Pharmacist-led reviews can help patients and practices

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A pharmacist-led medicine review can be a good support service for both GPs and patients. This article describes how it can work.

This article describes the input of a GP practice-employed pharmacist undertaking clinical medication reviews. The practice is small with two GP partners and a current list size of approximately 3750 patients and employs a pharmacist for six hours per week. While the term “medication review” can be used to describe various levels of intervention, in this article the term is used in the context of a full clinical review (see Table 1).

The importance of a medication review
Prescribing medication remains the most common therapeutic intervention in healthcare and represents myriad risks and problems from both the prescriber and patient perspective (see Table 2). Complex medication regimens are becoming the norm in a population with increasing longevity, resulting in the need for appropriate medication monitoring and follow-up procedures. It also needs a patient partnership approach to ensure mutual understanding about the need for, and risks of, long-term medication.

Within the current service provision, these needs are not being fully met: between half and a third of all medicines prescribed for long-term conditions are not taken as recommended, and £300 million is lost annually on medicines wastage, around half of which may be avoidable. One in 20 primary care prescriptions contain an error, and 5–8 per cent of all unplanned hospital admissions are due to medication issues. An ageing population with increasingly complex co-morbidities and the significant move towards preventative prescribing add to the pill burden and will further contribute to, and compound, these issues. Hence, there is an argument to optimise the role of the primary care pharmacist to address the complex medicines management needs in this sector.

Targeting medication review
Patients likely to be affected by the issues that the GPs wished to prioritise are targeted as follows.

Transfer of care: discharge forms
GPs forward electronic discharge forms to me for review. I reconcile the patient’s repeat medication list with the discharge form, initiating, stopping or amending doses where necessary. I also ensure that formulations and quantities are appropriate, prescribing is in line with local guidance and that any follow up (eg blood monitoring, checking inhaler technique) have been addressed. Often there will be queries in relation to medication that may need to be followed up. Examples include
### The environment and resources

- Patient and/or carer should be present and should understand the purpose of the medication review.
- Appropriate location – this may be the clinic setting or the patient’s home, but access to the full clinical record is essential.
- Appropriate time available to allow time to explore the patient’s views – this will vary from patient to patient.
- The review should be undertaken by a suitably qualified healthcare professional with appropriate experience and training and access to the full medical records to ensure that all medication can be reviewed fully. Good communication and clarity of roles and purpose between this healthcare professional and the patient’s GP is essential for recommendations to be followed up.

### Process

Each drug (prescribed, OTC and any others) should be checked individually and discussed with the patient/carer in terms of:

- appropriate drug choice
- appropriate formulation
- indication
- ongoing need
- dose
- monitoring
- potential interaction with other medication, disease condition and lifestyle
- adherence with local/national clinical guideline
- adherence with local prescribing formularies
- consideration of cost effectiveness

In addition, missing drugs should be considered. Is there an indication for medication that has not been addressed?

### Patient factors

The patient perspective should be sought in terms of:

- concordance – their agreement that medication is required and they are willing to take it
- their understanding of their medication, dose, duration of treatment, why it is needed
- how and when to take it, including appropriate use of devices such as inhalers
- understanding of the need for monitoring and its frequency, where relevant
- opportunity to ask any questions or discuss any concerns in relation to their medication

### Possible outcomes

- Shared approach to prescribing – “buy in” from patient to adhere to an agreed plan, where the patient understands why medication is being prescribed, what the duration of treatment is likely to be, how to take the medication or use the devices where appropriate eg inhalers, insulin pens, patches, etc. Ensure patients take medication correctly. Reduce wastage.
- Patient has opportunity to ask questions about medication and/or express concerns, which are taken seriously.
- Resolve any medication errors – ranging from unclear dosage instructions, mismatched quantities on repeat prescription, inappropriate prescribing.
- Address missed opportunity to prescribe.
- Stop any medication that is no longer indicated or appropriate (deprescribing).
- Ensure appropriate monitoring and follow up, which the patient understands and has agreed to.
- Cost-effective prescribing in terms of drug choice that complies with the relevant local and national clinical guidelines and local formulary advice.

### Medication review – our ideal

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<th>Table 1. Medication review – our ideal</th>
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<tr>
<td><strong>Drugs requiring monitoring</strong></td>
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<td>- High risk medication – DMARDs, lithium</td>
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<td>- Drugs that require monitoring are a particular risk area in primary-care prescribing.</td>
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<td>- For patients on medication such as methotrexate and lithium, it is important not only that there is a system in place to call the patient in for the appropriate monitoring checks, but also that the patient understands the need for, and frequency of, monitoring. As such, when patients are newly started on these types of medication they are referred to me for a medication review by the prescribing GP to undertake a clinical medication review focussing on the new medication.</td>
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<td>- In the case of DMARDs I provide the patient with a “patient contract” that explains the need for regular blood tests and the responsibility of the patient to ensure that they attend for these blood tests. Other issues such as use of analgesics and alcohol intake are often raised by the patient in these reviews.</td>
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1. Safety – to minimise risk of harm to patients particularly where the risk of error is known to be higher, eg high-risk drugs such as DMARDs, patients at the primary/secondary-care interface, elderly patients and polypharmacy.

2. Efficiency processes for patient and practice – to have systems in place whereby patients on repeat medication get an annual comprehensive clinical medication review and where there are additional checks for high-risk drugs.

3. Concordance – recognising that adherence and medicines wastage are significant issues both locally and nationally, to promote a shared approach to decision making in medication-taking and to ensure that patients who want to, have the opportunity to ask questions about their medication.

4. Cost-effectiveness – to ensure, where appropriate, that the practice’s prescribing is in line with local formulary and clinical guidelines.

**Table 2. Reasons for performing a medication review**

**Referral by GP**

Many of the patients referred to the medication review clinic are referred by the GP. A recent example was a patient referred to me to investigate why she was on atenolol when she appeared to have a history of asthma. Review with this patient not only identified that she had been wrongly Read coded as being asthmatic, but that several other medication issues existed which were subsequently addressed.

**Pharmacist perspective**

As a pharmacist, I feel that I approach medication review from a point of view that is unique within the practice. Using my clinical skills in this way provides me with enormous job satisfaction and gives me a sense of making a difference to individual patients’ lives. On the other hand, there are frustrations and barriers. Often patients do not understand my role and worry that I am going to stop their tablets, so I spend a lot of time managing such misperceptions. Our aims for the future include:

- broaden scope to include housebound and patients in residential care
- raise awareness of clinic both within surgery and to patients
- develop links with local community pharmacists so that we can signpost appropriate patients, eg follow up on inhaler technique via medicines user review (MUR) or New Medicine Service (NMS)
- undertake formal evaluation of the benefit of this service
- undertake patient survey to establish the patient perspective of this service.

**GP perspective**

The transfer of care from secondary to primary is the critical step in the patient’s journey where mistakes can occur. Modern medicine dictates that time constraints limit the ability to question the secondary-care prescribing doctors for further information thus leaving the prescribing primary-care physician potentially feeling vulnerable due to either a lack of knowledge or lack of information or both. The ability to ask the in-house pharmacist to chase these up is so reassuring and provides the confidence necessary to continue to prescribe where appropriate.

Similar considerations extend to DMARDs, an area of prescribing where mistakes can easily be made but where monitoring is relatively complex and time-consuming. Again, an in-house pharmacist can provide the reassurance that DMARD monitoring is sufficient and safe. Finally, with ever more prescriptions there is an increasing number of drug medicine reviews to be undertaken.

**Conclusion**

Regular clinical medication review should be an integral part of the care of patients on repeat medication. Done well, it puts the patient at the centre of care and addresses many priorities in terms of safety, quality and cost-effectiveness. The NHS Alliance and the Royal Pharmaceutical Society are currently recommending that clinical pharmacists should work more closely with doctors in primary care, as they do in the hospital setting. Undertaking routine clinical medication review in primary care is an ideal role for appropriately trained clinical pharmacists and presents pharmacists with an opportunity to integrate with GPs that will benefit the service as a whole.

**References**

3. NICE. Medicines adherence. CG76. 2009.

**Declaration of interests**

None to declare.

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