Repeat prescribing systems are widely used for patients stabilised on regular medication. These systems generate a prescription on a regular, usually monthly, basis for a patient without necessitating an appointment with a doctor. Medicines are often authorised for repeat for 6-12 months, so it is vital that medicines on monthly prescriptions remain appropriate. When a repeat prescription requires re-authorisation, a mechanism should be in place to ensure that a patient’s treatment is reviewed. Medication review provides an opportunity to critically assess the balance of risks and benefits associated with the medicines a patient is taking.

This bulletin discusses the rationale for medication review, some of the resources available to support the process, and one approach to medication review using the “NO TEARS” tool1 (see discussion on pages 3-4). Worked examples of reviews using this approach are given in the accompanying insert.

Support for medication review

Mounting recognition of the importance of medication review is reflected in the new General Medical Services (GMS) contract,2 the Older People’s National Service Framework,3 the Audit Commission’s report on primary care prescribing,4 and the new pharmacy contract.5 The National Sentinel Clinical Audit of Epilepsy-Related Death6 identified inadequate drug management in many cases of epilepsy-related death, and medication review has been recognised as an important component in the Multifactorial Falls Risk Assessment in Older People.7

Many patients do not take their medicines as intended and waste can be substantial.9 Furthermore, morbidity related to avoidable adverse drug reactions has been clearly demonstrated. A recent study showed that adverse drug reactions accounted for 6.5% of hospital admissions; these were associated with a median stay of eight days and accounted for 4% of bed occupancy.10 Most reactions were assessed as either “definitely” or “possibly” avoidable.

The use of many medicines by a patient (polypharmacy) is an important issue and, with increasing use of preventative therapies, this is unlikely to diminish. It is a particular problem in the elderly.11,12 The physiological decline associated with ageing is well documented, and it reduces the capacity to cope with both disease and treatments.

Managing illness is becoming increasingly complex and many healthcare professionals may be involved in the care of an individual. This increases the risk of inappropriate drug combinations being used.13

Re-authorising repeat prescriptions and reviewing medication can be undertaken in many ways.14 The method followed within a particular practice is often customary and can be difficult to challenge; however, it is important that any system for medication review is safe and effective, and that it is clearly understood by all staff and patients.

In undertaking medication review, the optimal role of different members within the primary healthcare team is not clear from existing evidence.15,16 Reviewers who know the patient will be more aware of what has been tried previously and of changes that will be acceptable. It should be appreciated that doctors take ultimate responsibility for every prescription that they sign.
Questions to ask about your current repeat prescribing system:

- Is there a safe mechanism for review that captures all prescriptions?
- What level of medication review (see Box 1) is currently being undertaken?
- How often are reviews done? How long are repeat prescriptions re-authorised for?
- Are medicines that are initiated in hospital appropriately repeated?
- Does the practice have a list of medicines considered unsuitable for repeat prescribing?
- Are repeats reviewed on an ad hoc basis rather than holistically on a regular basis?
- Can repeats be re-authorised by non-clinical staff, or without adequate review?
- Do patients have the opportunity to voice their opinions?
- Is the system transparent – do all patients and staff members know how it works? Is there a training schedule for practice staff?
- Are patients satisfied with their reviews?
- What happens when patients miss their reviews?
- What percentage of reviews lead to changes in prescriptions?
- Are reviews and interventions documented (to meet GMS contract requirements)?

These questions highlight broad issues relating to repeat prescribing systems; information about more rigorous assessment is provided in the resources described below.

Useful resources

*Saving time, helping patients. A good practice guide to quality repeat prescribing.*

This maps the main elements and participants of a repeat prescribing system and considers key areas in detail. For each step in the process it lists ‘points to consider’ and the relevant GMS contract quality indicators.

*Room for Review. A guide to medication review: the agenda for patients, practitioners and managers.*

This provides “practical advice for practitioners to increase the positive impact of medication review.” It includes discussion of current practice, the different types of medication reviews (see Box 1), the importance of patient/carer involvement, and case studies that illustrate how changes have been achieved at local level. The guide and tools (a framework for a comprehensive medication review, patient reminder charts, patient information leaflets etc.) are available from: www.medicines-partnership.org/medication-review.

Changing an existing system

- What level of medication review is preferred?
- Will reviews be done during routine consultations or in a dedicated clinic?
- Will you need to prioritise reviews initially? Identify a group of patients to review (e.g. elderly patients on more than four medicines) and establish how many appointments (or home visits) per week per practitioner will be required.
- Who will do the reviews – all or one partner?
- Will nurses be involved? For the small proportion of patients who are on medication for one chronic condition (e.g. asthma), it may be appropriate for a specialist nurse to perform reviews. If a patient attends several chronic disease clinics it is likely that they will benefit from reviews that are conducted by a practitioner overseeing all aspects of their care.
- Will pharmacists be involved? The new contract for community pharmacists makes provision for “medicines use reviews” and “prescription intervention services.” These “advanced” services are being provided by some pharmacists and an action plan passed to the GP.

It is likely that a team approach to medication review will be necessary and/or beneficial, and this will vary with different groups of patients and according to local resources, including uptake of supplementary prescribing. However, doctors must be able to critically assess medication and are well placed to perform clinical medication reviews.

It is important that all medicines being taken by a patient can be identified. These may include medicines prescribed in hospitals or out-of-hours settings; those obtained over-the-counter or via the internet; those ‘supplied’ by relatives or friends; alternative remedies; and medicines, such as depot injections, that may not be immediately apparent from records. Asking patients to bring all their medicines to a review appointment can be useful.

**Box 1: Levels of medication review**

**Level 0:** Ad-hoc
Unstructured, opportunistic review.

**Level 1:** Prescription Review
Technical review of patient’s medicines list.

**Level 2:** Treatment Review
Review of medicines with patient’s full notes.

**Level 3:** Clinical Medication Review
Face-to-face review of medicines and condition.
Medication review for the 10 minute consultation

The ‘NO TEARS’ structure (see Box 2) can be used as a mental prompt to aid efficient medication review. It is a flexible system that can be tailored to an individual practitioner’s consultation style and maximise the potential of the 10 minute consultation.

Box 2: The “NO TEARS” tool
♦ Need and indication
♦ Open questions
♦ Tests and monitoring
♦ Evidence and guidelines
♦ Adverse effects
♦ Risk reduction, prevention & remuneration
♦ Simplification and switches

Need and indication

Is the treatment still indicated, or has the diagnosis been refuted? For example, a tentative diagnosis of angina may have been subsequently disproved. Medicines may have been inappropriately continued or the dose may need adjusting (e.g. consider maintenance doses of proton pump inhibitors). Non-pharmacological interventions may be more appropriate. Does the patient know what their medicines are for and which are for “as required” vs “regular” use? Ensure that the indication for each drug is clearly recorded.

Open questions

What does the patient understand about their treatment, and which medicines do they actually take? Each physician will have their own way of asking such questions. It can be helpful to show the patient that you recognise some of the drawbacks of therapy by asking questions such as: “I realise a lot of people don’t take all their medicines, do you have any problems with any of your tablets?” or “Can you tell me what you’re taking regularly so that I can check that we agree?”. Compare their reply with the number of prescription requests.

Tests and monitoring

Is disease control and symptom relief adequate? Are further tests needed to assess disease control? Does monitoring therapy necessitate ordering tests? Check that drugs appropriate for “shared care” are monitored according to agreed protocols. If the patient is attending special clinics (e.g. for diabetes), avoid unnecessary duplication and concentrate on other issues.

Evidence and guidelines

Information on therapeutics is never static and it is useful to pause and reflect on new evidence and recent guidelines. There will be many patients who were given a diagnosis some time ago and who are now on sub-optimal treatment. For example, patients with presumed congestive heart failure may need an echocardiogram, dose optimisation of an angiotensin converting enzyme (ACE) inhibitor, and consideration for other preventative measures. A history of peptic ulcer might prompt *H. pylori* testing. Some medicines are now considered to be of limited clinical value or “less suitable for prescribing”. These issues can be addressed with the patient present.

Adverse effects

Iatrogenic problems must be considered. It is important to recognise when symptoms are adverse effects of medication. For example, a patient with continuous cough may be spared many investigations if the possibility of ACE inhibitor-related cough is considered. Avoid the “prescribing cascade”, i.e. misinterpreting an adverse reaction as a new medical condition requiring treatment. For example, prescribing inhalers for wheeze in a patient who is on a beta-blocker may be unnecessary and risk further adverse effects.

> “Always consider any new signs and symptoms as a possible consequence of current drug treatment.”

Risk reduction and prevention

If time allows, opportunistic screening (e.g. for alcohol use, smoking, obesity, or family history) can be done during a medication review. A review can be a convenient opportunity to address some of the measures that are included in the Quality and Outcomes Framework of the new GMS contract (both for medication review and chronic disease management). It can be useful to identify a patient’s risks and to establish whether medication is optimised to reduce this. For example, you may wish to ask patients on inhalers about their occupation. Many elderly patients are at risk of falls, which can be increased by postural hypotension or hypnotic use. A patient with a history of low-impact fractures may never have been assessed or treated for osteoporosis. Recognising any risks inherent in the repeat prescribing system with which you are involved is also important.
Simplification and switches

Some medication regimens are unnecessarily complicated. For example, unnecessary split doses can be altered, or several low-dose preparations may be better replaced with one higher-dose preparation. Formularies, where they exist, and local initiatives might advocate switching to generic products or to more cost-effective preparations. These can be discussed and explained with the patient present.

Synchronising treatments (i.e. prescribing medicines in quantities that should prompt requests for repeats at the same time) is practical and, importantly, reduces waste and improves compliance. Non-medical members of the healthcare team may be well placed to address these issues.

Overlap between the areas of ‘NO TEARS’ enables adaptation to individual consultation styles and increases the chance that a problem may be identified. For example, the need for bone protection in patients taking steroids could be recognised as an adverse effect by one reviewer but to another may be considered at the evidence or risk reduction stage. Significant issues identified by a review (e.g. benzodiazepine dependence) may need to be covered at subsequent consultations, and the use of repeats or the number of authorised repeats considered accordingly.

Documentation of discussions and consistent Read coding will make the next review easier and may be important for medico-legal reasons. Efficient medication review needs to be linked with safe systems for amending patient records following hospital stays, out-of-hours visits, and out-patient clinic appointments. Recognising the work done by other professionals within the healthcare team will avoid unnecessary duplication. It is unlikely that a medication review consultation will be a wasted appointment. One of the foremost skills of the physician is time management, and most GPs will concentrate on specific issues to avoid the process becoming overwhelming.

Summary

A structured approach to repeat prescribing is important. Medication review provides an opportunity to evaluate the risks and benefits associated with a patient’s medicines with due consideration of their autonomy. A 10 minute appointment every 6-12 months can promote safe and effective prescribing. It is an opportunity to consider a patient’s potentially changing physical, social and psychological status while also reducing the risk of iatrogenic problems, medico-legal issues and waste. It should improve patient satisfaction, reduce the number of ad hoc enquiries, and improve the confidence of both doctor and patient in the medicines prescribed.

Please refer to the enclosed Supplement for case studies using the “NO TEARS” tool for medication review.

References


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