



Room for review

A guide to medication review: the agenda for patients, practitioners and managers

Task Force on Medicines Partnership and
The National Collaborative Medicines Management
Services Programme

The **Task Force on Medicines Partnership** is a Department of Health funded programme designed to involve patients as partners in prescribing decisions and support them in medicine-taking, to improve health outcomes and satisfaction with care.

The National Collaborative Medicines Management Services Programme is based at the National Prescribing Centre in Liverpool and has the remit of improving the capability for medicines management in primary care through a systematic and co-ordinated programme of quality improvement.

The **National Prescribing Centre** (NPC) is an NHS organisation, formed in April 1996. Its aim is to facilitate the promotion of high quality, cost-effective prescribing and medicines management through a co-ordinated and prioritised programme of activities aimed at supporting all relevant professionals and senior managers working in the modern NHS.

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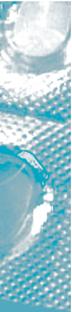
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Professor Marshall Marinker

The hazards of prescribing and taking inappropriate medicines have been long recognised. They include the secondary morbidity from unnecessary or inappropriate medicines, from wrong doses, incompatibilities, and confusion from the multiplicity of medicines prescribed, particularly in the treatment of older people. For these reasons the importance of reconsidering the patient's medication has always been implicit in any concept of good practice. What is new in medication review is the requirement that this should now be carried out in the NHS in an explicit and systematic way. The guide describes this as a “structured, critical examination of a patient's medicines”.

Clearly it will be necessary for reviews to be evidence-based, in line with many NHS initiatives that seek to bring the best information from research to the care of patients. This will be necessary but it will not be sufficient. The guide specifies that whenever some change to the prescription is proposed, in line with other NHS initiatives like Medicines Partnership, such change is to be implemented by “reaching an agreement with the patient”. Therefore, no less crucial than the evidence from clinical and pharmacological research, reviewers will also need evidence about the diagnoses, about the medicines that the patient is actually taking, about the patient's capacity and motivation to take the medicines, and about the patient's priorities and beliefs about medicine taking.

Two theoretical concerns about the scope of medication review require to be addressed here. The first refers to the danger of isolating consideration of prescribing and medicine taking from the whole clinical picture and process. The guide makes clear that there should be no such danger. Reviews of scripts in the absence of the medical record, or of the record in the absence of the patient, are described here as screens for significant prescribing error, and are to trigger a full medication review which must involve consideration of the relevant clinical information contained in the medical record, and can only be effective with the active participation of the patient.

The second concern refers to an apparent conflict between the two linked goals of medication review – to prescribe according to best evidence from scientific research, and to be mindful of the precepts of patient autonomy.

Scientific evidence and patient autonomy are relative not absolute values. Studies of the performance of medicines refer to their performance in research populations. They can only suggest the most sensible starting point in

considering what best to prescribe. The evidence cannot predict what will best suit any one individual patient. The patient is someone in a relationship with a health professional. Just as the citizen can expect to enjoy only such autonomy as is consonant with living in a society, so the patient can expect only such autonomy as is consonant with engagement in health care.

The theoretical conflict between these values will in practice be resolved by the exercise of professional judgement which must always go beyond the evidence, and by the development of a co-operative style of communication, what is described as concordance, between professional and patient.

There will always be trade offs, but one principle seems imperative. In order to come to an understanding with the patient about the medicines that will help, and about the need for co-operation, it is essential that the patient and the professional actually meet to discuss any substantial variations suggested by the review to the previous medication. For medication review to make a real difference, such discussion must be sensitive and responsive to the patient's particular situation, reasoning and concerns. If we are able to achieve this, the full implementation of medication review should transform both the quality of prescribing and the benefit to patients.

Marshall Marinker
2002

Background



Importance of medication review

Medication is by far the most common form of medical intervention in the UK. Many people are prescribed multiple and long term medication, so ensuring that patients get the maximum benefit from all their medicines is a major challenge.

There is considerable published evidence on issues associated with medicines and an increasing body of evidence for the effectiveness of medication review as a route to optimising therapy, improving health outcomes, reducing the likelihood of medicine-related problems and cutting waste. Evidence is also emerging that targeted medication review can enable people to maintain their independence and avoid admission to residential care or hospital.

Three recent documents have summarised current evidence of problems associated with medicine taking: ^(1,2,3)

- Adverse reactions to medicines are implicated in 5-17% of hospital admissions, and once in hospital, 6-17% of older patients suffer an adverse drug reaction during their stay
- Polypharmacy increases the risk of adverse drug reactions and of hospital readmission in older people
- In the case of patients with long term conditions, some 50% of prescribed medicines are not taken as prescribed
- Following hospital discharge, changes to medication are frequently made by patients and GPs, some intentional but many unintentional.

Common medicines-related problems include adverse drug reactions and treatment failures. Many are attributed to lack of monitoring and follow-up of the effects of medicines, over or under-



prescribing, and patients not understanding their medicines and not taking them as prescribed ⁽⁴⁾.

Some commonly prescribed medicines including non-steroidal anti-inflammatory drugs (NSAIDs), tricyclic anti-depressants, digoxin and lithium frequently cause problems ⁽⁵⁾. In an average PCT with 100,000 patients, NSAIDs account for some 18 hospital admissions with gastro-intestinal bleeding, and 22 admissions with congestive heart failure each year ⁽⁶⁾. Drugs such as benzodiazepines and anti-psychotic medicines are often prescribed inappropriately for the elderly; they can also contribute to falls. Medication review has been shown to play an important part in falls prevention ⁽⁷⁾.

There has been recent emphasis on the need for regular review of treatment and a growing awareness that many medication related problems can be avoided with increased vigilance and intervention by the health care team ^(4,7,8). A number of clinical trials in the UK and North America have shown the benefits of pharmacists reviewing long term prescriptions in community practice ⁽⁹⁻¹²⁾. Many problems with medicines could be prevented by monitoring the effects of long-term drug therapy, by identifying those at risk, and by modifying their medication where necessary ^(12,13).

Non-compliance with prescribed medicines can result in avoidable ill health, premature death, unnecessary hospital admissions and additional costs to the NHS. Although there is considerable evidence of its scale and consequences and much is known about its causes, we understand far less about how to overcome it. *Medicines concordance* is a novel approach to prescribing and medicine taking which involves an agreement between patients and health care professionals about the treatment to be followed ⁽³⁾. *Medication review* provides an important opportunity to discuss medicine taking and to work towards partnership between patients and health professionals in relation to medicines.

Against this background, the process of medication review is increasingly recognised as a cornerstone of broader *medicines management*. The targets for medication review included in the National Service Framework (NSF) for Older People testify to the significance of medication review within the bigger picture of health and well being for older people (see Box 2, page 9).

Partly as a result of the NSF target and work taking place in National Collaborative Medicines Management Services pilot sites, there is ongoing activity around the country aimed at implementing processes for medication review. These efforts are hampered by the lack of a common understanding of what a medication review should consist of, and how to provide it. Consequently, the quality

and effectiveness of medication review can vary widely and there is a need for practical guidance to support the provision of reviews that meet the needs of patients as well as fulfilling the obligations of primary care organisations under the NSF.

In very many places, good work is already being done. But it is clear that scope remains for greater involvement of patients and carers, which can lead to genuine partnership and better outcomes for both patients and the NHS. In its attempt to set the scene for medication review and provide some pointers towards more consistent and inclusive practice, this guide has drawn heavily on the experiences and views of patients and carers. Thus, we hope that the guide will contribute towards increasingly effective and patient-focussed practice in medication review.

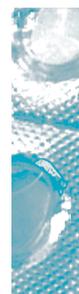
This guide and accompanying website, www.medicines-partnership.org/medication-review seek to take account of the needs of patients and health professionals for more information and support around the medication review process. They are written primarily for practitioners and managers working within the NHS including GPs, pharmacists, nurses and practice staff, as well as PCTs being performance managed by the new Strategic Health Authorities, and their partners in local authorities who are responsible for ensuring safe, high quality, cost effective services for their communities. They should also be helpful to patient groups and to any individual older people, patients or carers who are interested in how to get the most out of medication review. Finally, they should be of interest to decision-makers at a national level who are concerned with how the NHS can deliver effective and efficient services, to improve the health of particular groups of patients and the population as a whole.



Purpose of this guide

There are practical issues for the NHS in relation to capacity and staff time to undertake medication review and meet NSF and other targets.

Applying different levels of intervention, prioritised to the needs of patients and using the skills of different health professionals as appropriate can make capacity issues more manageable. The collaborative programme has demonstrated that working differently can lead to real improvements without creating more work. By suggesting how this can be delivered in practice the guide may make medication review more achievable for local organisations.





BOX 1 OBJECTIVES OF THE GUIDE

- 1 Offer practical advice for practitioners to increase the positive impact of medication review for patients**
- 2 Point towards greater patient and carer involvement in medication review as a route to partnership in treatment decisions and medicine taking**
- 3 Help primary care organisations develop effective review processes**
- 4 Share good practice that is emerging in medication review at a local level**
- 5 Provide practical tools for practitioners and patients through the website**
- 6 Propose definitions and a framework which should help local and national tracking of medication review activity.**

The website, www.medicines-partnership.org/medication-review, provides more detailed material for those with a particular interest in the subject, as well as a range of tools for practitioners and patients that can be downloaded and adapted for local use. The suite of tools generated by the study is shown in Box 8 on page 39.



Scope, methodology and approach

This guide focuses on the practice of medication review in primary care, with the needs of older people and people with long term conditions particularly in mind.

We have taken a pragmatic approach, consulting widely with practitioners and experts, as well as listening to patients and carers. A full list of references and links to relevant source material is provided on the website, www.medicines-partnership.org/medication-review. Case studies have been selected to illustrate the different levels of review described in section 3 of the guide. They show how forward-thinking organisations have implemented medication reviews to meet local needs. They are illustrative and not intended to represent the only or best way to carry out reviews. Each one has its own strengths and weaknesses, which we have attempted to highlight, suggesting ways in which each could be further developed to increase patient involvement and move towards concordance.

Section 2

Current practice in medication review



The need for medication review

Medication review is now emerging as an important component of medicines management.

As well as the obvious benefits for patients, there are also a number of policy issues which are putting medication review at the top of primary care organisations' agendas:

- The medication review milestone in the Older People's National Service Framework (Box 2, below)
- The introduction of the single assessment process (SAP) for older people, which should include questions about medicines use that can trigger the need for full medication review
- The annual health check for older people ⁽¹⁴⁾
- The focus on medication review within the National Collaborative Medicines Management Services Programme
- GP requirements for qualifying for the Sustained Quality Allowance ⁽¹⁵⁾
- Recognition of inadequate drug management in many of the cases examined by the National Sentinel Clinical Audit of Epilepsy Related Death ⁽¹⁶⁾.

BOX 2 OLDER PEOPLE'S NSF MEDICATION REVIEW MILESTONE

All people over 75 years should normally have their medicines reviewed at least annually and those taking four or more medicines should have a review 6-monthly.

To be reached by April 2002



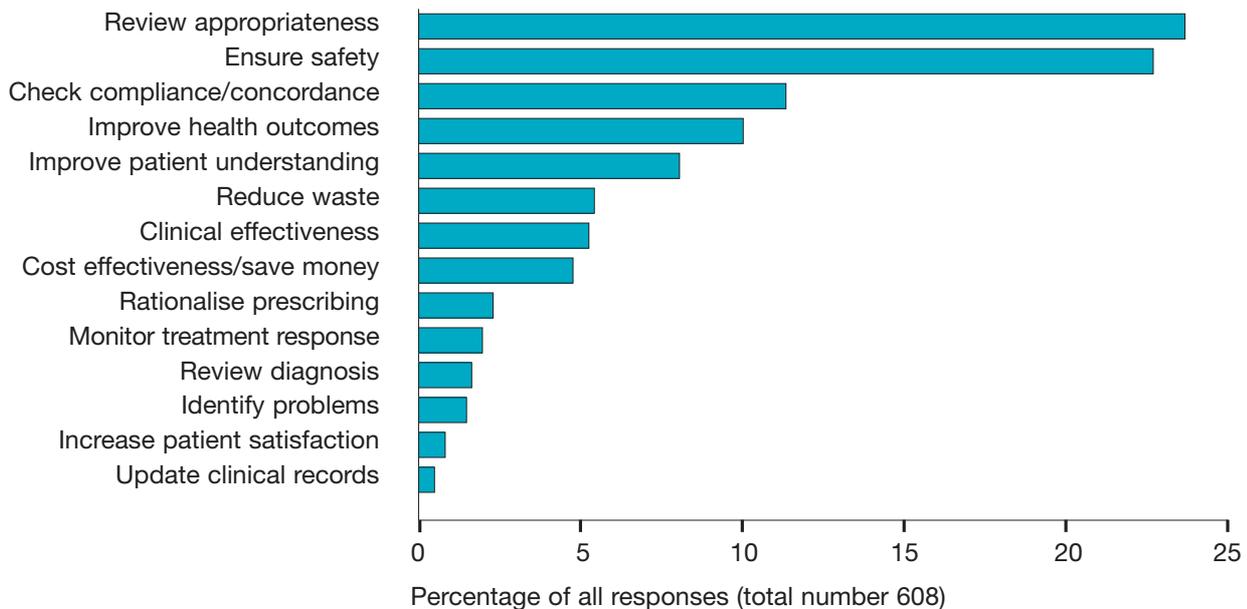
Barriers to implementing reviews

Whilst there is increasing recognition of the importance of medication review, and its pivotal role in the bigger picture of patient health and well being, there is far less of a consensus about its main aims or indeed what precisely constitutes a review.

There is still more confusion about who should carry out reviews and how they should be documented. In some places, the interrogation of a GP computer system to identify patients on a particular medicine and convert them to a different product would be deemed a review. In others, only a dedicated face-to-face consultation with a health professional would be classified as a review. These marked divergences of view hamper the development of consistent approaches to medication review and undermine attempts to establish an accurate and comprehensive picture of activity around the country.

The lack of consensus surrounding the purpose and process of medication review is illustrated by the results of a survey of professionals (GPs, practice nurses, pharmacists, managers and other practice staff).

VIEWS ON THE MAIN PURPOSE OF MEDICATION REVIEW



Source: Unpublished survey of participants in National Collaborative Medicines Management Services Programme, 2002 ⁽¹⁷⁾



Progress on the ground

A recent survey by the National Collaborative Medicines Management Services Programme ⁽¹⁷⁾ identified that:

- Before joining the programme, only 25% of PCTs involved in the first “wave” had an agreed guideline or protocol in place to support medication review
- Less than half of practices planned medication reviews in advance
- A third reviewed medication as part of a routine consultation without allocating dedicated time for the process
- Only 30% of practitioners would usually document a review in the patient’s notes or by use of a computerised clinical Read code.

This survey, and information gathered by the Department of Health, indicate that medication review is already established in many organisations, but can be ad hoc, and only rarely has the participation of patients been fully thought through. There are few examples of patients being actively involved as partners in medication review. In some cases patients may only discover that their medicines have been reviewed when their next repeat prescription is different from the last.

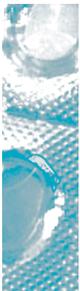
This rather patchy picture is underlined by the reported experiences of the older people, patients and carers to whom we spoke in the course of our user research. Their views are described more fully in section 4 of the guide: *The patient perspective*.

Of the many aspects of medication review that could be improved, the most pressing need is to work towards involving patients as partners in review, in order to reach informed agreement about their medicines.



Section 3

What is medication review?



Definition

There is no single agreed blueprint for what constitutes a medication review.

Various definitions have been proposed by researchers, but in practice we see health professionals lacking a common terminology to discuss review processes, still less a clear language to use with lay people and patients.

A useful definition may need to be sufficiently widely drawn to accommodate a range of medication review-type activities, reflecting legitimate diversity in local practice and the needs of different patients at different times. Within this broad definition it would seem to be useful to define some clear levels of review that can be easily differentiated and understood, and used as the basis of a consistent recording system, as well as a dialogue between professionals and with patients.

BOX 3 PROPOSED DEFINITION OF MEDICATION REVIEW

A structured, critical examination of a patient's medicines with the objective of reaching an agreement with the patient about treatment, optimising the impact of medicines, minimising the number of medication-related problems and reducing waste.



Principles

Our hope is that ultimately, fully concordant face-to-face clinical medication reviews will be available to all patients who would benefit from and want them.

The frequency of face-to-face clinical medication reviews may depend on the patient's condition and preference. There may continue to be a place for other types of review in the intervals between face-to-face sessions and/or for patients with less complex needs. We also recognise that this goal may take some time to achieve and may require changes to current practice and reprioritisation or additional resources. In the meantime, there is a need to establish a set of underlying principles for medication review that should apply to any type of review. These might be seen as the fundamentals without which any medication review process may be considered as flawed.

BOX 4 SUGGESTED PRINCIPLES OF MEDICATION REVIEW

- 1 All patients should have a chance to raise questions and highlight problems about their medicines**
- 2 Medication review seeks to improve or optimise impact of treatment for an individual patient**
- 3 The review is undertaken in a systematic way, by a competent person**
- 4 Any changes resulting from the review are agreed with the patient**
- 5 The review is documented in the patient's notes**
- 6 The impact of any change is monitored.**



Models of review and case studies

There are several distinct approaches to medication review being followed in practice.

By no means all reviews are conducted with the patient present. Some involve professionals scrutinising a patient's list of medications to identify anomalies and problems. Others would include looking at the patient's full record so that appropriateness of medication can be assessed in relation to their condition and



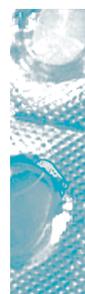
history. Both of these activities have value, but neither is as effective as face-to-face discussion with the patient. A medication review that does not take account of what the patient actually takes – rather than what is on the prescription or in the record – is incomplete. It is important to know what the patient is actually taking, the response to medication, whether the condition is worsening or improving, and if there are any unrecognised medical needs. Face-to-face review provides the opportunity to discuss the patient's values and beliefs, and how medicine-taking fits in with the patient's daily life.

People also use the term “medication review” to cover related activities such as a data analyst interrogating a GP computer system to identify all patients taking a particular medication, to highlight opportunities for substituting a therapeutically equivalent product on the basis of cost. While cost effectiveness is a legitimate objective of medication review, it should always be subordinate to improved care and safety. Blanket adjustments for cost reasons alone, in our view, do not constitute medication review.

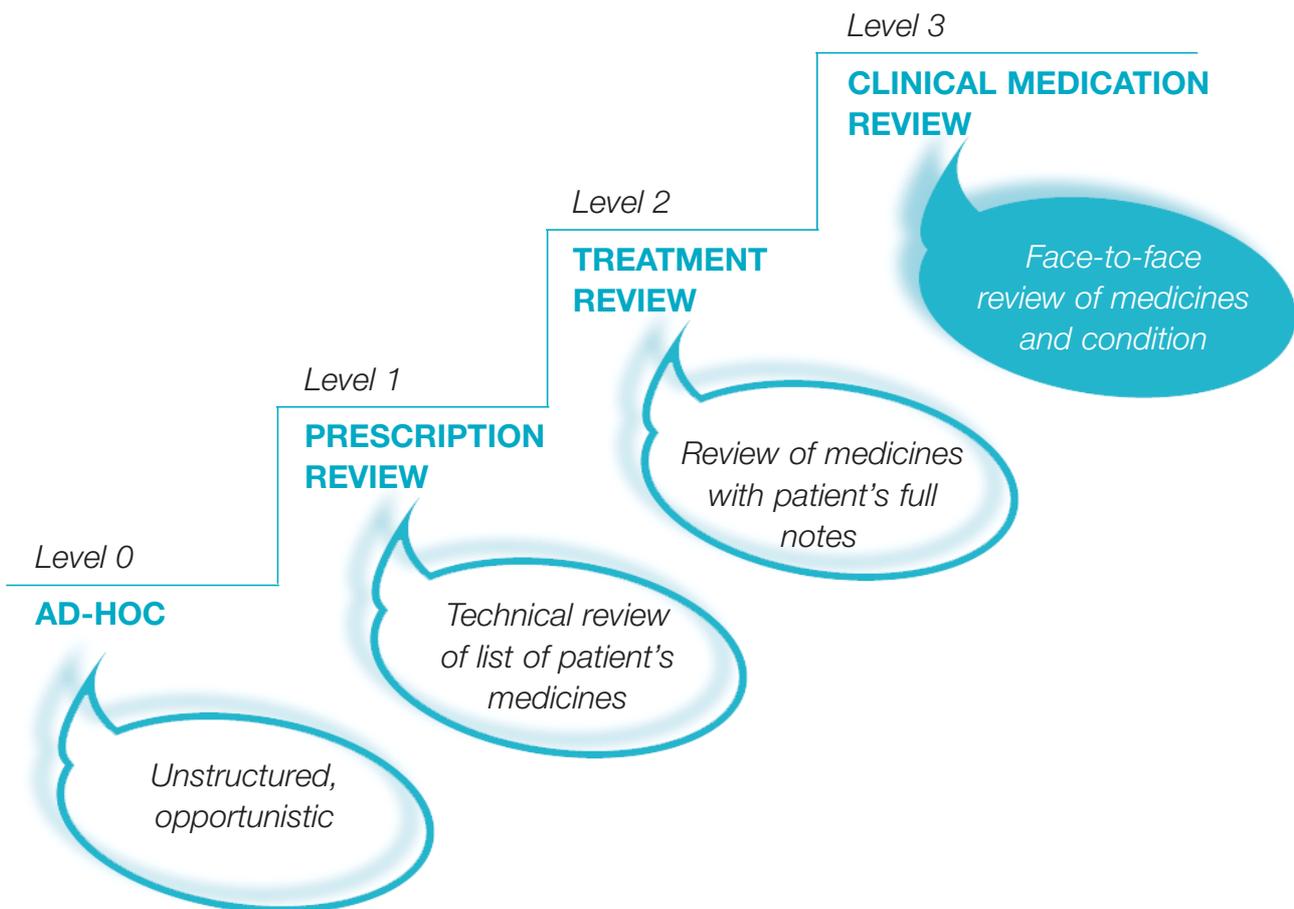
In effect, the general umbrella of medication review covers a whole spectrum of activity, which is more or less systematic and involves patients to a greater or lesser degree. Within that broad spectrum we have identified four types or levels of review, reflecting common approaches used around the country. The value of defining these different levels is to:

- Illustrate a range of possible approaches
- Encourage clarity and consistency
- Provide a basis for systematic recording and comparison
- Support professionals as they seek to improve quality
- Encourage a move towards reviews which involve patients as partners.

Whatever the type of review, it is essential that the patient is informed and involved in the decision making around changes and is provided with opportunity to discuss and feed back how they feel about their medication. It is unacceptable not to discuss with a patient or carer any aspect of a review leading to a change in their medicines. Although there may be workload implications for primary care staff, this need not be unduly onerous. Guidance and tools for communicating with patients in relation to medication review are detailed in section 5: *Putting medication review into practice*, and on the website, www.medicines-partnership.org/medication-review.



LEVELS OF MEDICATION REVIEW



AD-HOC

Level 0



Unstructured, opportunistic review of a patient's medication might mean an isolated question to a patient from a receptionist in the surgery, from a nurse in a clinic or from a pharmacist in the community pharmacy. It might be a question of clarification about a dosage or formulation or name of a medicine. This would not normally be classified as medication review. It may also consist of

a discussion with a practitioner about medicines within a consultation held for another reason.

Issues: The fact that a medication review is opportunistic rather than planned in advance may not negate its value, and it may help identify high priority patients who would benefit most from a more thorough review. However, unstructured reviews will almost certainly not cover all the key medicine issues. And a review carried out within a normal GP or nurse appointment may not be as helpful to

patients as a designated session, given their keen awareness of the time pressures affecting many surgeries (see section 4: *The patient perspective*).

PRESCRIPTION REVIEW

Level 1



Technical review
of list of patient's
medicines

What: Prescription reviews normally take place without access to the patient's clinical notes and do not usually include a review of the full repeat prescription. The patient may be present, but not always.

Who: Community pharmacist, member of practice staff, practice support pharmacist or technician, audit assistant, GP.

Examples of interventions: Dose and pack optimisation, resolving quantity problems, drug presentation issues, brand to generic switches, deciding to continue or discontinue a medicine.

Issues: Prescription reviews can be helpful in identifying anomalies and highlighting patients who may need clinical medication reviews. As a stand-alone tool their benefits are relatively limited as they do not normally allow for a full discussion with the patient. They may, however, be useful in periods between face-to-face clinical reviews.

CASE STUDY 1

PRESCRIPTION REVIEW

Level 1 prescription reviews by community pharmacists in Coventry PCT

Background

As part of a review of medicines management, Coventry PCT set out to improve care for patients and make better use of the skills and knowledge of its community pharmacists to support GPs. Joining the National Collaborative Medicines Management Services Programme (MMS) enabled them to extend the role of the community pharmacists in medication review. A pilot Prescription Review and Intervention Scheme with Education (PRISE) was introduced in February 2002.

Objectives

The PRISE scheme formalises and enhances existing community pharmacist activity, creating better relationships between prescribers and local pharmacists and improved services for patients. It also provides a consistent agreed process for reviewing prescriptions and managing medicines across the Coventry PCT area.

Approach

In consultation with the Local Pharmaceutical Committee (LPC) and interested GP practices, the pharmaceutical adviser arranged for community pharmacists to review prescriptions presented for dispensing without access to the patient's notes. Pharmacists and surgeries involved in the pilot were trained on a range of agreed interventions by the pharmacist, use of standard forms to document interventions and refer problems and proposed changes to the GP. Pharmacists are paid £2 for each intervention and provide a detailed monthly report to the pharmaceutical adviser to claim the fees due.

Results

During the first three months of operation, over 1000 interventions were made and an estimated 85% of changes referred to the patient's GP were actioned immediately. Most interventions related to the quantity of medicine prescribed or to problems with the drug details on the prescription. A small number of reviews revealed significant problems with treatment and led to more in-depth clinical reviews by the GP. Coventry PCT estimates that for an investment of £5000 on fees and administration, approximately £150,000 of potential savings will be made during the first year of operation.

The scheme is now being rolled-out to include more pharmacies and general practices and the range of interventions is being developed and enhanced.

The PCT believes that the scheme has:

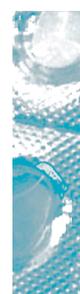
- Enhanced patient care
- Improved relationships between community pharmacists and GP surgeries
- Identified and resolved problems in repeat prescribing systems
- Generated significant savings through more efficient systems and processes.

Comment

This relatively simple, low cost scheme provides a way of quickly resolving problems with prescriptions and identifying patients who need clinical medication review. It could potentially be developed by increasing the emphasis on asking patients about their experience with their medicines and checking their understanding of their condition and treatment.

Contact

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TREATMENT REVIEW

Level 2



Review of medicines
with patient's full
notes

What: Treatment reviews normally take place under the direction of a doctor, nurse or pharmacist, but often without the patient – for instance, removal of unwanted items from the repeat medicines list, and dose adjustments. This may arise from a review of patients with a particular condition such as asthma or taking a group of drugs such as proton pump

inhibitors. The review may include the complete repeat prescription or focus on one therapeutic area (eg hypertension), drug (eg lithium) or group of drugs (eg NSAIDs). Recommendations may be passed to the prescriber for implementation.

Who: GP, practice based pharmacist, practice nurse or suitably trained pharmacy support technician.

Examples of outcomes: Reducing the number of items, modifying doses.

Issues: Like prescription reviews, treatment reviews can be a cost-effective method of resolving important anomalies and highlighting patients who need face-to-face clinical medication reviews. The advantage is that medicines can be seen in the context of the patient's medical condition, history and treatment. The main shortcomings are that the review relies on the formal medicines record rather than the patient's own account of what medicines they take, and changes may be suggested and implemented without the full involvement and agreement of the patient. Care is needed to ensure that agreement is not assumed and that patients have a genuine opportunity to raise questions and express their views, which are taken into account in the treatment decision.

CASE STUDY 2

TREATMENT REVIEW

Level 2 treatment reviews by practice support pharmacists in nursing homes in Cheltenham and Tewkesbury

Background

Patients in nursing homes often take complex medication and have special medical needs. In the past, the quarterly visits of community pharmacists concentrated on checking storage, administration records and medicines management issues raised by the home rather than medication review. The PCT was aware that these patients needed regular medication review and explored how this service could be provided.

Objectives

The PCT wanted to improve health outcomes and the well being of nursing home patients by:

- Optimising medicines use, reducing the risks of adverse effects and minimising waste
- Reducing the likelihood of drug interactions
- Identifying under-used medicines
- Withdrawing any treatments no longer appropriate
- Ensuring appropriate drug monitoring, where relevant.

Approach

A GP or pharmacist is identified to review, once or twice a year, each nursing home resident taking 4 or more prescribed items. The patient's clinical record is used to highlight when review is due. The pharmacist or GP:

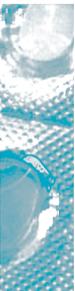
- 1 Records current medication – Identifying drugs and clinical indications
- 2 Reviews current medication:
 - Confirms treatments still needed
 - Ensures medicines carry specific dosage instructions
 - Checks that generic names are used
 - Highlights potential drug interaction
 - Identifies adverse drug reactions
 - Identifies items not being taken
 - Reviews storage, administration, and timings
 - Checks recording of administration
 - Ensures appropriate monitoring is carried out.

If a professional other than a GP has completed the review, recommendations or a referral are made to the GP for agreement before implementing any changes. The pharmacist is responsible for ensuring that the patient's records are updated with a "medication review completed" code and that the next medication review date is recorded in the patient's computerised clinical record.

Results

The commonest changes recommended were:

- Discontinuation of medication no longer required
- Further review of analgesia
- Further review of laxatives
- Bringing therapeutic monitoring up to date – including full blood counts, Us & Es, thyroid, blood pressure and lithium levels
- Changing dosage forms – switch to liquid and soluble forms for residents with swallowing difficulties
- Review of night sedation.



Comment

Bringing more clinical and patient-focused medication review into care homes is potentially of great benefit to residents and is a way of addressing well-documented medication problems common in the care home setting. Nursing home patients are very vulnerable and it can be extremely difficult to involve them in medication review, to reach genuine agreement about treatment. It is vital that wherever possible reviewers encourage patients to express their views about their medicines so that their preferences can be taken into account in the review. In the meantime further work is needed to develop approaches to medicines concordance that can be effective in care homes.

Contact

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CLINICAL MEDICATION REVIEW

Level 3



Face-to-face
review of medicines
and condition

What: Clinical medication reviews require access to the patient's notes, full record of prescriptions and non-drug care and results from laboratory tests etc. The review should include the complete repeat prescription as well as over-the-counter and complementary remedies. In clinical medication reviews, medicines would not be examined in isolation but considered in the context of the

patient's condition and the way they live their lives. Clinical medication review should therefore involve the patient as a full partner. This means listening to the patient's views and beliefs about their medicines, reaching an honest understanding of their medicine taking behaviour, and taking full account of their preferences in any decisions about treatment. This is more than what currently happens for most patients when they visit their GP for a renewal of a repeat prescription item. The invitation to a review of an individual patient's medication (ie a type 3 review) should include both the patient and (when appropriate) the carer.

Who: GP, hospital doctor, practice nurse, practice support pharmacist, specialist nurse, clinical pharmacist or community pharmacist working on a sessional basis.

Examples: evaluating the therapeutic efficacy of each drug, identifying and addressing unmet therapeutic need, monitoring the

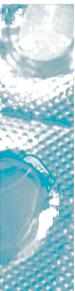
BOX 5 FRAMEWORK FOR A CLINICAL MEDICATION REVIEW

The review should include all prescribed, over-the-counter and complementary medicines prescribed for or taken by the patient.

In the review, discussion would normally cover:

- Explanation of the purpose and importance of the review
- Objective evidence of the effectiveness of the treatment (eg blood pressure, peak flow)
- The patient's experience of their medicines, including perceived efficacy and side effects
- Practical issues such as swallowing difficulties, ability to read labels and written information, container preferences, ordering or supply problems
- The patient's basic understanding of their medicines and medication devices, including what they are for, the expected benefits, and the implications of failing to take them as recommended
- Answering any questions about the medicines or the condition
- An agreement about the treatment to be followed, including any changes in medicines
- A check to ensure the patient understands how much, how often, when and the way in which their medicines should be taken, including joint completion of a medication record/reminder chart for the patient if they want one (a proforma is provided on the website, www.medicines-partnership.org/medication-review)
- Monitoring requirements, correct administration techniques and storage considerations
- Need for counselling or further information for patients and carers
- Requirements for any additional support eg monitored dosage systems, collection and delivery services
- Supply issues.

The review should conclude with a summary of the agreement with the patient about the treatment and an explanation of what will happen next (eg the date for the next review).



progress of the conditions being treated, together with purposeful discussion about specific aspects of the patient's medication to facilitate a concordant approach to medicine taking. Clinical medication review may take place in a variety of settings including the patient's home.

Issues: Clinical medication reviews can be seen as the ideal, in that they provide an opportunity for a fully concordant discussion about medicines and may be more likely to result in genuine agreement, with the patient taking the medicine as prescribed. However,

- face-to-face clinical medication reviews do not *necessarily* lead to a concordant discussion – this may depend on the approach and skills of the health professional
- they will be more resource-intensive than other forms of reviews.

Clinical medication review can be made less resource-intensive by

- Creatively deploying the skills of a range of health professionals
- Focussing clinical medication review in the first instance on patients in greatest need, in line with locally produced guidance (see section 5: *Putting medication review into practice*)
- Following a clear structure supported by well designed tools (available from the website, [www.medicines-partnership.org/medication review](http://www.medicines-partnership.org/medication%20review))
- Supplementing periodic clinical medication reviews with other forms of review.

CASE STUDY 3

CLINICAL MEDICATION REVIEW

Level 3 clinical medication reviews after hospital discharge, Huntingdon PCT

Background

Participating in the MMS programme led to a pilot clinical medication review scheme for patients aged 65 years or over recently discharged from hospital, because of their particular vulnerability to medicines-related problems.

Objectives

- Reduce potential pharmaceutical care problems and improve concordance in medicine taking following hospital discharge
- Increase safety and effectiveness by:
 - comparing pre-admission and post-discharge medicines, including non-prescribed medicines
 - allowing the pharmacist and patient to discuss practical aspects of medicine-taking and patient understanding of their medicines
 - agreeing recommendations with the patient and communicating them to the GP.

Approach

Reviews are undertaken by a clinical pharmacist in patients' homes and funded by Huntingdonshire PCT. All patients aged 65 years or over who have recently been discharged from the local hospital with discharge medication are identified by the practice using the discharge summary from the hospital, and referred for review. The discharge summary and patient's pre-admission medication summary and medical history (from the GP clinical system) are then e-mailed or faxed to the PCT. The practice contacts the patient to explain the scheme and ask for their consent to be visited. If the patient agrees, they are contacted by the PCT to arrange a suitable time and date for review. At the review visit the patient is given an information leaflet about the scheme and relevant contact details. The review usually takes 30-45 minutes. Following the review, feedback is sent to the patient's GP. The practice is responsible for Read coding the medication review and deciding on appropriate follow-up.

Results

The scheme was piloted with 5 general practices starting in February 2002. 100 medication reviews were carried out (average patient age 77 years).

- In 27% of cases, the discharge letter did not match the medicines being taken
- 28% of patients needed help taking their medicines
 - 27% were confused about which medicine to take when
 - 11% could not read the labels
 - 20% could not open their containers easily
 - 18% had problems swallowing capsules/tablets
- 44% thought they were experiencing side effects from their medicines
- 49% did not understand the reason for taking one or more of their drugs.

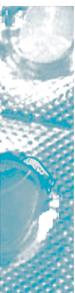
A total of 430 points were fed back to the patients' GPs following the review. A further development has been the production of a guide to medication review in the elderly, which lists all the drugs that have been encountered so far and potential pharmaceutical care problems or checks to be made for each drug. It is hoped that this will be a tool for other pharmacists to adopt or adapt.

Comment

Giving patients information about the medication review in advance and a clear consent process are particular strengths of this scheme, which targets patients at a point when medication related risk is high and takes patients' own experiences of their medicines as a key component.

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CLINICAL MEDICATION REVIEW

Level 3 clinical medication review in Channel locality of East Kent Coastal PCT

Background

During 1999/2000, discussions with healthcare and social service professionals working in Channel PCG highlighted a number of problems with medicines management in the community. In April 2000, the PCG board agreed to the development of a medicines management support service.

Objectives

The aim of the service is to provide patients with appropriate support to enable them to take their medicines effectively. Specific objectives included supporting a range of patient groups with their medicine taking – including the elderly, people with epilepsy and people with mental health problems – by:

- Reducing problems associated with administering medicines
- Reducing problems with medicines on discharge from hospital
- Improving use of monitored dosage systems (MDSs).

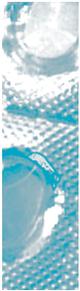
Approach

Details of the service were provided to primary and secondary care health professionals, and to social services care managers. Referrals are made to the PCT prescribing team and patients assessed at home by one of the team. Clinical review is undertaken by the prescribing adviser and documented in a standard format. This action plan is communicated to relevant professionals involved with the patient's care. If a MDS is required, a community pharmacist is identified to provide this service.

Results

Between 1 April 2000 and 1 April 2002, 164 patients were referred under this scheme. The frequency of referrals has increased with time and is currently running at approximately 5 per week. On average each referral requires 2 hours of input from the team.

The majority of referrals have come from social services care managers. This reflects the need within social services for more support to help patients manage their medication. Staff costs for the service were not separately funded but £8000 was committed recurrently, to fund the provision and monitoring of MDSs by community pharmacists. 29 patients were classified as being "at risk" from their medication. Drugs for which this was a significant problem included; analgesics, tricyclic anti-depressants, diabetic medication, antihypertensives, warfarin and digoxin.



- For 17 of the referrals, admission to a care home was a real possibility if support was not provided with medicines. For all 17 patients a MDS was provided to enable carers to manage the medication. So far this has saved 228 months of residential home care, which equates to a saving of £263,000
- 123 of the 136 patients who received interventions were successfully supported to take their medicines correctly and maintained their independence
- The remaining 13 patients were not successfully supported to manage their medicines at home. This was usually because the patients were too ill or needed support from alternative services.

A patient and referrer satisfaction survey is currently being undertaken. 90% of patients receiving an intervention have been enabled to take their medicines correctly. This existence of the service means that these problems are no longer ignored or handled inappropriately, and patients are provided with individualised support – not just offered a MDS device as an answer to every problem.

Comment

This example demonstrates the value of medication review within the bigger picture of health, independence and well being, when it is based on listening to patients and finding ways to meet their individual needs. It also shows that medication review can be highly cost effective, and that potential savings extend far beyond simply reducing the cost of the medicines themselves. One of the most positive aspects of the service has been the partnership that has developed between social services, GPs, district nurses and community pharmacists, to help solve patients' medicines problems.

Contact

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CASE STUDY 5

CLINICAL MEDICATION REVIEW

Level 3 Practice pharmacist led medication review in South Sefton PCT

Background

A practice based pharmacist started undertaking medication review clinics in April 2002, in a single-handed South Sefton GP practice, in a deprived area with a high rate of medicines use. Reviews were targeted at polypharmacy patients aged 75 years

and over, in line with the NSF for Older People. The aim was to develop partnerships with patients to help them get the best out of their medicines. A polypharmacy review tool, approved by the Prescribing Sub-Committee of the PCT, was employed by the practice pharmacist during reviews to ensure consistency of approach.

Objectives

- Help patients get the best from their medicines
- Improve concordance
- Reduce unmet pharmaceutical need
- Increase the number of patients requesting medication reviews
- Make better use of pharmacist skills.

Approach

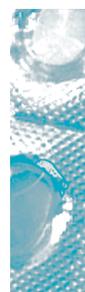
- Practice staff telephoned the patients to inform them of the purpose of the review and to arrange appointments to attend the pharmacist's clinic
- At the review, the pharmacist:
 - Checks patients' understanding of reason for each medicine
 - Seeks to identify any problems with medication (eg forgetting to take medicines, side effects, practical difficulties)
 - Facilitates discussion with patients about their medicine taking
 - Identifies any potential changes to medication and support needed
 - Documents outcomes and follows up any agreed action
 - Advises patients how to contact the pharmacist if they have any questions before the next appointment
- Pharmacist/GP makes any changes to the repeat system once the recommendations agreed with the patient are ratified by the GP. (Some types of changes did not need to be agreed with GP as authority had already been given to the pharmacist to action if appropriate)
- Changes communicated to the patient
- Patient's computer record annotated with the Read code 8B3V.

Following review, a sample of patients is asked to provide feedback on their experience of the process. The survey used was designed in conjunction with the PCT Patient Involvement Officer. Once all patients have been reviewed, re-booking for second of twice-yearly medication reviews will begin.

Results

The results of a survey of 40 patients after their initial medication review demonstrated:

- The review contributed to a better understanding of their medicines (38 patients)
- 38 patients were content with the location
- 37 thought the length of the session was right (30 minutes per patient)



- Many positive comments about the opportunity to talk to someone and to find out more about their medicines.

Comment

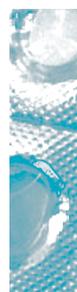
This is a good example of how a medication review process seeks to involve patients. There is potential for the service to further develop both partnerships and concordance, but it already demonstrates how health professionals can help patients manage their medicines better.

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Section 4

The patient perspective



Background

To prepare this guide, we undertook a series of structured interviews and focus group discussions with older people, carers and people with long term medical conditions.

We wanted to understand people's experience of having their medicines reviewed, and how medication review might help them make better use of their medicines.

We have spoken to over forty patients and carers, ranging in age from 50 to nearly 100. The people we spoke to suffered from a broad range of medical conditions and took a wide variety of prescription medicines as well as over-the-counter and "alternative" and complementary remedies. They had experienced notable variations in the quality and consistency of care. Their expectations of the health system and their attitudes to managing their own care also diverged widely.

This work was carried out by an experienced qualitative researcher between May and July 2002. A more comprehensive report of the findings can be found on the website, www.medicines-partnership.org/medication-review.



Experience of having medicines reviewed

We found that general awareness of medication review and of older people's entitlement to review was low.

Many participants were surprised to discover that there is a requirement for review for people over 75. Some wondered whether this had been communicated to the general public. Most people seemed quite bemused by the idea that they should be having their medicines reviewed once or twice a year, and sceptical that health professionals could ever find the time to deliver reviews.

"They don't have time. They are rushed off their feet."

Few people reported being asked about their medicines by their doctor or by another health professional. There were, however, two groups of patients who had personal experience of regular medication review:

- Some patients under the care of a hospital specialist whose regular outpatient visits routinely included a review of their medication and how it was working
- Some older people whose GP reviewed their medicines during a special appointment each year. In one case the patient was told to book a double appointment for these reviews.

There was a particularly striking example of a patient with rheumatoid arthritis who regularly reviewed her medicines with her hospital consultant.

"I see my specialist twice a year – we review my medications and I value it. It is a two way process – he knows me and knows my history. He checks with me. It is a friendly exchange. It's for me to say how I am feeling on a particular medicine: how it's working, any particular side effects. I can also ask about new drugs."

However, few people we spoke to felt that they had a real opportunity to talk about their medicines and have their questions answered. People who took an active interest in their own health or that of the person they cared for, whose medicines were *not* being reviewed by professionals, appeared to have evolved a range of compensating strategies of their own. For example, some people under the care of different hospitals for different problems were concerned that individually their various specialists were unaware of medicines they were being prescribed for their other conditions.



These patients tended to maintain their own list of medicines, sometimes with help from a family member, which they shared with their health professionals.

“I see my heart consultant and I don't know if he knows what I am on. I take in a list.”

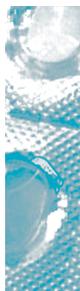
Many people read patient information leaflets carefully and asked their GP, nurse or pharmacist specific questions about individual drugs.

“I read in the leaflet that a person my age should only be taking 2 a day, but I was on 3. So I raised it with the doctor and he said ‘You're right’ so now I'm only on 2.”

There were several examples of people discontinuing prescribed medication in the face of side effects they found intolerable.

“I was getting so many side effects – bruising, urinating blood – but he [GP] said I must take the tablets. I took the bull by the horns and stopped taking them – and I felt better. The nurse did blood tests after that and they were all OK. The only thing was she suggested I went back on the ones for cholesterol.”

Some people tested out any new medicine for a short period – usually no more than one or two days – before deciding whether it “suited them” and hence whether they would continue to take it. In one case a man abandoned several of his medicines after reading a newspaper article about side effects. These examples show that many people are prepared to take an active part in the management of their own medicines, but lack an opportunity to review medication with a health professional who listens to their experiences and takes their views and preferences into account.



PATIENT GROUPS AND THEIR RESPONSES



Attitudes towards medication review

All but one of the people who had personal experience of having medicines reviewed found it helpful.

Of those who hadn't (by far the majority), most – not all – would like the opportunity to discuss their medicines with a health professional. Reasons people gave for not wanting medicines reviewed were:

- Avoiding unnecessary change
"I say, if there is nothing wrong, don't mend it."
- Fear of being taken off a medication they depend on
"If they suggested coming off a pill – diazepam or HRT – it would be difficult to come off."
- Concern that medication reviews may be to save the NHS money and not primarily for the benefit of patients.

The greatest concern amongst people whose medicines were not reviewed was overload on the NHS and a sense that health professionals had other more pressing claims on their time. This was a strong theme in many of our discussions. At the same time it was clear that some places were managing to provide face-to-face medication review, and this was highly valued.

A range of views was expressed about who should review medicines. Many people began with an assumption that it should be the doctor, but at the same time regarded GPs as under the greatest time pressure.

“I don’t suppose they’d find the time”

In exploring this question further in the groups, people were open minded about who should conduct reviews:

- It was understood that hospital doctors knew most about specific conditions and the medicines to treat them, but conversely had little knowledge outside their own areas of expertise and lacked an overview of the whole person (this view was most forcefully expressed by a retired hospital consultant)
- On the other hand, some people thought that GPs were frightened to take them off tablets that had been started in hospital

“He says ‘No, you must take the tablets’”

- People were generally open to the idea of medication review by pharmacists, but concern was expressed about how the link would be made to the doctor
- The practice nurse was seen by many as a good alternative, as she was seen as having more time than the GP, but some concern was expressed that nurses might not have the relevant skills.



What patients and carers want from medication review

In discussing medication review, patients and carers were remarkably clear about their needs.

People simply wished to tell their health professional how they felt, and to see if they were taking the best medicines for their problems. To do this, they felt that they needed:

- Specific time set aside for medication review
“It’s no good just at the end of the surgery”
“If there’s a waiting room of people, I feel guilty and I can’t talk”
- Someone to listen carefully to questions
- Clear explanations in simple language
- An open interaction where they could be honest about what they were actually taking, and the health professional would be honest about the consequences of taking (or not taking) the medicines.

The list of things people would like to discuss in a review of their medicines ranged from fundamental:

“I’d like to know what’s wrong with me”

to wide-ranging:

“I’d like to know what new medicines are available to prevent me from becoming ill.”

Ideas and suggestions reflect a number of key topics.

1 General information about the medical condition and treatment

- Confirmation of “what you are on and why”
- What medication is for which condition
“You get a lot of tablets, but no-one tells you what’s what.”
- Likelihood of side effects actually happening to me
- What to expect on a day-to-day basis
“Will my pain go?”

2 How to take pills properly

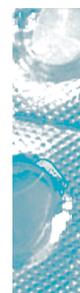
- What to take
- How much to take
- When to take it (time of day, with meals etc)
- How long from starting the treatment until it takes effect
- Advice on “pill pots” (ie monitored dosage systems).

3 Medication options

- *“Do I really need ALL these tablets?”*
- Has any new product come onto the market since the medicine was initially prescribed?
- Information and reassurance about “postcode prescribing”: is anything being withheld for financial reasons?

4 Personal beliefs and preferences

“I should make it clear that I might be willing to shorten my life if it improved my quality of life. Doctors should be honest. They should talk about what it would mean to me and how I live my life... If you are in so much pain that you cannot move it may not be apparent to the doctor in his little kingdom.”



5 Concerns about medication

- Is a particular symptom a side effect of my medicine? Which one?
- Packaging issues
- Changes of medication name and/or appearance of packaging
- Can pills “build up in the system”?

One person summed it up as:

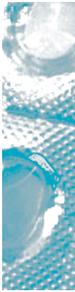
“We’d like to ask all the things we couldn’t ask when we were very ill.”

Many people we spoke to were concerned about how they would remember what they were told in their medication review. Memory was perceived as not always reliable, so there might be a need for a note of some kind as an aide memoire for what had been discussed in the review.



Conclusions from listening to patients

Patients and carers welcome medication review.



Although a relatively small proportion of the people we spoke to had direct experience of having medicines reviewed, those who had found it helpful and almost everyone else would welcome it. People were open-minded about who should carry out reviews and recognised that different health professionals have complementary knowledge and skills. Overall, they simply wished to tell their health professional how they felt and to see if they were taking the best medicines for their problems. To do this they felt that they needed:

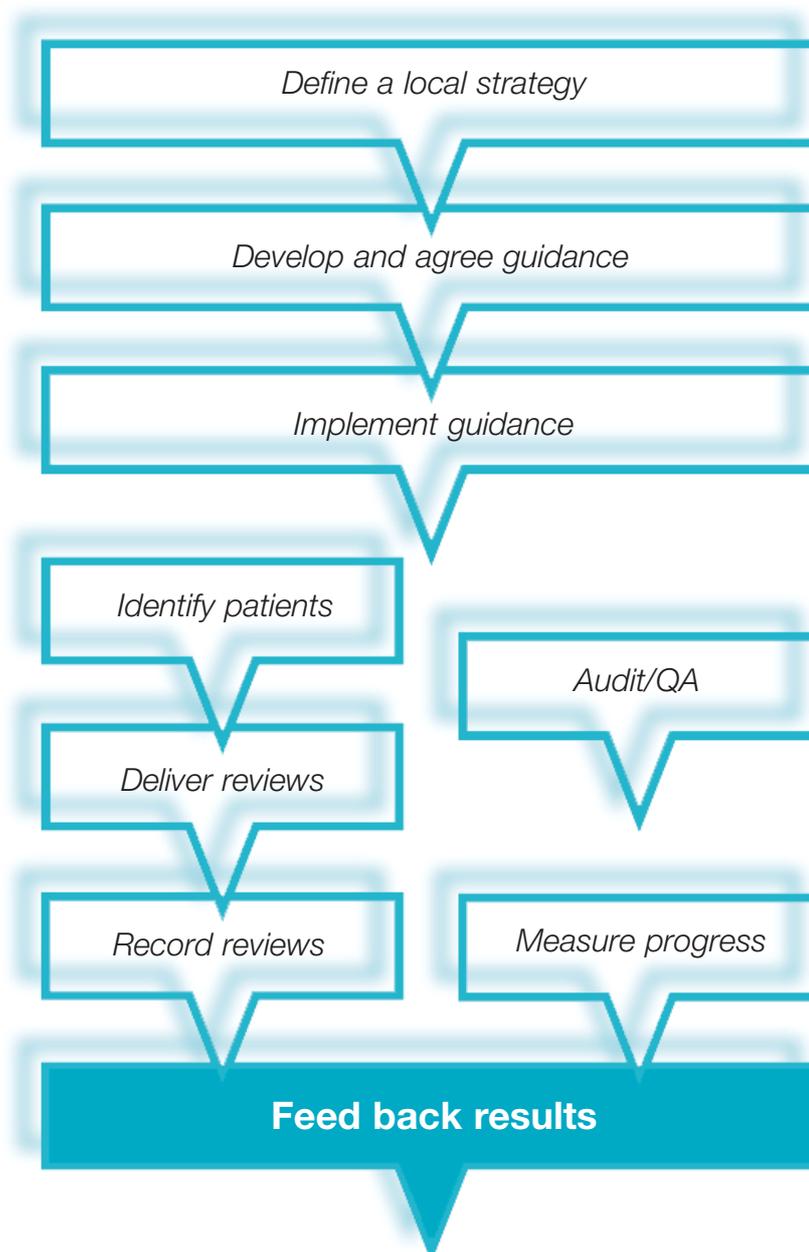
- Specific time set aside for medication review
- Someone to listen carefully to questions
- Clear explanations in simple language
- An open interaction where they could be honest about what they were actually taking, and the health professional would be honest about the consequences of taking (or not taking) the medications.

There was also felt to be a need for a written record of what had been discussed in the review. By understanding how patients feel about medication review and what they want from it, health professionals should be in a better position to deliver reviews that meet patients’ needs.

Section 5

Putting medication review into practice

ESTABLISHING A MEDICATION REVIEW PROCESS





Defining your strategy

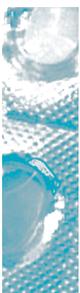
A medication review strategy can be most useful if it is seen in the wider context of the overall goals for health and well being of the community, and developed collaboratively by health professionals involved in patient care and operational managers, with input from patients.

It will be less useful if it is seen as a corporate initiative developed in isolation by PCT staff responsible for prescribing, and designed to meet an externally imposed target. Local stakeholders who could usefully be involved in the development of the strategy and subsequently the guidelines could include:

- The Professional Executive Committee of the PCT
- The Patient Forum
- Individual practices and practice staff
- Local groups representing pharmacy
- The Local Authority, particularly in relation to the Single Assessment Process for Older People.

To begin with, it is useful to establish your own levels of baseline activity and to determine your own goal, based on local priorities and available resources. What you do next will depend on what you want to achieve. Earlier in this guide we proposed a framework for classifying medication reviews and some PCTs have chosen to prioritise reviews of one particular type. It is entirely possible to implement elements from more than one type simultaneously based on this framework.

Identifying which patients to prioritise for review can be an important element of the strategy. It may be useful to consider two categories of people: those who could be at particular risk of medication-related problems, and those who have more broadly defined special needs. Trigger questions about medicines use in the Single Assessment Process for Older People could be a key route for identifying people who might benefit from review. Encouraging community pharmacists to ask a few simple questions when dispensing regular medicines may also help pick up patients in need of full review.



BOX 6 POTENTIAL TARGET PATIENT GROUPS

At risk of medicines-related problems

- Taking four or more medicines every day
- Recently discharged from hospital with complex medicines
- Receiving medicines from more than one source (eg hospital specialist and GP)
- Significant changes to the medication regimen in the past 3 months
- Taking medicines requiring special monitoring (eg lithium), with a wide range of side effects (eg NSAIDs) or a narrow therapeutic range (eg digoxin) [see the tools on the website, www.medicines-partnership.org/medication-review]
- Symptoms suggestive of an adverse drug reaction
- Where non-compliance is suspected or known to be a problem.

Special needs

- Older people
- Residents in care homes
- Learning difficulties
- Sensory impairment such as poor sight or hearing difficulties
- Physical problems eg arthritis, inability to swallow
- Mental states such as confusion, depression, anxiety, serious mental illness
- Communication difficulties
- Literacy or language difficulties
- Minority ethnic groups
- Refugees and asylum seekers.

Opportunities to improve care

- Patients in disease areas where new evidence on treatments or guidelines have become available.

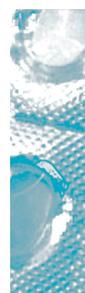


A number of Primary Care Organisations participating in the National Collaborative Medicines Management Services Programme have chosen to focus initially on sub-sets of patients such as those taking a particular drug or with a particular medical problem such as diabetes or hypertension. This approach seems to be successful in testing out ideas, which can then be implemented more widely. It also makes the workload and resource implications more manageable.

In setting objectives for medication review at a strategic level it is important to think about how you will track your progress. Finding useful indicators for medication review is not necessarily straightforward but will be highly worthwhile. For example, evidence on health improvement or cost effectiveness could make significant contributions to taking practice forward.

BOX 7 ILLUSTRATIVE MARKERS FOR TRACKING PROGRESS IN MEDICATION REVIEW

- Existence of agreed local guidance for medication review
- Number of practices that have adopted the guidance
- % of patients 75 years and over whose notes contain documented evidence of a medication review in the last 12 months
- % of patients 75 years and over taking 4 or more medicines whose notes contain documented evidence of a medication review in the last 6 months, and a clinical medication review in the last year
- % of vulnerable patients discharged from hospital on repeat medication whose notes contain evidence of a clinical medication review within 8 weeks of discharge
- % of medication reviews that led to a recommended change in treatment
- Number of reviews of each level carried out
- Estimated cost savings/increases from medication review
- Cost of implementing the medication review guideline
- Patient satisfaction with medication review process and outcome (sample basis).





Developing local guidance

Once a high level strategy has been defined, further work will be needed to develop detailed local guidance on review procedures. This needs to cover:

- How patients will be identified for review
- The procedure for the review (there may be more than one type of review to meet the needs of different patients at different times, such as an annual clinical medication review with a prescription review every six months)
- How patients will be informed and involved in treatment decisions
- Who will carry out the reviews
- How recommendations will be communicated to the prescriber and actioned, if the review is not by the prescriber
- How reviews will be recorded and the outcome of reviews shared between professionals and with the patient. (Not all primary care and community staff have access to clinical records. Using patient-held shared health and social care records may be one potential approach)
- How changes will be monitored.

There may be a need to develop tools to support the new process such as standard forms and letters and a patient satisfaction survey. The website, www.medicines-partnership.org/medication-review, contains a set of proforma tools which have been used in practice and collated for this project by the Pharmacy Practice Group at the University of Leeds. They can be downloaded and tailored for local use. It also includes a library of tools developed and used by a range of organisations in their own medication review processes.

BOX 8 TOOLS AVAILABLE ON THE WEBSITE

- **List of questions/areas to be covered in a medication review and information sources**
- **Medicine monitoring guide for the reviewer, to highlight risks/issues with particular medicines**
- **Compliance assessment tool**
- **Leaflet/information sheet for patients**
 - What a medication review is**
 - Questions to ask in the review**
- **Patient-held medication reminder chart**
- **Patient experience questionnaire.**

www.medicines-partnership.org/medication-review



Depending on the types of review that are used (section 3), thought may also need to be given to how the reviewer will access patient information without compromising confidentiality, how recommendations will be communicated to prescriber and patient, and how any resulting changes will be monitored. Particular thought needs to be given to how patients are to be involved in reviews and how their views are to be given precedence in treatment decisions. This is always a challenge, and may be particularly difficult where reviews are carried out without the patient being present.



Recording reviews

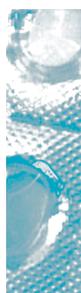
Local guidance for medication review needs to cover how reviews will be recorded. There is currently no universally agreed way of documenting medication review.

Many organisations have defined their own approaches to meet local needs, but this means every local organisation having to re-invent the wheel, and fails to provide common data to measure progress nationally or to provide information which people can use to compare their own performance with that of others.

Some practitioners use Read codes to document reviews, but many GPs and practices have been discouraged by the complexity of the Read coding system and by regular reports of its imminent demise. As long as the system is in place, using Read codes for recording medication review has the potential to enable:

- Consistent and easier data recording and retrieval
- Data to be used for monitoring, analysis and audit
- Feedback to practitioners to improve clinical activity
- Tracking achievement of NSF targets and local priorities
- A common clinical language to be shared between primary and secondary care, minimising risk and reducing potential duplication.

Within the existing system there are many alternative Read codes available for recording medication review. We recognise that there are limitations in the area of medication review including a lack of clear definitions. In the interests of clarity, consistency and comparability, we are consulting with the NHS Information Authority (NHSIA) to investigate the feasibility of agreeing a set of common recommended codes for recording the different types and outcomes of review referred to in section 3 of this guide. This still leaves scope for individual organisations to define their own local sub-codes in order to capture more detailed information if they wish.



Practitioners and organisations will need to decide locally how best to record reviews and consider the usual medico-legal and confidentiality aspects concerning clinical recording. There is useful guidance about confidentiality on the NHSIA's web site, www.nhsia.nhs.uk/caldicott.

Practices can also introduce local Read codes if required. However, in the medium to longer-term, and until the availability of a range of more useful Read codes we suggest that:

- the 8B code and its sub-codes offer the greatest flexibility for recording and searching purposes.

Taking account of the likelihood of national improvements or changes to existing clinical terminology coding, we suggest local discussions about recording medication reviews and consideration of the following codes to record the level of review.

BOX 9

LEVEL OF MEDICATION REVIEW

SUGGESTED READ CODES

Level 1:
Prescription or technical review of a list of the patient's medication under the direction of a doctor, nurse or pharmacist, but in the absence of the patient

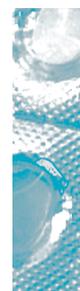
8B3h
(medication review without the patient)

Level 2:
Treatment review under the direction of a doctor, nurse or pharmacist, in the absence of the patient but with reference to the patient's clinical record

8B314
(medication review)
or for systems with 4 byte coding only
8B3S
(medication review)

Level 3:
Clinical medication review specifically undertaken by a doctor, nurse or pharmacist in the presence of the patient with access to the patient's clinical record and laboratory test results as required

8B3V
(medication review done)



There is no requirement for practices who are not using Read codes, or who currently use different Read codes to switch to those above. This will be for local decision. But it is important to introduce a consistent approach in each practice, whereby types of reviews are recorded the same way. A fuller description of the Read coding system and guidance about how to use it is provided by the NHS Information Authority at www.nhsia.nhs.uk



Implementing local guidance

Once guidance has been developed and agreed it will need to be rolled out.

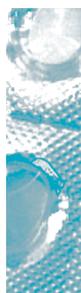
It may be necessary to raise awareness of the importance of medication review and its role in improving the quality of care, and involving patients as partners in relation to their medicines. There may also be a need for some training in the specific skills required to undertake reviews and in how to apply the guidance and use the associated tools.

Medication review is an important opportunity to establish the concept of partnership between patients and health professionals in relation to medicines. The Task Force on Medicines Partnership is able to offer materials and direct support for training to organisations who would like to take this forward. This support can be accessed through the website or by contacting the Centre for Medicines Partnership.

The National Prescribing Centre's *Modernising Medicines Management Guide* includes a range of advice and suggestions for the development, implementation and monitoring of medication review and other medicines management services (www.npc.co.uk/npc_pubs.htm).

Quality assurance and audit need to be considered as part of implementation. Systems will be needed to capture and feed back data on medication review to enable QA and audit and to encourage improvement. This could include feedback:

- To the health professionals involved so that they can further develop their own practice
- From patients and carers about their experience of review and their level of satisfaction with its outcome
- To the developers of the guidance so that it can be amended and improved
- To inform policy development at a national level.



(15) *Allowances for practices providing a quality service*, Model Local Development Schemes. HSC1999/107. NHS Executive, Leeds

(16) Hanna NJ, Black M, Sander JWS, Smithson WH, Appleton R, Brown S, Fish DR. *The National Sentinel Clinical Audit Of Epilepsy Related Death: Epilepsy – Death In The Shadows*. 2002. The Stationery Office, London

(17) Unpublished survey of participants in the National Medicines Management Services Collaborative. 2002. National Prescribing Centre, Liverpool

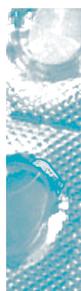
Glossary

Concordance is a new approach to the prescribing and taking of medicines. It is an agreement reached between a patient and a health care professional that fully respects the beliefs and wishes of the patient in determining whether, when and how medicines are to be taken.

Medication Review is a structured, critical examination of a patient's medicines with the objective of reaching an agreement with the patient about treatment, optimising the impact of medicines, minimising the number of medication-related problems and reducing waste.

Medicines Management is a system of processes and behaviours that determines how medicines are used by patients and by the NHS.

Medicines Management Services are the processes for designing, implementing, delivering and monitoring patient-focused care, based on need. They can include all aspects of the supply and therapeutic use of medicines, from individual patient level to an organisational level.



Reviewers

Association of the British Pharmaceutical Industry (ABPI) – NSF for Older People Group

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Dr W. Denys Wells, GP, Past Chairman MMS (2001-02)

Sue White, Head of Disability Policy Branch, Department of Health

Medication review provides an important opportunity to discuss medicine taking and to work towards partnership between patients and health professionals in relation to medicines.

There is considerable published evidence of problems associated with medicines and an increasing body of evidence for the effectiveness of medication review as a route to optimising therapy, improving health outcomes, reducing the likelihood of medicine-related problems and cutting waste. Evidence is also emerging that targeted medication review can enable people to maintain their independence and avoid admission to residential care or hospital.

This guide and accompanying website, www.medicines-partnership.org/medication-review are written primarily for practitioners and managers working within the NHS. This includes GPs, pharmacists, nurses and practice staff, as well as PCTs being performance managed by the new Strategic Health Authorities and their partners in local authorities who are responsible for ensuring safe, high quality, cost-effective services for their patients. They should also be helpful to patient groups and to any individual older people, patients and carers who are interested in how to get the most out of medication review. Finally, they should be of interest to decision-makers at a national level who are concerned with how the NHS can deliver effective and efficient services, to improve the health of particular groups of patients and the population as a whole.

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