

Why many GPs ignore MUR forms

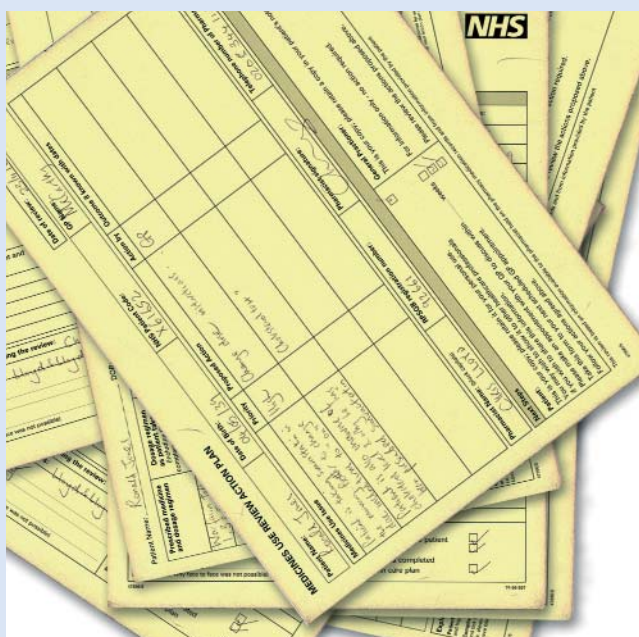
In this article, **Howard Stoute**, GP and chairman of the All Party Parliamentary Group on Pharmacy, gives his perspective on MURs

For the past six months, the All Party Parliamentary Group on Pharmacy has been carrying out a major inquiry into the future of pharmacy. One of the issues that the inquiry has been looking at is the state of the relationship between pharmacists and other front-line primary care professionals, particularly GPs. The ability of community pharmacists to deliver the advanced and enhanced services envisaged in the new pharmacy contract, such as medicines use reviews (MURs), depends heavily on the strength of these relationships and the degree of connectivity between pharmacies and GP surgeries.

It is apparent, however, from some of our recent evidence sessions that although doctors approve of pharmacists' enhanced role in principle, poor communication and a lack of integration between surgeries and pharmacies to a certain extent is undermining this role.

MURs are a case in point: pharmacists have taken to the idea enthusiastically, and undertook nearly 150,000 of MURs in 2005/06. Patients, too, have responded positively to their introduction with a number of surveys showing that they value the opportunity to discuss their medicines use with their pharmacist and think that it has a positive impact on their care. GPs, on the other hand, have been far more cautious and many pharmacists have found it difficult to get GPs to engage with the idea. Why is this? One would have thought that GPs, given their current workload, would have welcomed the opportunity to devolve much of the responsibility for educating patients about their medicines onto pharmacists. Most GPs admit that they find it difficult in the limited time that they have with each patient to help them to develop the knowledge they need to enable them to make informed decisions about the medicines they use.

The main reason is that far from taking the pressure off GPs, the introduction of MURs



has in fact increased GPs' workload in many cases or, at the least, led to them receiving information that they do not have the time or resources to use in any meaningful way. GPs' main concern is about the format in which the information is provided. At present GPs receive a lengthy and detailed paper form, which is time-consuming to interpret and contains information that cannot easily be entered into their practice IT systems. It is hardly surprising, therefore, that many MUR forms are either discarded or ignored by GPs.

Improvements needed

This clearly cannot be allowed to go on: not only is it a waste of pharmacists', patients' and GPs' time, but it is also wasting a considerable amount of NHS resources. A streamlined MUR model, one which has been endorsed by GPs as well as pharmacists, is essential if we are to move forward and ensure that the undoubted potential that MURs have to improve patient care is realised. One improvement, in my opinion, would be to condense the current form to a one-page document that contains a set of fields that

have been mutually agreed. This should make it easier for GPs to pick up any necessary action points and incorporate any relevant new information or data into their IT systems. The key change that needs to be introduced, however, is to make the MUR form available in an electronic format so that it can quickly and easily be appended to patients' records. On the face of it, this would seem to be a rather distant prospect, given the current problems that the NHS is facing with its IT systems. If the Department of Health is serious, however, about making the most of the new community pharmacy contract and ensuring that the NHS makes more efficient and effective use of its medicines budget — both of which are things that ministers say are priorities for the department — then it needs to push this issue

much further up its agenda. Without proper IT support, MURs will continue to interest only a relatively small percentage of GPs.

This is not to say, of course, that there are not some good examples of pharmacists and GPs working together effectively to make best use of the MUR process. A number of practices, for example, ask patients to go for an MUR with a pharmacist before asking them to come along for their annual medicines review at the practice. This helps to improve compliance among patients, GPs argue, and also improves the quality and value of the GP's review. Other GPs have encouraged pharmacists to go into practices and to see patients on site, having agreed between them beforehand what it is they want the MUR process to achieve and how they can use it to improve patient care. The challenge now, therefore, is to encourage other practices to follow this lead. Once again this is something that is likely to require the intervention of the DoH. It is a challenge that the DoH, in conjunction with primary care trusts, has to take on if MURs are to be a success in the long run.

How I have used root cause analysis

In this article, **Graham Lavender**, a supplementary prescriber in a Southampton GP practice, describes three cases in which medication reviews did not result in an intended outcome and how applying root cause analysis allowed him to learn from each

The HOMER study,¹ which reported on home-based medication review by pharmacists, resulted in significant concerns over the value and, indeed, safety of pharmacist medication review. The study (a randomised controlled trial involving 872 elderly patients recruited during an emergency admission) indicated a statistically significant higher rate of hospital admissions as a result of pharmacist medication review. Although the study design has been criticised,² there has been no detailed look at the individual pharmacist interventions that may have resulted in the hospital admissions.

In recognition of the increasing clinical role of pharmacists, the Royal Pharmaceutical Society issued a revised "Clinical governance framework for pharmacist prescribers" in October 2005. One recommendation of the framework is that pharmacist prescribing should be considered in clinical risk management programmes, including root cause analysis (RCA). An RCA investigation traces the cause and effect trail from a failure. It is a



step-by-step method that leads to the discovery of a fault's first (or root) cause.

To date, no attempt has been made to identify the root cause of the increased hospital admissions in the HOMER study and, until such an analysis is made, no sound conclusions can be made on the validity of

the individual pharmacist interventions. Although RCA is not the only clinical governance tool recommended by the Society, it has the advantage over clinical audit, for example, because it can analyse a sequence of events.

As a prescribing pharmacist of 30 months' standing I have followed the Society guidelines to assess clinical medication reviews that I have carried out and which have resulted in other than the desired outcome. The process is similar to a practice encouraged during my supplementary prescribing course, in which the supplementary prescriber had to write up and analyse all significant events. I continued with this practice after the course, entering patient reviews in which a significant event occurred, onto my online continuing professional development file. Significant events are any incident where further reflection might be advantageous in identifying not only the cause of an adverse incident but also any training requirements and plans needed as a result.

Case 1: Stopping a patient's medicine in order to follow guidelines

Mrs JG, a 62-year-old female had had a gastroscopy two years ago, which was normal aside from some gastric inflammation attributed to the use of non-steroidal anti-inflammatory drugs. Her appointment was part of a review of all patients on long-term proton pump inhibitors (PPIs) using local guidelines similar to the National Institute for Health and Clinical Excellence dyspepsia guidelines.

When I saw Mrs JG, she was taking omeprazole 20mg *od*, and co-proxamol *prn* for intermittent osteoarthritis. No over-the-counter medicines were being taken. In her notes, the gastroscopy report suggested prescribing a PPI for four to six weeks to resolve irritation to the gastric mucosa after which the drug was to be stopped and only used if symptoms returned. However, it appeared from the patient's notes that she had been taking omeprazole 20mg for the two years because no medication review had taken place (this in itself is an example of why it is important to conduct regular medication reviews).

Having confirmed that the patient was asymptomatic it was agreed that she would stop taking the omeprazole and this would be reviewed at a later date. I was comfortable with this course of action because there was no reason to continue a relatively powerful drug when, in this case (ie, after gastroscopy), there was no indication of long-term need, and I advised Mrs JG to return if she experienced any gastrointestinal symptoms.

At a practice meeting some months later I was informed that Mrs JG had been admitted to hospital with a gastrointestinal bleed but had made a full recovery. I seemed to be the only one at the meeting concerned that stopping her omeprazole had been the cause. The comment by the GP prescribing lead was: "We looked at your intervention. It followed guidelines. It was in the interest of the patient not to have unnecessary medication and we have no problems with it. Unfortunately any intervention you, or any of us, make can have adverse consequences

which, despite best practice, are simply unpredictable and should not change practices unless evidence suggests otherwise."

Initially, I was happy to accept the GP's assessment, but when I applied RCA a sequence of events that might have prevented Mrs JG's gastrointestinal bleed was highlighted. The step that caused me concern was the sudden stopping of omeprazole after two years' continuous therapy. Although the local guidelines and the gastroscopy report said that therapy should be stopped after four to six weeks because the patient had been on omeprazole for two years a slow reduction in the dose of omeprazole would have been more appropriate. Although the literature is sparse on this point, it could be assumed that the lower acid levels in the stomach as a result of long-term omeprazole therapy might have led to some reduction in gastric protection and a sudden rebound in acidity may have had adverse consequences.

Case 2: Starting a patient on a new medicine for a newly diagnosed condition

Mr TM, a 69-year-old man who had been treated for prostate cancer in 2004, had an appointment with me following a raised fasting glucose level and an HbA_{1c} of 8.4.

He had been first seen by a GP in my practice (my independent prescriber) who agreed a clinical management plan. I prescribed metformin 500mg tablets, one with

breakfast for the first week, adding one with the evening meal for the second week and, finally, adding in one with lunch thereafter. The patient's BP measurements averaged

150/90 over the past three readings and his cholesterol was raised but I explained that we were first going to treat his high blood glucose levels before looking at his blood pressure and then his cholesterol level. Mr TM had no questions and I asked him to come back to see me in six weeks, following another HbA_{1c} test.

At the next appointment, however, his HbA_{1c} was almost the same (8.6) and before I could ask him any questions he said "I took

the course of tablets, am I now cured of diabetes?"

RCA requires a detailed record of events if the reason for an undesirable result is to be determined. In this case, although the notes on examination, therapy and goals were detailed, no record was made of the counselling I gave on starting the patient on metformin. Several weeks after an event it is difficult to remember an individual consultation but, given the sequence of events and

the outcome, I am prepared to admit that I had not been clear about the long-term nature of the therapy. It is relatively easy to make an assumption, based on your own knowledge, but from a patient's perspective there is no reason to assume that a treatment is for life. My RCA for this patient identified a failure in my counselling. It indicated the need to be more specific in future and, if necessary, to provide written instructions and information.

Case 3: Learning to question an independent prescriber's decision

Mrs KB, a 76-year-old woman with a history of chest pain, had been referred in 1999 to hospital for further investigation for heart disease and, considering her symptoms and age, was prescribed aspirin, a statin (simvastatin 40mg *od*) and an antihypertensive agent (losartan 50mg *od*). The result of an exercise test was equivocal and a follow-up stress test showed no indication of cardiac ischaemia. However, the hospital suggested that Mrs KB continue taking the aspirin, statin and the antihypertensive as a precaution. The patient was a non-smoker, with a body mass index of 24.

During the medication review, I found that, at the patient's request some months earlier, the GP had stopped prescribing aspirin. This was because Mrs KB had experienced some bruising (a common side effect in elderly people taking aspirin). She had no chest pain at rest, but experienced tightness in the chest on excessive exercise, which responded to glyceryl trinitrate. However, these episodes were rare. BP was 148/90 and readings over the past 12 months had all been in excess of 140/85. Electrolytes and

renal function were normal. I advised Mrs KB that, because of her high BP readings, we should increase the dose of losartan to 100mg and to repeat electrolytes and BP measurements after a month. I accepted the reason for stopping the aspirin and recorded in the patient's notes that aspirin was contraindicated due to excess bruising, with a reference to the date of the consultation where this had been decided with the GP.

Less than a month later, Mrs KB was seen at the surgery having woken with chest pain that did not resolve with GTN, sweating, nausea and palpitations. She was admitted to hospital with an acute myocardial infarction and discharged after having a stent inserted. I saw her after she was discharged, now taking aspirin and clopidogrel. Again she was heavily bruised but she had accepted that the risk of a repeat MI outweighed the concern about bruising. I later discussed the patient at a practice meeting. The conclusion was that the patient's overriding concern about unsightly bruising and the subsequent stopping of prescribing must be seen as a

clear example of patient's choice. Clearly, this was most likely to have caused the MI but, using RCA analysis, there was evidence of opportunities, on a number of occasions, to break the sequence that led to the MI.

The exercise test is known to have a limited diagnostic value (especially for elderly patients) and, although followed by a stress test, a negative result does not completely exclude coronary artery disease — it is well established that around 30 per cent of atheroma grow into the artery wall, giving little obstruction of blood flow and hence not necessarily identified on exercise and stress testing. The aspirin had been initially prescribed with this possibility in mind and this was not recognised on at least two occasions: the GP had failed to balance the risk of stopping aspirin against the patient's concern about bruising and I had failed to challenge the GP's decision. In this case, RCA not only found the primary event that led to the adverse outcome but also identified subsequent events that presented an opportunity to reverse the original error.

RCA has enabled me to reflect in detail on medication reviews where the outcomes were not as intended. For each case, a root cause can be identified from an examination of the sequence of events and subsequent training can be used to prevent a repeat occurrence. In two of these three cases, the patients required secondary care and, although my GP practice was happy with my reviews, it was shown that, in fact, it might have been possible to avoid the hospital admissions. It should be noted that it is not necessary to prevent the root cause from occurring — it is merely necessary to break the chain of events at any point so that the final "failure" does not occur, for example, with Mrs KB (case 3), where there was the opportunity to break the sequence when I later reviewed the patient.

For Mr TM (case 2) incomplete counselling skills were identified as the root cause of the incident. Assumptions were made that the patient had a good understanding of diabetes and a need to review the quality of the information given to patients and to check their understanding was identified.

RCA allows a detailed breakdown of a sequence of events and the identification of the actual cause or steps in the sequence of events which might have caused the adverse outcome. The HOMER study included no such analysis and without one it is not possible to identify the root causes of the increased hospital admissions. This reduces the validity of its conclusion that pharmacist medication review increases hospital admissions. There will always be adverse outcomes when a significant number of interventions are made; the challenge is to identify the causes, recognise any training needs and meet those needs.

Clearly if RCA identifies individuals with unacceptable numbers of adverse outcomes and training is not addressing the problem, then questions must be asked about the suitability of the individual for the role. With pharmacists now taking on increasing roles, the potential for adverse outcomes is ever present. Only by using tools, such as RCA, can we ensure that patients have the quality of care they deserve and the profession of pharmacy can meet the standards of care that

its new roles demand. The value of medication review as an opportunity to break the sequence of events leading to an adverse outcome must be recognised as well as the inherent advantage of regular medication review for all patients on regular medication.

References

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2. Hay JW. Pharmacist medication review study design concerns. *BMJ* 2005;330:347.

Sharing prescribing and medication review learning

If you would like to share a prescribing or medication review case study in *P&MM*, please contact Lin-Nam Wang (tel 020 7572 2413, e-mail lin-nam.wang@pharmj.org.uk)

Collaborative awards presented at gala

Last month the National Prescribing Centre hosted a gala ceremony to celebrate the medicines management collaboratives. **Olivia Timbs** reports

For the past five years the National Prescribing Centre (NPC) has run various medicines management collaborative programmes involving teams in primary and secondary care and community pharmacy.

To celebrate the successes of the participating teams, and 10 years of the NPC, it organised a gala awards ceremony at which two teams presented their projects in five categories. Richard Seal, director of medicines management at the NPC, was master of ceremonies, and winners and runners-up were presented with their awards by Jeanette Howe, deputy chief pharmacist at the Department of Health, England. The day was rounded off by an address from Heinz Wolff, emeritus professor of bioengineering at Brunel University.

Mr Seal started the day's proceedings by saying that many people had been involved in the collaboratives: 146 primary care trusts, 44 acute hospital and mental health trusts, 28 community pharmacies and 25 health community teams. They had all contributed to "making medicines management everybody's business."

Care at the interface

The first award went to Coventry Teaching PCT in the category of "increasing patient care at the interface".

Mark Galloway, head of medicines management at the PCT, said one of the team's key aims had been to use community pharmacists' skills to improve prescribing efficiency and, to that end, it had developed the Prescription Review and Intervention Scheme with Education (PRISE) project.

Pharmacists were paid to highlight to prescribers potential dose optimisations, excessive repeat prescribing and the potential for brand to generic switches. An analysis revealed that for every £1 spent on fees for pharmacists, £3 savings were made to the prescribing budget (from over 11,000 interventions, £112,000 cost-savings were made with payments of £28,000 made to pharmacists).

Oxford Radcliffe Hospitals NHS Trust was the runner-up in this category with a project to improve the efficiency of the out of hours pharmacy service.

Increasing safety and reducing risk

In the second category, "increasing patient safety and reducing risk" the award went to East Kent Coastal PCT.

Heather Lucas, the PCT's pharmaceutical adviser, described the medicines support service designed to assist patients — identified by health care professionals or those



working in social services — who were having difficulty taking their medicines. Patients were assessed by pharmacy technicians, with back-up provided by a clinical medication review undertaken by a prescribing adviser.

Half the referrals came from social services and it became apparent that, for the scheme to work effectively, care agency staff had to be trained how to administer medicines safely and to know where their responsibilities lay. The successful implementation of the scheme has resulted in less drug wastage and fewer hospital admissions.

South Staffordshire Healthcare NHS Foundation Trust was the runner-up team for improving the reconciliation of medicines in a mental health trust. This project — although in the third wave of the collaborative — had been the first opportunity for mental health services to be involved.

Efficiency and waste

The third award was picked up by Ashford PCT in the category "increasing efficiency and reducing waste." The basis for the project was so simple and so reproducible every PCT and health board in the UK should take note.

Sandra Swinerd, lead medicines management technician at the PCT, revealed that from studying ePACT data it emerged that the trust was spending £250,000 per year on blood glucose testing strips — a sum larger than that being spent on oral glycaemic drugs.

An audit carried out at several practices showed that patients were ordering many more strips than they required. (Patients controlling their diabetes with oral glycaemic drugs need not check their blood glucose more than twice a week and those controlling their condition through diet need not test their blood glucose at all.)

After discussion with patients test strip usage has dropped and community pharmacists are to participate further in their care by discussing blood glucose test strip usage as part of the medicines review process.

University Hospitals of Leicester NHS Trust was the runner-up with a project that involved employing medicines management assistants to improve medicines housekeeping.

Patient involvement

Calderdale and Huddersfield NHS Foundation Trust — rated as excellent in the Healthcare Commission's medicines management health check — won the "patient involvement" category.

The award recognised the trust's efforts to increase patient safety and reduce risk through the self-administration of medicines.

Karen Guy, one of only a handful of nurses who work in a UK pharmacy department, described the benefits to staff as well as patients through the introduction of self-administration. The time spent, for example, administering medicines on the medicine round dropped from just over four hours in every 24 hours to less than two hours.

Patients' knowledge about their medicines, why they have been prescribed them, the dose, course and possible side effects improved. She explained that the system enabled patients to "practise" taking their medicines before they are discharged and so enables hospital staff to help patients and their carers cope with more complication medication regimens.

The runner-up team from Hinchinbrooke Healthcare NHS Trust looked at improving access to medicines in hospitals by Parkinson's disease patients.

Improving access to medicines

In the final category "improving access to medicines", the winning team from Guildford and Waverley PCT was represented by Fay Boyett, medicines management facilitator, and Fiona Harris, chief pharmacist, who described the COUNT project.

COUNT stands for Confused over how much medicine to take and when to take it; Over ordering medicines — too many packets at home; Unable to open packaging — unable to unscrew the lids on bottles or open the foil packs; Not taking medicine — forgetting, or choosing not to take medicine; and taking Too many or too few journeys to fetch medicines.

Using information gleaned from this, the team has been able to focus on ways to help old people to take their medicines.

The team has developed a calendar for 2007 which includes a section describing various compliance aids and, following some market testing with people in a day centre, the testers — mostly women in their 80s and 90s — decided that a magnifying glass and a pill popper would be the two most useful aids in helping them take their medicines.

The runner-up award in this category went to Central Cornwall PCT with a community pharmacy-based asthma project.