

Hampshire medicines management project saves NHS over £1 million

Brian Curwain, chief pharmacist for Hampshire Primary Care Trust (West), reports on a combined savings effort across two PCTs

In 2005, the Medicines Management Programme Board, a body constituted from Eastleigh and Test Valley South (ETVS), New Forest, Southampton City and Mid Hampshire primary care trusts, Southampton and Winchester Hospital Trusts and the West Hampshire Trust, identified five prescribing changes that were capable of saving £1.75m across ETVS and New Forest. The medicines management teams of these two PCTs took on the challenge of implementing these changes in primary care. Effective implementation required each practice to have dedicated pharmaceutical support and prescribers to be aware of, and in support of, the changes. At no stage were GPs offered financial inducements to participate in the project and we are grateful for their goodwill.

Targets

One of the key objectives of the project was to ensure the cost-effective prescribing of statins. The target was to have the most cost-effective drug, simvastatin, prescribed for 80 per cent of all statin prescriptions. In the New Forest and parts of ETVS this meant a major change in prescribing habits since, as a result of a previous recommendation to use a different drug (based on costs before generic simvastatin became available at around 10 per cent of the previous price) less than 50 per cent of statin prescriptions were for simvastatin.

Some practices adopted the change early and willingly, while others raised legitimate concerns about the equivalence of effect on cholesterol levels. We generated data from the early adopting practices to prove that simvastatin was as effective at lowering cholesterol and these remaining practices were per-



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sued. Measurements of, for example, patients' cholesterol levels and blood pressures revealed that the prescribing changes were not detrimental, and that GP performance (under the quality and outcomes framework) was not adversely affected.

Other practices were concerned about the workload of changing several hundred patients' prescriptions and worried about handling patients' concerns. We drafted letters for the practices to use and, in some cases, agreed to have the team telephone number on them so that patients could call. If they did, a member of the team would explain the rationale for the change. In New Forest PCT 78 per cent of statin prescriptions are now for simvastatin and in ETVS the figure is 80 per cent.

Another intervention involved the cost-effective use of antidepressants. It meant persuading prescribers to concentrate on the use of two drugs, fluoxetine and citalopram, as first-line agents, instead of more expensive newer drugs. Though heavily marketed, the

newer products have no clear advantages and we often found themselves at odds with the pharmaceutical industry, which tried to persuade us otherwise.

Another commonly used drug, amlodipine, had recently come off patent and become much cheaper. However, the generic product was amlodipine maleate and the GP computer systems tended to offer the original product (besilate) at the top of their menus when the drug was typed in. Detailed work was required to counteract this technical flaw. Unfortunately, this work frequently needed to be repeated when monthly update discs had been run. A combination of educating and persuading practice staff to do this and doing it ourselves was employed.

Communication

The ways in which the medicines management teams got their messages across were varied: GP medicines management groups, practice meetings, individual discussions and prescribing newsletters were all used. In addition, we made community pharmacists aware of what we were planning and when it would happen locally. They, in turn, assisted with giving information to patients about the changes. We also spoke to some of the patient groups attached to surgeries, to explain and discuss our work to improve both the effectiveness and the cost-effectiveness of therapy.

Performance was monitored from Prescription Pricing Division data every month. This was shared with all the practices so that everyone knew how they were doing. Figures were regularly discussed at GP medicines management meetings.

Members of our two medicines management teams also met frequently to share

learning about the change management that we were driving forward. Clear protocols for making changes were developed and these were adapted for different practices.

Success

Prescribing was monitored using robust data and benchmarking performance against national and Hampshire averages. At the outset, potential savings were carefully calculated so we were able to track progress month by month. Overall prescribing costs have fallen from 2.5 per cent below to 10 per cent below the national average.

Monitoring costs across England had the effect of contextualising what we were doing: we were encouraged, at one stage, when we calculated that if the whole of England had done what we did, savings of several hundred million pounds could have been made.

The work done on this project in 2005/06 resulted in savings of £1,123,000 across the two PCTs. This saving will be repeated in future years as long as the relevant drug costs remain broadly similar. We have also helped GPs to realise that NHS budgets are finite and that savings made in one area may free funds for use elsewhere. This will be helpful for implementing practice-based commissioning.

The freeing of significant resources for our organisations has made a significant contribution to meeting financial targets and to avoiding the draconian measures which would have been imposed on our PCTs had we failed. Such measures would undoubtedly have meant reduction in services for patients.

Patient perspectives

There were no direct measures of patient satisfaction but in one practice, where over 300 patients had a medicine changed, only 11

rang the medicines management team to discuss it. All patients had received letters explaining the project and only one ultimately refused to agree to a medicine change.

Many of the patients affected had the chance to discuss their medicines and the changes to their therapy with GPs or pharmacists. It was found that, overwhelmingly, patients are happy to agree to things that save money for the NHS as long as they are persuaded that the change is not detrimental to themselves — they are proud, on the whole, to do their bit to help us reduce the NHS spend and hence the burden on taxpayers.

As a result of seeking the co-operation and collaboration of patients, an increased feeling of partnership was evident, which adds to the develop of the partnership agenda between patients and NHS professionals.

Team outcomes

Before this programme the teams had little experience of large scale therapy switches in general practice. As a pharmacist working in a practice, it is relatively simple to carry out tasks that the practice wants. In this project we had to persuade the practices that a major money saving effort was required, even though the two PCTs were doing relatively well in prescribing at the start of the project. The teams have become much more skilled in managing and driving change.

As two PCT teams coming together we have also learnt from each other and matured as an integrated unit. The PCTs have seen clearly what we have been able to achieve through monthly medicines management reports. There is a greater awareness within the organisation of how medicines management is relevant to almost all parts of health service delivery.

In addition, because we have been able to show GPs changes in hospital prescribing practices resulting from other parts of the programme, there is now a genuine feeling that we are all acting together within one health economy.

Finally, our value for money is clear — a group of staff who cost the PCTs around £400,000 per year have achieved savings of almost three times this amount.

Conclusion

As a result of this project, prescribers in both primary and secondary care are more willing to listen to our PCT's wishes and to collaborate with implementing desired changes. The PCTs now have pharmacists designated to provide support to all practices and good long-term relationships have developed — we are now well-placed to discuss the needs of the PCT and the local health economy and this is beginning to bear fruit in practice-based commissioning locality groups.

Pharmacists in the PCTs are a trusted source of both information and practical assistance. Although this has been built on a history of providing support to clinicians, the ability to make a real financial impact is significant.

Our medicines management programme is ongoing and, it is hoped, will be applied to the whole of Hampshire. The need for interventions is likely to continue as the costs of various drugs change as a result of both patent expiry and the operation of category M in the Drug Tariff. Five further key prescribing interventions are now being finalised.

By increasing the cost-effectiveness of prescribing we free resources for other things, including the uptake of new, expensive and effective therapies in either primary or secondary care.

Secondary care can support PCT aims

Better communication between primary and secondary care allows hospitals to help primary care trusts meet their prescribing targets, according to research presented at the annual scientific meeting of the Drug Utilisation Research Group in February.

A problem faced by many PCTs is that medicines prescribed in hospitals might not correspond to those preferred in primary care and this can be expensive. For example, in December 2005 the prices of 28 omeprazole 10mg capsules and tablets in the Drug Tariff were £5.46 and £11.14, respectively, so PCTs preferred capsules to be prescribed. However, these prices might not apply in secondary care — many hospitals receive discounts from suppliers. "The capsules and tablets could be the same price but in some cases, the price of tablets can be lower," said Phil Woodvine, data analyst at the school of pharmacy, Keele

University, said. Patients prescribed omeprazole tablets in hospital cost the PCT more when they move into primary care. "Pharmaceutical advisers in our department say that GPs will try to switch [the patient to a PCT preferred product] but patients resist this. They do not want to change their medicine because it has been prescribed by 'the specialist at the hospital,'" he explained.

One way of avoiding this situation is to inform hospital chief pharmacists of primary care targets and ask them to support PCTs. For example, in the West Midlands, the strategic health authority secondary care pharmaceutical adviser attended the chief pharmacists meeting and presented the PCT's targets. The result of this simple strategy was a decrease in the hospital prescribing of omeprazole tablets from 31 per cent to 1 per cent in three months (monitored using IMS

Hospital drug issue data). Similar achievements were made with the prescribing of ramipril and lansoprazole. "The question remains why this type of dialogue had not already occurred between PCTs and hospitals regarding this and similar switches," the researchers said.

They commented that NHS targets together with practice-based commissioning and integrated care pathways make it more important than ever that there is robust dialogue and collaboration between medicines management services in primary and secondary care. In addition, if drug procurement choices in secondary care were aligned to primary care targets, this would free resources as well as provide more continuity for patients. The research was carried out by Keele University, in collaboration with West Midlands chief pharmacists.

Failings in the system: a case study

Graham Lavender, a supplementary prescriber in a GP practice, uses root cause analysis to look at how a patient could have been allowed to take two beta-blockers for over a year

One of the misconceptions about root cause analysis (RCA) is that its only purpose is to look at the primary cause of an incident. In fact, RCA looks for all the interventions after an incident or error that might have been an opportunity to rectify the problem. The case study in this article involves a patient who was prescribed two different beta-blockers for more than a year. In that time, a number of health care professionals had the opportunity to identify the error and stop one of the beta-blockers but failed to do so. As a result, the patient experienced significant side effects and considerable costs were incurred in investigating his symptoms.

Background

Mr M is a 74-year-old who had an unremarkable medical history until May 2003 when he went to see his GP with joint pain, which was diagnosed as osteoarthritis. Indometacin 75mg *od* was prescribed but this was changed to rofecoxib 12.5mg *od* a few months later. (Readers may think the cyclooxygenase 2 selective inhibitor could have contributed to the patient's subsequent cardiac problems but this is beyond the scope of this article.) Later still, rofecoxib was replaced with co-codamol *prn*. Mr M also suffered from gastrointestinal reflux.

Sequence of events

September 2004, beta-blocker prescribed Mr M came to the practice with chest pain and, as is standard procedure, was referred to a rapid access chest pain clinic for assessment. He was subsequently prescribed: nebivolol 5mg *od*, aspirin 75mg *od*, simvastatin 40 *on* and ramipril 2.5mg *od*. I believe the initiation of nebivolol was the first error in this case; it is an expensive non-formulary beta-blocker and the patient's notes reveal no justification for not using a formulary drug. Leaving the cost implications aside, the use of a less common drug may have contributed to the addition of the second beta-blocker — nebivolol was presumably not recognised as a beta-blocker by the later prescriber. Unless there is clear clinical need, formulary drugs should always be used first line; they are chosen for their evidence base and cost effectiveness and, perhaps what is not so often appreciated, they are more widely recognised.

March 2005, nebivolol stopped Mr M had a stent fitted to treat unstable angina. Following the procedure, nebivolol was stopped (it was not on the discharge medication list) but it is probable that it was not deleted from the practice computer.

May 2005, second beta-blocker added Mr M's notes indicate that bisoprolol 2.5mg *od* was prescribed three months after the stent, for chest pain attributed to angina on exertion. It is unclear who made this addition, but this is the first clear cause of the problem because Mr M still had in his possession an old repeat prescription request form, which listed nebivolol. Although it is common when stopping a drug (ie, nebivolol) to delete it from the practice list of current drugs, it is less common to ensure that the patient only has up-to-date forms for ordering repeats.

When the bisoprolol was initiated, Mr M should have been asked to destroy all old repeat request forms. Because this was not done, Mr M was able to order both nebivolol and bisoprolol and it appears that from May 2005 he was taking two beta-blockers.

September 2005, opportunity 1 Mr M was admitted to hospital with chest pain. The diagnosis was that the pain was non-cardiac and probably musculoskeletal. The medication list on admission contained nebivolol and bisoprolol and no procedure on admission picked this up. There was also a lapse in the discharge procedure: the two beta-blockers are listed on the discharge form. My understanding of the secondary care procedures is limited but it is usual for a pharmacist to sign off the discharge medication form. So, at least one health care professional, the discharge pharmacist, was in a position to intervene and correct the error. At this point, Mr M was taking:

Aspirin 75mg *od*
Nebivolol 5mg *od*
Clopidogrel 75mg *od*
Ramipril 5mg *od*
Bisoprolol 2.5mg *od*
Isosorbide mononitrate 20mg *bd*
Simvastatin 40mg *on*
Quinine 300mg *on*
Co-codamol 30/500mg *prn*

October 2005, opportunity 2 When Mr M was admitted to hospital with chest pain in September 2005, he was found to have gastric angiodysplasia, which was treated with Argon plasma coagulation. The treatment was routinely followed up a month after. Nothing of note was recorded during the follow up, but the main issue is that the discharge letter from the consultation listed all Mr M's current medicines, including the two beta-blockers. Again, the co-prescribing was not picked up by anyone.

November 2005, opportunity 3 Mr M had continuing chest pains and underwent cardiac imaging (a "Myoview"). It is unlikely that a pharmaceutical history was taken during the Myoview examination — no list of medication was made on admission and the discharge letter did not contain a medicines list. Mr M continued taking the nebivolol and bisoprolol.

May 2006, opportunity 4 Mr M, occasionally dizzy, tired and bradycardic, and with a BP of 100/40, had a perfusion scan. This showed no inducible ischaemia, suggesting that the continued chest pain was not coronary. Again, the discharge letter did not contain a list of current medicines and a fourth opportunity to question the two beta-blockers was missed.

Communication between primary and secondary care seems to have been less than ideal and a clear, accurate system of communicating current medication might have picked up the error.

June 2006, opportunity 5 It was not until I invited Mr M for a medication review that the two beta-blockers were noted and a slow monitored withdrawal of nebivolol was initiated.

Conclusion

At least seven key events that may have contributed to, or where it might have been reasonable to have identified the error have been established. It is not possible from the patient's notes to identify all the primary and secondary care personnel involved, but the purpose of RCA is not to apportion blame. Rather, it is to determine the original cause of a problem and analyse the sequence of events, identifying where the error could have been corrected.

In addition, prescriptions being dispensed in primary care should have resulted in a call to the prescriber. Furthermore, this situation could have prompted the community pharmacist to undertake a medicines use review.

There are a number of key messages from this case. The communication between primary and secondary care, with particular regard to current medication, needs to be improved. As a minimum, secondary care providers must always be assured that they have an accurate up-to-date medication record for a patient. In addition, the number of missed opportunities for intervention from both primary care, secondary care and community pharmacists means we must question the effectiveness of current checks and safeguards.

Benefits of becoming an FPMM member

Anil M. Patel, a community pharmacist and supplementary prescriber based in Kingston upon Thames, explains how and why he became a member of the Faculty of Prescribing and Medicines Management

It is clear that revalidation — the regular appraisal of a health care professional's skills and competencies — is looming, although it is not certain when it will be introduced. This development and the idea of getting prepared for it, motivated me to apply for membership of the Faculty of Prescribing and Medicines Management (FPMM). It would mean that I could demonstrate my competencies within the profession and to other health care professionals but, ultimately, I recognised this would benefit my patients.

Associate membership of the College of Pharmacy Practice and the faculty is open to anyone committed to high standards of pharmacy practice through annual submission of continuing professional development records. Full member status of the faculty is achieved through a process of accreditation. The pharmacist must demonstrate that he or she practises to a sufficiently high standard and has appropriate skills, knowledge and experience. The pharmacist assesses his or her own competence against a nationally validated competency framework, either at general or advanced level. This must be substantiated by a portfolio of evidence from daily pharmacy practice. This evidence is then verified by two assessors who are members of the FPMM and is followed, at a later date, by an interview with the assessors.

Gaining membership

The main reason I applied for full membership of the faculty was my conviction that it represents pharmacists with an enviably high standard of performance in prescribing and medicines management, and I wished to achieve this standard. With appropriate diligence (and a lot of memory jogging) I compiled a portfolio of my CPD and my career, reviewing the skills I had acquired and reflecting on my special achievements. I had worked in community and in secondary care at a large teaching hospital before embarking on a continuing course of postgraduate studies, including training as a supplementary prescriber.

With some assistance from the administrative staff at the college, I put together the required documentation and finally submitted my written review in the portfolio format described in the faculty's handbook, "A guide to the FPMM and how to achieve membership" (available at <http://fpmm.collpharm.co.uk>). This was often my sole guide to the correct submission format.

Once my portfolio had been assessed, I was invited for an interview at the college in Coventry. The interview was a rigorous one, conducted by two experienced pharmacists.

Although daunting and thorough, the interview was also an amicable and interactive process during which I felt comfortable enough to put my case forward with enthusiasm. The hard work of compiling the portfolio and the interview was worthwhile, and I achieved membership status.

Although I personally did not have a mentor, mentoring to help associates to achieve full membership is available through the faculty and I would encourage associates intending to become members to make full use of a mentor. Details of the help and support provided through mentoring are available on the faculty website. Mentors' own experience of being members and how the faculty helps them in their careers will prove invaluable.

Benefits

Membership of the faculty has had a positive impact on me as a community pharmacist. I have the opportunity to meet supplementary prescribers from other sectors of pharmacy, such as academia and hospital as well as practice-based pharmacists.

In September 2006, the faculty organised a mentoring masterclass for supplementary prescribers in London. This was well-attended. The one-day course was intensive and filled in many gaps in my knowledge — assisting me in discussion with my peers in supplementary prescribing as well as providing me with confidence to help mentor others.

The College of Pharmacy Practice and its faculties

The College of Pharmacy Practice has been supporting personal and professional development of associates and members through recognition of continuing professional development for 25 years. It has also set up two faculties — the Faculty of Prescribing and Medicines Management and the Faculty of Neonatal and Paediatric Pharmacy (see *PJ*, 20 January, pp76–7), with a further one planned for public health pharmacy — to allow the development of pharmacy specialities.

Revalidation is a top priority for the college, which plans to support its members and associates to maintain their CPD regularly — a significant part of the revalidation process. Applying for membership of the college and one of its faculties is one way for pharmacists to demonstrate their commitment to CPD and can help them identify the competencies needed for their pharmacy practice which, in turn, will support professional revalidation.



The faculty takes a proactive approach and offers encouragement to pharmacists from all sectors. With the faculty's support, I was recently accepted on an independent prescribing course. And I am confident that I will get additional support from other members of the faculty through the network of experience available through the forum on the college's website.

Although I gained a master's degree in 2003, like many community pharmacists, lack of time is the principal obstacle to pursuing higher education. Through mentoring and support, the FPMM aims to help pharmacists set up and undertake research. The college and faculty are also involved in the administration of the Servier Prescribing and Medicines Management Awards. These innovative awards support the implementation of educational and clinical initiatives and fund project development in the areas of osteoporosis, coronary heart disease and diabetes.

I have only been a member of the FPMM for a few months but I have found that my association with the faculty has already provided me with a refreshed sense of direction, access to a wealth of experience, increased confidence in my sector of practice and, most of all, increased ability to perform to the highest standards. I encourage pharmacists to apply to become associates and then work towards becoming full members of the college and the faculty.

I would also encourage members and associates of several years standing to volunteer their views by writing articles for the faculty's newsletter and offering feedback on how their own membership and being associates has helped them, to the faculty liaison coordinator (e-mail: teresa@collpharm.org). Such first-hand knowledge would be of great help to me and other new members in becoming involved in the running of the faculty, and to associates applying for full membership.