HOWS AND WHYS OF MEDICATION ERRORS

The National Patient Safety Agency will begin piloting root cause analysis (RCA) for pharmacy staff in England and Wales in January 2004. RCA is a technique that will enhance national and local learning from incident reporting. In the third of a series of articles, Wendy Harris, senior pharmacist at the NPSA, explains why RCA will be so important to pharmaceutical practice

Dovetailing with the National Learning and Reporting System (NLRS), root cause analysis (RCA) provides a rigorous framework within which to reflect on an actual or potential safety incident, working back across the sequence of events. RCA is important, because it helps move thinking beyond the "who" to the "how", by uncovering underlying, contributory and causal factors in systems and process failures, to prevent a recurrence.

We acknowledge that pharmacists already take patient safety extremely seriously, and trap a significant number of medication errors. But, in practice, things can and do go wrong despite high levels of professionalism in the field. For example, in primary care, an estimated 1 per cent to 11 per cent of all prescriptions are associated with some sort of error. However, there are few data on the type, frequency and provenance of errors, or how to prevent them, which is why RCA matters.

Various methods can be used for RCA:

- A "fishbone diagram", where each of the "bones" reflects different environmental and operational factors
- Timelines, where a chronological chain of events is mapped and tracked
- The Five Whys or the Why-Why chart, which involves asking why enough times in a row to find the root cause of an incident

Common to all of the methods is the need for systematic documentation and reflective practice. Pharmacists are already adopting this approach for continuing professional development, which will become mandatory from 2005. But this signals a significant cultural change for community pharmacy, which is being driven by several developments. New standard operating procedures, incident reporting to the NPSA, audits, patient questionnaires and intervention monitoring will all require documentation as part of clinical governance.

Endorsed by the Royal Pharmaceutical Society, with which we are working closely on its implementation, RCA is a way of enhancing patient and customer focus and informing the quality agenda, which in turn underpins the new pharmacy contract.

The other key component of RCA is team work, and a readiness to share the learning with immediate colleagues and other pharmacists and health care professionals.

Many hospital pharmacists are already doing this, as part of trust risk management procedures, and for solo practitioners in community pharmacy this can be a way of relieving the isolation of the job and fostering good working relationships with peers and other health care professionals. But, gathering potentially "commercially sensitive" information, and possibly sharing it with competitors, might seem counterintuitive and inimical to business practice in community pharmacy. These concerns need to be addressed at a local level and all pharmacists will need the support of their primary care trusts and local peer networks.

As part of a package of risk assessment and incident reporting, RCA can be used to inform business planning. But, primarily, it is about enhancing patient safety and working towards greater transparency and public accountability for all NHS services. Whether shared at an individual, local or national level, RCA is not about finger pointing or blame; it is about learning how an incident occurred. The NPSA does not intend to use the information for league tables, or criminal prosecution; rather, it will apply the local learning to the development of national solutions.

RCA and the training required to use it will take time, but it is a short-term investment for potentially significant long-term gains. From January 2004, the NPSA will begin training key NHS staff in the use of RCA, including the Society inspectors, so that they can support pharmacists locally and spread the learning. We will also be assisting with additional training workshops and materials, and have provided an RCA e-learning toolkit, now available at www.npsa.nhs.uk.

At the same time, in collaboration with the respective Centres for Pharmacy Postgraduate Education in England and Wales, we will pilot RCA with one or two local tutor groups in each of the countries, with roll-out to community pharmacy expected in late 2004.

We are still consulting key stakeholders about the best way forward, but it is envisaged that once fully operational, RCA will be carried out in local "collegiate" pharmacy networks. Each of these will have a pool of around a dozen members, to ensure four or five participants can be drawn on at any one time. Reports would be fed back to the NPSA in confidence every quarter.

Ultimately, any individual, company or profession that openly acknowledges its mistakes and actively works to prevent them will be perceived as more trustworthy than one which consistently works to conceal them.

This series can be viewed at www.pjonline.com/series.

Community pharmacy scenario using RCA

You receive a prescription for methotrexate 40mg weekly for a patient you do not know. The person waiting to collect the prescription is not the patient. You prepare the medicine, but do not apply a label. You telephone the prescribing GP to discuss the dose. While on the telephone, you continue to dispense a prescription for another patient in the pharmacy, who is anxious not to miss her bus.

To speed up the process, you signal to an assistant to apply a label from the printer to a prepared bottle of tablets and to hand out the completed prescription while you continue to talk with the GP to confirm the correct dose of methotrexate (which should be 10mg weekly). You note the confirmed dose on the patient medication record while the assistant prepares the tablets. Several days later a woman returns with a bottle of tablets, saying they are not what she normally takes. You recognise her as the patient in a hurry to catch her bus. The tablets are methotrexate. Why did it happen, and how will you prevent it happening again?

Why did the patient receive the wrong medicine? The label was applied to the wrong bottle.
Why? The pharmacist was talking on the telephone and directed the dispensary assistant by hand signals and pointing to apply a label, without actually speaking to her.
Why? The pharmacy was busy. And the telephone call took longer than expected, creating a backlog of waiting patients and prescriptions, and one patient was anxious not to miss her bus.
Why did the pharmacist not check the labelling? He knew he had generated the correct label and had confirmed the prescription against the PMR — it just needed to be applied to the tablet bottle.
Why did the pharmacist allow the assistant to complete the job unchecked? The assistant had completed her dispensing training and she is usually good at her job.
Does the pharmacy have a standard operating procedure for checking completed prescriptions? Yes, but we do not stick to it when we get busy.
Why not? Would it not be better to review the SOP and produce one that does work in busy situations? Yes, you are right.