DO YOU KNOW WHY YOU MAKE ERRORS?

In the last of a series of articles, Wendy Harris, senior pharmacist at the National Patient Safety Agency, describes how various tools and techniques can facilitate the detection of systems errors and embed patient safety in every aspect of practice

Pharmacists have a major part to play in minimising risks to patient safety associated with the prescribing, supply and use of medicines. The National Patient Safety Agency is committed to supporting the role of pharmacists as patient safety advocates with a range of tools designed to provide systematic and balanced understanding and analyses of processes and procedures.

The tools have been developed in association with a broad range of key stakeholders, including regulatory, professional and educational bodies, as well as patients. The tools also borrow heavily from other high risk industries, such as engineering and aviation, where they have been successfully applied for many years. They provide an important means of measuring progress towards enhancing patient safety, detailed in the seven steps to patient safety (www.npsa.nhs.uk), embedding it in every aspect of care and service delivery and helping to ensure that when things do go wrong, the right action is taken. They are integral to sustaining an open, fair and accountable culture, which relies on reporting and learning; only within this context can a virtuous circle of safety be promoted and safety risks minimised (Creating the virtuous circle: patient safety, accountability and an open and fair culture. London: The NHS Confederation; 2003).

None of the tools is intended to provide firm answers or solutions, nor do they replace the need to investigate a patient safety incident, or to take appropriate disciplinary action if warranted. Designed to be used with the National Reporting and Learning System (NRLS), the tools outlined here can also be used in conjunction with the 'Medicines, ethics and practice' guide, published by the Royal Pharmaceutical Society, to:

- Assess risk
- Examine systems failures methodically
- Strengthen processes and procedures
- Enhance the learning from potential and actual patient safety incidents
- Treat staff fairly and consistently
- Inform solutions

The following section offers some guidance on how the tools might be used and outlines some scenarios to stimulate your thinking.

THE INCIDENT DECISION TREE

The incident decision tree (IDT) is an algorithm. By opening up a range of possible options, it aims to help managers make consistent and equitable decisions about staff when considering what action to take after a patient safety incident.

It initially asks if the actions and their consequences were deliberate. If the answer is "yes", referral to the police, the relevant regulatory or disciplinary body and suspension may need to be considered.

If the answer is "no", the algorithm guides the user through three linked domains, each of which has its own set of outcomes. The first, ill health, is designed to ascertain if there was evidence of ill health or substance abuse. The second, the foresight test, tries to gauge if the individual concerned knowingly ignored agreed protocols and safety procedures and if there was evidence of recklessness. The third, the substitution test, tries to assess if a peer with the same qualifications and experience would have behaved in the same way.

The further the route travelled through the incident decision tree, the more likely the outcome is to be a systems induced error.

For example, how would you deal with the following scenario?

A community pharmacist returns to the pharmacy after a week's holiday, during which time, several different locums, supported by part-time staff, managed the pharmacy. When looking through the prescriptions dispensed while she was away, the pharmacist spots a dispensing error. A further check of stock and invoices and the patient medication record confirms that a patient safety incident has occurred. This is not the first time that this type of incident has occurred when the pharmacist has been on holiday.

Record the incident and report the error to the NLRS. What have you learnt from this incident? The incident decision tree could be used to help you decide on an appropriate course of action for the staff involved. Do they need further training? Do communications need to be tightened? What is the line of responsibility? Are the correct systems in place?

Consult the 'Medicines, ethics and practice' guide (July 2003) and law and ethics fact sheet 11, "Dealing with dispensing errors", to be clear about your legal obligations.

ROOT CAUSE ANALYSIS

Unlike the incident decision tree, root cause analysis (RCA) works back across the sequence of events leading to an actual or potential incident to uncover underlying, contributory and causal factors in systems and process failures, with the aim of preventing a recurrence (*PJ*, 6 December, p781).

The following scenario describes an incident that did not result in any harm, but which could potentially have been serious. Why did it happen? How would you prevent it from happening again?

Antibiotics were ordered for a patient admitted through accident and emergency. The patient's sensitivity to penicillin was recorded on the admission notes but not communicated to the pharmacy. Co-amoxiclav was supplied to the ward and administered by nursing staff who were unaware that it was a penicillin.

Record the incident and report as before. What can be learnt from this incident? RCA will help to identify the causal factors, and this information should then be acted upon to prevent future reoccurrence.

FAILURE MODES AND EFFECTS ANALYSIS

Failure modes and effects analysis (FMEA) is a form of assessment used in industry and now applied to health care. It can be used to: identify potential systems failures before they happen; prioritise appropriate action in line with the seriousness of the possible consequences of those failures on patient care and the organisation; and assess the likelihood of recurrence.

FMEA pinpoints function (how something is supposed to work), failure mode (how that function might fail), contributory factor (something that leads to the failure) and effect (the consequences). It can be applied to a human or mechanical process, which is then mapped out from beginning to end, using a flow chart to identify potential failures and risks and information gleaned from the NLRS and local risk registers.

What are the potential consequences in the following scenario? How likely is to happen again? What action should be taken to reduce that likelihood? For example, should standard operating procedures for receipt of discharge information be developed?

A practice pharmacist visits a local residential care home to conduct a medication review for a patient on behalf of a general practitioner. The pharmacist identifies discrepancies between the information held by the home and the practice. Changes have recently been made to the patient's prescription after her discharge from hospital, which have not been recorded in the GP notes. The patient has received the correct dose and frequency administered by the home staff, but the medication history and repeat prescription record remain incorrect.

This series of articles has been produced to stimulate debate and inform the profession on the NPSA developments. To support you further and to help progress local discussion, the NPSA has produced a video to provide an introduction to the issue of patient safety. It is available from the Department of Health publications line on 08701 555 455.

The NPSA will also be launching an interactive web-based learning toolkit in spring 2004. This includes triggers for thinking about how to develop patient safety in practice, and is designed for use by different health care professionals according to their area of interest, setting and role.