

# Drug history taking

## — avoiding the common pitfalls

By Carolyn Gates, MSc, MRPharmS

Pharmacy technicians are becoming increasingly involved in taking patients' drug histories on admission. This article describes the key points technicians should be aware of to help improve medicines management from admission to discharge



Medicines in a patient's possession may be out of date or no longer used

**E**stablishing an accurate drug history for patients admitted to hospital is important since this will form the basis on which future inpatient therapeutic decisions are made. Studies have shown that drug histories taken by pharmacists are more accurate and complete than those taken by junior medical staff<sup>1-3</sup> and with increasing use of technicians at ward level, clinical technicians are also having a greater role in this area.<sup>4</sup> The drug history taking process can also be used to identify any patient-related medicines management issues that may have affected the admission or that may affect discharge.

Drug history taking is a skill that needs to be learnt and practised. This article aims to highlight some common pitfalls and, although aimed at technicians working in adult acute admission areas, it is also likely to provide some useful tips to junior pharmacists.

### — The basics

In general, adults admitted to acute admission wards will have been fast-tracked through accident and emergency, will be physically unwell and will usually have limited information about their medicines with them. Coupled with a need to establish an accurate drug history as quickly as possible, the whole process can be challenging.

**Carolyn Gates** is lead directorate pharmacist, medicine and emergency services, at University College Hospital, London

When taking a drug history it is important to establish the following:

- Allergy/drug sensitivity status
- Regular and occasional medicines used
- Any medicine recently started, stopped or changed, and the reasons why
- Any side effects experienced
- Quantities of medicines the patient has at home
- How much the patient usually receives on repeat prescription (patients with a history of drug overdose for example may only receive limited supplies)
- How the patient manages their medicines at home (eg, carers, district nurses, medication reminder devices)

Since patients often misunderstand the true meaning of an allergy, allergy and drug sensitivity status should be confirmed for every patient, even if the allergy box on the inpatient drug chart has been completed. If an allergy or drug sensitivity is identified, the nature of the reaction should be documented. Generic drug names should be used and the constituents of any combination preparations should be recorded.

For patients who are unable to confirm their allergy status, the technician or pharmacist taking the history should check the patient's medical notes, speak to a relative or contact the patient's GP surgery. The source of any information should also be noted (eg, "no known drug allergies from GP surgery"). It may be possible to clarify a patient's allergy status at a later date.

It should never be assumed that a drug history written in a patient's accident and emergency notes or on their drug chart is correct. Similarly, it should not be assumed that a blank drug chart means that the patient was not taking any medication.

### — Sources of drug history

In general, those taking drug histories will need to use more than one of the following sources to collect information.

**The patient** Few patients can accurately state the name and strength of all their medicines. Drug names based on "sounds-like" should not be suggested, otherwise doxazosin may become digoxin, for example. Inhalers, oral contraceptives, hormone replacement therapy, once weekly medications, eye-drops, ointments, herbal medicines and over-the-counter medicines should be specifically asked about since these are frequently forgotten.

**Patients' own medicines** If patients have not brought their own medicines into hospital with them, relatives or carers should be asked to bring them in. Each medicine should be discussed with the patient to establish what it is for, how long they have been taking it, and how frequently they take it. It should not be assumed that the dispensing label accurately reflects patient usage. The date of dispensing should also be checked since some patients may bring all their medicines into hospital, including

those stopped years ago. The community pharmacy contact information can also be obtained from the dispensing label. If the patient uses a particular strength of medicine that cannot be supplied by the hospital, this should be noted since it could cause confusion when the patient is discharged.

**Relatives/carers** Some patients have relatives, friends or carers who help with their medicines. This is common with elderly patients or families where English is not the patient's first language. These carers can help establish a drug history and give an insight into how medicines are managed at home.

**Repeat prescriptions** Some patients keep copies of all their repeat prescriptions — however, these can be several years old. The date of last issue should always be checked and each item should be confirmed with the patient, bearing in mind that the dose or strength may have changed without the patient realising. If there is any doubt, the GP surgery should be contacted.

**GP referral letter** Handwritten drug histories such as those found in a GP referral letter should be used with caution since they may be illegible or incomplete. In all cases, the drug history should be checked with the patient, relative or carer and GP surgery.

**GP surgery** Some GP receptionists will read repeat medicine lists over the telephone. Ideally, the list should be faxed, especially if it is likely to be long and complicated. In general the surgery should be

## Panel 2: Patients taking warfarin

The following points should be recorded for patients taking warfarin:

- Indication and target INR
- Date started and expected duration
- Dose (confirm with the patient in terms of number and colour of tablets)
- Who monitors the INR (clinic, GP, district nurse, etc)
- Relevant contact telephone numbers
- Dates of last and next INR check
- Frequency of checks
- Time of administration (many hospitals administer warfarin in the evening — this could lead to double dosing on admission if the patient takes it in the morning)
- Strength of tablets usually kept by the patient
- Quantity of tablets the patient has at home
- If the patient has experienced any problems with warfarin

## Panel 1: Medication reminder devices

If the reminder device is filled by the patient or relative, it is important to check that this is being done correctly. If it is dispensed by a community pharmacist, the device should be checked for dispensing labels which will provide the pharmacy contact details. The community pharmacy should be advised of the patient's admission to avoid unnecessary repeat dispensing. The date of last dispensing should be checked and whether any medicine has changed recently, bearing in mind that the GP may have changes planned for the next prescription.

The patient should be asked how many reminder devices they have at home, since discharge medication may be unnecessary if there are no inpatient changes. If the device has been filled by a district nurse, they should be contacted to confirm exactly what has been put in it.

It must be remembered that some regular or "as required" medicines may not be in the device, such as antibiotics, once weekly bisphosphonates, recent hospital outpatient prescriptions, laxatives or analgesics. If the patient is not sure about what additional medicines they take this should be checked with the GP surgery or a relative or carer.

If the patient does not know who fills their device the GP surgery may be able to help since they often use particular pharmacies for this purpose. A database of local pharmacies that provide the service can usually be obtained from the PCT if necessary.

asked about repeat medicines, acute medicines ("one-off" medicines) and medicines that have been discontinued over the previous couple of months. Specific questioning may be needed for different formulations, for example, CFC-free inhalers, the Calcichew range, and modified-release preparations. Not all surgeries keep up-to-date records, so the date of last issue and the quantity supplied should be checked. Similarly, misunderstandings may be identified if, for example, a patient claims to take a particular medicine but the surgery says it has not issued a prescription for over a year.

**Reminder charts** Some hospitals provide reminder charts for patients on discharge. Again, if using these as a source for taking a drug history, the information should be confirmed with the patient or carer and the date of issue noted.

**Hospital discharge summary** An inpatient stay during the previous month or a recent outpatient appointment may mean that the GP surgery is not yet up to date with the patient's current medicines. If the patient does not have a copy of their discharge summary or outpatient prescription it may be found in the pharmacy dispensing records or could be obtained by telephoning the pharmacy department at the hospital where the patient was last treated.

**Nursing home records** Most nursing or residential homes use medication administration record charts and a copy of the most recent version is often sent to hospital with the patient. If this has been printed by the local pharmacy, it will provide an accurate drug history as well as providing a record of what the patient has actually received in the home. Handwritten lists from care home assistants, nursing staff or district nurses may

contain transcription errors and must always be confirmed with the GP surgery.

**Community psychiatric nurse** Some patients are monitored in the community by psychiatric nurses or keyworkers. It is worth making contact with these people to obtain further information about the patient's drug history and also to identify any medicines management issues (eg, supply quantities, supervision requirements). Medicines such as injectable anti-psychotics, for example, may be absent from the GP surgery records.

**Medication reminder devices** Medication reminder devices may be filled by the community pharmacist, district nurse, relative or patient. Examples include blister packs (eg, Venalinks) or refillable boxes (Dosette, Medimax, etc). Points to look out for when using a reminder device to help compile a drug history are outlined in Panel 1. Hospital pharmacy systems should be in place to ensure that community services are restarted when the patient leaves hospital and that the community pharmacist, GP or district nurse is aware of any changes to the patient's medicines. This is a good example of discharge planning at the point of admission.

### — Problem groups

Following is a selection of issues that commonly arise in the acute admissions unit.

**Warfarin** A separate drug history should always be taken for patients on warfarin. Information can be obtained from the patient, their anticoagulant records, or the anticoagulant clinic. Points that should be recorded are summarised in Panel 2. The anticoagulant clinic should be informed of a patient's admission, especially if the patient is due an international normalised ratio check

in the near future or if a long stay in hospital is likely. The ward pharmacist should ensure that the anticoagulant record book contains the inpatient dosing and liaise with the clinic on discharge as necessary.

**Steroids** For asthma or chronic obstructive pulmonary disease patients who have been prescribed steroids as an inpatient, the number of courses they have had in the previous six months should be checked, and whether these were a slow wean or a short five-to-seven day course, since a reducing course of steroids may be warranted. For patients on long-term steroids, the drug chart should be clearly annotated by the pharmacist so that treatment is not inadvertently discontinued. Some patients may be taking steroids as part of a chemotherapy regimen — if accurate information cannot be obtained, a specialist oncology pharmacist should be consulted.

**Insulin** Insulin regimens are often documented inaccurately or incompletely in medical notes (eg, "Mixtard"). Information to check includes the brand of insulin, the administration device (disposable pen, 10ml vial, refillable pen, Innolet, etc) and the dose in units. It should be remembered that some older patients still use pork or bovine insulin.

**Oral contraceptives/HRT** Many women do not consider the oral contraceptive pill or hormone replacement therapy to be medicines so this should always be asked. Additional counselling may be needed regarding a "missed pill" or antibiotic interactions.

**Methotrexate** The National Patient Safety Agency has highlighted methotrexate as a high risk drug.<sup>5</sup> As it is prescribed weekly, the day of administration, strength and number of tablets taken should be confirmed with the patient. Any folic acid prescriptions should also be asked about.

**Bisphosphonates** Many elderly patients take weekly bisphosphonates (eg, alendronate, risedronate). It is important to confirm with the patient which day of the week they take the medicine and that they are taking it correctly. If patients have bis-

phosphonates in their monitored dose systems together with other tablets it is likely that they are not taking them correctly. Calcium preparations should also be asked about, bearing in mind that patients may not realise that there are different products in the Calcichew range, for example.

**Inhalers** Patients may not know the name or strength of their inhaler but they can usually describe it by colour. However, descriptions of colours can vary. For example, a patient describing a "red" inhaler may be referring to Flixotide (orange), whereas a "green" inhaler may turn out to be Atrovent rather than Serevent. The different types of administration device may also need to be described to the patient to identify the type they use. The GP surgery should be contacted for confirmation if there is any doubt.

**Drug misusers** Patients who misuse drugs can be difficult to deal with. They may exaggerate their daily intake of methadone or benzodiazepines (either prescribed or obtained illegally) and can put undue pressure on medical staff to prescribe. Hospital policies should be in place to limit inappropriate prescribing. In general, prescriptions and usual quantities for methadone or benzodiazepines must be confirmed with the prescribing GP or drug dependency unit before prescribing for an inpatient. With regards to methadone, the community pharmacist should also be contacted to confirm the date of the last prescription collected, frequency of collection and the validity of the current prescription. A telephone call on discharge will alert the community pharmacist as to when the patient will resume his or her prescriptions.

## Discharge planning

Discharge planning should start at the point of admission where questions about medicines management can be asked at the same time as taking a drug history. Examples of patients requiring extra care at discharge include:

- Patients with confusion or dementia
- Patients with repeated hospital admissions
- Patients using reminder devices pre-admission (communication with the community pharmacist or district nurse will be needed on discharge)
- Other situations where communication with primary care is needed (eg, drug misusers)
- Patients likely to need help with their medicines
- Patients whose first language is not English
- Patients on warfarin (communication with the anticoagulation clinic, district nurse or GP is needed).

Any useful telephone numbers obtained on admission should be documented (eg, community pharmacist, district nurse, anticoagulant clinic) as these will probably form part of the discharge plan.

## Documentation

Clear documentation of the patient's drug history and any medicines management issues is important. Care should be taken to write legibly, and unambiguously, and entries should be signed and dated. Any drug omissions, errors on the drug chart or potential problems for discharge identified by the technician compiling the drug history should be highlighted to the relevant clinical pharmacist who will be able to ascertain the clinical significance and take the appropriate action.

Pharmacy departments should have guidelines about how medicines management issues should be documented. For example, they may be recorded on the back of the drug chart, in the pharmacy communication notes or in the medical notes.

At University College Hospital London, we have adapted the back of the inpatient drug chart to record such information. The clinical pharmacists also use the chart to communicate unresolved drug issues when the patient is transferred out of the acute admission area, and as a means of confirming drugs that have been stopped or altered on admission.

## Summary

It is important to establish an accurate drug history when a patient has been admitted to hospital. The process involves more than just writing a list of drugs, and medicines management aspects need to be considered to obtain a complete picture. Obtaining such information can be challenging and at times frustrating, but being aware of the key issues outlined in this article should help technicians and junior pharmacists avoid the common pitfalls.

## References

1. Tulip SC, Cheung P, Campbell D, Walters P. Pharmaceutical care for older people: recording and review of medication following admission to hospital. *International Journal of Pharmacy Practice* 2002;10(Suppl):R58.
2. McFadzean E, Isles C, Moffat J, Norrie J, Stewart D. Is there a role for a prescribing pharmacist in preventing prescribing errors in a medical admission unit? *Pharmaceutical Journal* 2003;270:896-9.
3. Dutton K, Hedger N, Wills S, Davies P. Prevent medication errors on admission. *Clinical Governance* 2003;8:128-37.
4. Jones G. Medicines management initiatives reduce errors. *Hospital Pharmacist* 2004;11:475.
5. National Patient Safety Agency. Reducing the harm caused by oral methotrexate. Patient safety alert. July 2004.

### "Focus on technician" articles

Any pharmacist or technician who is involved in any new developments in work undertaken by technicians is asked to consider writing an article for publication. Advice on the publication process can be obtained by telephoning the editorial office on 020 7572 2425/2419. Articles can be sent by post to *Hospital Pharmacist*, 1 Lambeth High Street, London, SE1 7JN, or submitted by email to [hannah.pike@pharmj.org.uk](mailto:hannah.pike@pharmj.org.uk)