

PROVIDING PHARMACY SERVICES TO MEDICAL ADMISSIONS UNITS

Pharmacists are increasingly becoming an active part of the team assessing patients on admission. Despite problems in obtaining funding, this trend is likely to continue, because of the benefits that the arrangement brings to patients, hospitals and pharmacists alike. This article outlines those advantages

Provision of pharmacy services to medical admission units (MAUs) is a priority area for the hospital sector of the pharmacy profession. Such services enable pharmacists to increase their contribution to patient care by moving from ward-based medicines management towards more proactive care on admission. This offers an opportunity to reduce risk to patients. It also helps to establish pharmacists as a key part of the clinical team.

The main advantage of a pharmacy service to MAUs is that drug-related problems can be identified and resolved early on.

There is political support for this. The Audit Commission's 2001 report on medicines management¹ recommends that clinical pharmacy should move "from reactive quality control towards proactive involvement in direct patient care and the anticipation of errors." It says: "It is clear that a proactive approach would be safer for patients." The Department of Health's "Pharmacy in the future — implementing the NHS plan"² also comments positively on pharmacists' work on admission wards "to help make sure a patient's medicines are right early in their stay."

Early assessment reduces the risk of medication errors and therefore fits with the Department of Health's commitment to a 40 per cent reduction in the number of serious errors involving prescribed drugs by 2005.³

— CURRENT SERVICES

Pharmacy MAU services are well established in some hospitals but provision is patchy, largely because of a lack of funding. Varied arrangements are in place: some hospitals have full-time admission pharmacists

while others are only able to support a service for a few hours each day.

There are specific challenges to providing pharmacy services to MAUs because of the rapid turnover of patients (patients are usually moved to a ward or discharged within 24 hours), the acute nature of the clinical problems encountered, and the fact that admissions occur 24 hours a day. Pharmacy activities undertaken in MAUs typically include:

- Taking drug histories
- Assessing patients' own drugs (PODs)
- Medication review
- Attending post-take ward rounds
- Supply of medicines
- Providing information and advice to doctors and nurses
- Patient counselling

— DRUG HISTORY TAKING

Taking a drug history is a key task in a MAU. As well as ensuring that the correct medicines are prescribed for the patient's acute problem, an accurate drug history enables an assessment to be made of whether admission might be related to prescribing errors, to an adverse drug reaction or to patients not taking their medicines appropriately.

History taking can be more difficult in an acute situation than for planned admissions. Patients may be confused or too ill to be interviewed, and the GP referral letter — assuming one is available — might have been written in haste and may contain incomplete or inaccurate information about the patient's medicines. Another problem is that many patients are admitted "out of hours", when there is little chance of obtaining rapid confirmatory information on a patient's prescribed medicines from primary care sources (ie, from the GP or community pharmacist).

There is therefore a need for skilled medication history taking in such situations. Pharmacists have been shown to be better

than junior hospital doctors at taking an accurate history in MAUs. Advantages in histories taken by pharmacists over those taken by doctors include fewer errors in the history, fewer unintentional discrepancies in medicines prescribed on admission, better recording of patients' use of "over-the-counter" and complementary medicines, and more complete recording of allergy status.⁴⁻⁷

In some MAUs, the drug history is taken by a pharmacist if he or she is first to see the patient. In such cases, the doctor might choose not to repeat the task. More usually, however, a junior doctor takes the history as part of the clerking process and the pharmacist (or technician) then confirms it. There are two reasons for this arrangement: first, learning to take a drug history is an important part of a doctor's training and, secondly, with current hours of service, pharmacists will not always be available when patients are admitted.

A further argument for pharmacist involvement in MAU drug history taking relates to the "knock-on" effect on discharge medication.⁸ An inaccurate drug history on admission can lead to inaccurate prescribing and then to transfer of inaccurate information on the discharge summary.

— PATIENTS' OWN DRUGS

Increasingly, patients are encouraged to bring their medicines with them when admitted to hospital, for use during the inpatient episode and on discharge. This arrangement aims to reduce waste, reduce patient confusion by avoiding the unnecessary duplication of drugs, and facilitate discharge.⁹

An assessment of PODs can also help with the drug history by establishing what medicines patients are taking on admission. However, patients in MAUs are less likely than those with planned admissions to bring their medicines with them, especially if they are admitted via an accident and emergency department. It is important to ensure that accident and emergency staff know that they need to keep any PODs that patients bring in

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on admission. Ambulance staff should also be encouraged to collect medicines from a patient's home when bringing them in an emergency admission.

MEDICATION REVIEW

Conducting a medication review on an MAU involves checking patients' drug charts, offering advice to medical teams on any change in medicines that might be needed, and drawing up a care plan. This relates to both medicines the patient has been taking regularly and to drugs that have been prescribed on an MAU for the acute condition.

By monitoring prescriptions in the MAU, the delay between prescribing and intervention is reduced. When pharmacists do not see the drug chart until the patient has been transferred to a ward, there is inevitably a delay — reported to be 48 hours on average¹⁰ — in picking up problems.

Provision of clinical pharmacy services to MAUs, together with consulting patients' medical notes, attending ward rounds, and discussing appropriately with ward staff and patients, has been shown to identify more care issues than a simple review of the drug chart.¹¹ However, with limited staffing, there is often a need to target patients who are most likely to require pharmaceutical care. This might, for example, include elderly patients, patients taking more than four medicines, and those with type 2 diabetes.¹²

ATTENDING WARD ROUNDS

Many hospitals that have developed a clinical pharmacy service to a MAU aim, where staffing allows, for a pharmacist also to attend the post-take ward rounds.

Attendance on ward rounds, including post-take rounds, provides pharmacists with more opportunity to be involved in the decision-making process on prescribing than ward visits alone⁵ and increases the timeliness of interventions.¹³ Ward rounds are, however, time consuming and, in some hospitals, pharmacists are not able to attend, or can participate only for specific patients who are known to have pharmaceutical problems.

MEDICINE SUPPLY

If a patient has not brought PODs in with them (or has insufficient supplies) or if new items are prescribed, these are usually supplied from ward stocks where possible if the prescription is likely to be revised when the patient is stabilised. Medicines that are expected to be continued unchanged, and any non-stock drugs, are usually dispensed ready-labelled for discharge.

For patients who are discharged straight from an MAU, hospital policy may be that discharge medicines are not supplied if there has been no change in the prescription and the patient already has sufficient supplies.



When bringing in patients in an emergency, staff should be encouraged to collect up PODs

This can speed up the discharge process and produce financial savings.^{11,14}

COUNSELLING

Medicine counselling is an important part of MAU pharmacy activity, especially for patients who are discharged direct from the unit with new medicines. It could, in theory, reduce readmission rates.

Pharmacists have reported how counselling in MAU can be prioritised to specific groups (eg, patients aged over 75, those being discharged on newly prescribed "complicated" medicines, such as warfarin or inhalers, and those with a known history of poor compliance^{15,16}).

TRANSCRIBING AND PRESCRIBING

In some MAUs, pharmacists are involved in transcribing the drug chart to create discharge prescriptions. This is particularly helpful when there is pressure on beds.

For pharmacists working in MAUs, supplementary prescribing is not expected to be particularly relevant because, for example, the situation does not lend itself to the drawing up of a clinical management plan (and agreeing it with the patient). Supplementary prescribing might conceivably be useful for patients who are regularly readmitted, particularly if doctors' workload in a MAU is especially high.

Independent prescribing might offer wider opportunities for pharmacists on MAUs, and the Department of Health has announced that it will soon start discussions on the framework for this.¹⁷ It is not yet known what range of medicines will be prescribable.

OTHER ISSUES

Communication Patients who are not discharged are quickly moved from an MAU to a ward. To ensure continuity of pharmaceutical care a good communication system — electronic or paper-based — is needed between MAU pharmacists and pharmacists on the ward to which the patient is transferred. MAU pharmacists can highlight

interventions that have been made and other problems that have been identified but not yet addressed. Communication with community pharmacists to support discharged patients also needs to be considered.¹⁷

Skill mix Providing MAU services involves significant staff resources. Different approaches have been taken to the specific workload of pharmacists and technicians, depending, in part, on staff availability. For example, in some hospitals clinical technicians take drug histories and check PODs on admission, while pharmacists concentrate on formulating care plans. Other hospitals take the view that a drug history is best taken by a pharmacist, because decisions have to be taken on the appropriateness of therapy. Most hospitals have found that it is useful to allocate their more experienced pharmacists to the MAU, because of the broad nature of the medication issues encountered.

When considering staff resources it is important to note that an efficient MAU pharmacy service should reduce the workload of clinical pharmacists on the wards, enabling rearrangement of their work, for example, to allow more time for discharge planning.

Hours of service It is not ideal for MAU pharmacy services to be offered only during standard weekday pharmacy hours, because patients are admitted to hospital 24 hours a day, and some 50 per cent of prescriptions are written outside traditional working hours.¹⁸ In addition, staff at pharmacies that only offer MAU services during standard weekday hours have found that this can cause problems because of the heavy morning workload dealing with overnight admissions and, on a Monday, dealing with weekend admissions.

Ideally pharmacy hours should be extended, where this is practical. Extending the pharmacy presence on the MAU to 9am to 9pm on weekdays, plus six to 10 hours over the weekend, has been shown to reduce the average delay in reviewing patients' therapy from 48 hours to 16 hours.¹⁹

THE FUTURE

Despite the support given by the Audit Commission report,¹ lack of funding still limits development of pharmacy services to MAU. Even where no new funding is available, many hospitals are now choosing to prioritise pharmacist activity in MAUs because of the benefits of focusing attention at this stage of the patient's stay.

Optimum use of support staff and the wider use of electronic prescribing and automation should help reduce the demands on pharmacists in the dispensary, thereby releasing pharmacists' time for clinical services in MAU.

References on p77

Continued from p73

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Continued from p68

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