

A career as an A&E department pharmacist



Fancy yourself in a scene from *ER*? Accident and emergency departments are increasingly making use of pharmacists' skills. Read on to find out more about the challenges offered by this specialty

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The accident and emergency department is traditionally an area that has had little pharmacist input compared with that for other hospital departments. However, it is the department with the highest turnover of patients in a hospital and is where substantial quantities of medicines are administered. A&E departments are chaotic places at times and, for example, the use of verbal orders in the resuscitation room may increase the risks associated with the use of medicines. Thus, there are many challenges for pharmacists in providing a service to these departments.

This article describes the contribution made by a pharmacist working in the emergency department at Queen's Medical Centre (QMC), Nottingham, and gives a brief overview of some of the ways other hospitals are using pharmacists in their A&E departments.

Background

QMC is a teaching hospital with approximately 1,200 beds. The hospital renamed its A&E department an emergency department following a recent rebuild and it is one of the busiest in Britain, with 131,581 patients attending in 2004. The job description summary for the specialist emergency department pharmacist's post at QMC is: "To provide and develop pharmacy services to the emergency department. This will include helping to bridge the gap between the

emergency department and the admitting wards in the hospital, and improving medicines management in the emergency department."

Key areas of work

Government targets are driving change in emergency care. Current targets for treatment in A&E departments, introduced in December 2004, specify that all patients attending A&E must be admitted, transferred or discharged within four hours.¹ These targets have led to a hospital-wide redesign of processes and to changes in skill mix, with nurses and other health professionals (including pharmacists) expanding their roles. Among the pharmacist's roles in the emergency department is to look at initiatives to help achieve the four-hour target.

Drug history taking

Taking a drug history has been found to be a key role for pharmacists working on medical admissions wards.² It has also been acknowledged and well documented that pharmacists are more accurate than doctors at taking drug histories.³⁻⁵

The practice of pharmacists taking drug histories in A&E departments, before patients are admitted to medical admissions wards, may have several benefits. For example, it enables better judgements to be made by doctors about adjusting patients' treatment on ward



rounds since accurate drug histories are already known. It also means that any drug-related issues on admission, or potential drug-related problems, may be highlighted early in a patient's stay as recommended by the Audit Commission.⁶

In addition to improving the quality of drug histories for patients on the medical admissions ward, this service also helps to reduce junior doctors' workload and speeds up the admissions process, reducing the amount of time patients spend waiting for assessment and review.

At QMC, the emergency department pharmacist takes a drug history for those patients being admitted to the medical admissions ward. The pharmacist uses information obtained from speaking to patients about the medicines they are taking or, as appropriate, from referring to the patient's GP, nursing or residential home staff, relatives and previous notes. The pharmacist then reviews the patient's medicines in light of the reason for admission. Any drug-related issues that may be important to the patient's treatment are brought to the attention of medical staff. The pharmacist may suggest a simplification of a medicine regimen if necessary. A full drug history and any relevant comments are documented in the patient's medical notes and the pharmacist informs ward-based pharmacists of any patients that may need to be followed-up. The pharmacist is also involved in completing drug charts, which are then reviewed and signed by a doctor.

Ward rounds

At QMC, there is a consultant ward round every morning for patients who have been admitted to hospital under the care of the emergency department. This is a small ward round with up to 14 patients and is attended by the emergency department pharmacist.

On the ward round, the pharmacist's role is to clarify drug histories, add any new medicines that are required to the drug chart, provide advice to medical and nursing staff and write discharge medication forms. As well as ensuring the appropriateness of medicines for patients, having a pharmacist complete the discharge medication forms speeds up the discharge process. For patients who are discharged during the ward round, medicines are dispensed by the pharmacist, or discharge technician, immediately after the round has finished. Most discharge prescriptions can be dispensed on the ward using pre-packs. This enables patients to be discharged promptly and helps to clear beds ready for new admissions from the emergency department, activities which help meet the four-hour target for the emergency department.

Risk management

The emergency department pharmacist at QMC is part of the department's risk management group. This group meets bimonthly and reviews all incidents. Any trends are studied and

practices altered if appropriate. The pharmacist liaises with members of the hospital's drug incident group regarding any drug incidents that may have a hospital-wide impact. Examples of hospital-wide risk management issues have included the introduction of colour-coded syringe labels in line with national guidance and reviewing the use of lidocaine and sodium chloride ampoules in view of similar packaging.

Guidelines

There were relatively few specific drug guidelines in place in the emergency department at QMC when the pharmacist's post was created. Since then, new guidelines have been developed for treating illnesses and infections only applicable to the emergency department, and the emergency department pharmacist has taken a lead role in their development. These guidelines have included emergency department-specific antibiotic guidelines for the treatment of animal and human bites, and guidance for the treatment of patients who have received intravenous morphine and midazolam. In addition, for paediatric patients, guidelines have been introduced for the dose-rounding of analgesia, as well as a treatment algorithm for patients presenting with anaphylaxis.

Intravenous infusions can involve complicated calculations. A set of standardised infusion guidelines for the administration of aminophylline, amiodarone, naloxone and salbutamol have been developed and are available for use by both medical and nursing staff. The guidelines contain essential information on administration of these drugs, any dosage calculations that are required and dosing regimens.

Teaching other staff

Teaching can be an important part of the A&E department pharmacist's role. This aspect of the job has been developed at QMC by the pharmacist working alongside the emergency department training and education team. Informal educational input is part of the pharmacist's daily work and formal teaching sessions are also undertaken by the pharmacist.

Doctors receive training by the emergency department pharmacist at their induction to ensure that they are aware of trust and national guidelines. Topics covered include accurate prescribing, antibiotic guidelines and guidelines specific to the emergency department. Nursing staff receive training on various subjects including intravenous drug administration.

Source of advice

The pharmacist is a source of advice and information to all medical and nursing staff. Common tasks that the pharmacist may undertake include:

- ▶ Tablet identification
- ▶ Giving advice on drug choice, particularly antibiotics
- ▶ Providing dosage recommendations for elderly patients and those with renal impairment
- ▶ Providing information on the administration of intravenous drugs
- ▶ Providing compatibility information
- ▶ Carrying out dosage calculations

Counselling at discharge

The emergency department pharmacist selectively counsels patients on discharge, concentrating on seeing patients taking multiple medicines, the elderly and those patients referred to them by medical and nursing staff. Examples of patients that have been counselled on discharge include:

- ▶ A patient admitted with hypoglycaemia because she was unable to use her insulin device correctly
- ▶ Patients unable to remember to take their medicines
- ▶ Patients unsure about why they have been prescribed their medicines

Research

At QMC, the pharmacist is involved in the hospital's emergency department research group. In addition to undertaking audits, the pharmacist assists in research projects, helping with study design and pharmaceutical issues. At other hospitals, a number of pilot studies looking at ways in which the pharmacist can have an impact in the

A&E department have already taken place.

One hospital has examined the role of pharmacists in the A&E department in seeing patients with minor illnesses.⁷ Pharmacists saw patients who could have been managed by community pharmacists, including those with coughs and colds, allergic reactions, bites and stings, and reactions to the sun.

Clinical decision units


Clinical decision units are attached to A&E departments in some UK hospitals. They are designed for short-stay patients who need to be admitted for less than 24 hours, such as patients who have taken overdoses who need monitoring for a few hours or patients admitted with cellulitis before continuing treatment under a home care service. Because of the high patient turnover, a rapid and efficient pharmacy service for these units is required.

Training for the role

There is no national training scheme or mandatory qualification for A&E department pharmacists. Most training is "on the job", with training needs varying depending on the background of the pharmacist.

The UK Clinical Pharmacy Association (UKCPA) Emergency Care Group was started in 2004. The group aims to provide a link for all emergency care pharmacists and includes A&E department pharmacists. It ran its first series of workshops at the UKCPA autumn symposium last year and its first study day is expected to be held this year. Members of the UKCPA can also benefit from study days run by other groups, for example, the study day "Introduction to critical care" run by the UKCPA Critical Care Group.

Future developments

The role of the emergency department pharmacist is likely to continue to expand as emergency department staff and managers realise the benefits of having pharmacists as part of their teams. 

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