Recruitment problems forced staff at the West Cumberland Hospital to review the provision of their pharmacy service. This article reports on the new service that has been developed to make better use of the skills of pharmacists and technicians.

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For any hospital pharmacy faced with a chronic staff shortage, there comes a point when pharmacy staff either retreat into the dispensary and hope nobody notices the service gaps or managers make big changes. The widespread difficulties with pharmacist recruitment in recent years forced staff at the department at the West Cumberland Hospital into exactly this position. When the situation came to a head approximately two years ago, we chose the latter option. It was time to look closely at how the acute trust operated and to ask ourselves fundamental questions about our role within it, such as:

- Are our clinical pharmacists performing functions that could be carried out by alternative members of staff, given proper training?
- Are traditional systems of supply and dispensing still the best way to meet the needs of patients and colleagues at ward level?
- Does a dispensary really have to remain open between 9am and 5pm — or could we provide a more efficient service by going out and finding the work?

Once we had considered each of these issues in turn, a common conclusion emerged: we should be doing things differently.

The lack of pharmacists in our department was happily compensated for by an enthusiastic team of pharmacy technicians keen to develop their careers. With the advent of accredited checking technicians and supplementary prescribing pharmacists, we realised that traditional hospital pharmacy roles need no longer apply. The symptoms of an over-stretched department may merely be as a result of the wrong people doing the wrong jobs. This article describes how over the last two years we have responded to the challenges created by pharmacist shortages by developing a service that is far more efficient than the one we originally had.

### Changing technician roles

In recent years, we have begun sending technicians at MTO 2 grade or above to train for the BTEC professional development certificate in dispensing technician checking. To date, we have seven accredited checking technicians and one who is nearing accreditation. Five of these have been appointed as ward liaison pharmacy technicians. This is a new role in which technicians are completely dedicated to clinical work at ward level and have no traditional duties such as dispensary cover or stock top-ups.

The type of clinical work that we envisaged technicians carrying out at ward level included many of the tasks that would previously have been performed by a clinical pharmacist. Significantly more training would obviously be needed if our technicians were to obtain the necessary skills. This training was delivered through an in-house programme carried out by our clinical pharmacists. Ward liaison pharmacy technicians now routinely perform the following activities at the West Cumberland Hospital:

- Taking medication histories and clarifying any discrepancies
- Screening patients’ own medicines
- Monitoring blood results and calculating creatinine clearance
- Counselling on the use of new medicines (including warfarin and inhalers)
- Monitoring compliance with the antibiotic policy
- Transcribing discharge prescriptions
- Counselling on discharge medicines and communicating with primary care staff

The key to the success of the new system is having a good working relationship between pharmacists and ward liaison pharmacy technicians. Technicians are actively encouraged by our clinical pharmacists to take on roles that perhaps they once would have been unsure about. In...
turn, this extension of the technician role has allowed pharmacists to open up new avenues in their own professional development. Because most of the work carried out by our ward liaison pharmacy technicians would traditionally have been performed by a clinical pharmacist, the new system represents a more efficient use of our valuable resources.

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**Innovative supply system**

In-patient medication charts now rarely leave the wards. Supply of non-stock in-patient medicines is arranged on the ward by the ward liaison pharmacy technicians, while discharge prescriptions only have to be sent to pharmacy when they contain controlled or newly-prescribed drugs.

This situation is made possible by the maintenance of in-patient dispensing (IPD) sheets by the technicians. The IPD sheet is transcribed from the medication chart when it is first written and regularly updated to reflect additions or changes.

Whenever a ward is visited by a clinical pharmacist, they will clinically check any IPD sheets which have been newly written or changed. Following this clinical check, the IPD sheets can be sent to the dispensary for the supply of any non-stock items.

All in-patient medicines at the hospital are supplied in original packs with patient instructions on, and are kept in a locker beside the bed. This system allows the technicians to help achieve a rapid discharge of patients. Once a discharge prescription has been signed, an accredited checking technician can in many cases release the prescription without ever sending it to the dispensary (see Panel 1).

Ward liaison pharmacy technicians carry bleeps so they can be called by nursing staff whenever a patient is ready to be discharged. This enhances even further the responsiveness of a system that works well in practice and satisfies patients, nursing staff and hospital management alike. A recent audit of discharge prescription waiting times for the surgical directorate has demonstrated that the typical turnaround time of three hours has been reduced to an average of 55 minutes under the new system. We have calculated that, in addition to saving two bed hours per patient, the system also saves 150 minutes of nurse time per day (equalling one nurse shift per week). This is because nurses need no longer spend time transporting medicine/drug charts to and from the pharmacy.

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**So what do pharmacists do?**

We believe that these innovative working systems have played a huge part in helping us to recruit and retain several experienced clinical pharmacists in the last 18 months. Our pharmacists now spend little time in the dispensary (which now only needs to open for two short spells morning and afternoon), and can concentrate on developing their clinical roles. These are just a few examples of activities which pharmacists undertake:

- Attending daily ward rounds
- Providing advice to nursing staff at the point of drug administration
- Attending regular ward meetings
- Working towards elimination of drug-related admissions
- Optimising medication in cases of polypharmacy
- Providing advice to GPs on discharge
- Undertaking clinical audit
- Developing supplementary prescriber roles

Many of these activities would not have been feasible to perform routinely without back-up from a ward pharmacy liaison technician.

**Emergency admission units**

With a rapid bed turnover, the emergency admissions unit is a prime example of a department that demands a responsive and dynamic pharmacy service.

The unit, which opened in May 2003, has 30 in-patient beds and an assessment area for day cases. There are, on average, 550 medical and surgical admissions each month, of which approximately 350 relate to patients who are discharged directly from the unit. All patients admitted to an emergency admissions bed are transferred to an appropriate unit or discharged within 24 hours.

The clinical pharmacy service to the unit is provided by one dedicated full-time clinical pharmacist and one ward liaison pharmacy technician. They are both based on the unit and spend the majority of their time on clinical activities. Routine supply of medicines is performed by an MTO I technician as part of a one-stop dispensing scheme.

Within a short time of the unit opening, this innovative clinical pharmacy set up has become an indispensable part of the multi-disciplinary team service. Intervention data, which is collected constantly at the hospital for risk management and audit purposes, has already demonstrated this. In 2003, the pharmacy team made a total of 2,125 clinical interventions, 830 of which were rated at level four, five or six on the Hatoum Scale (very significant, extremely significant or life saving).

The Emergency Service Collaborative was recently rewarded with £100,000 of extra capital from the Department of Health for increasing the throughput of patients from the Accident & Emergency (A&E) department. This success was in no small part due to the hard work of the pharmacy team in the emergency admissions unit. By facilitating swift discharges, the team continually aims to clear beds for patients who are waiting in A&E. This team-based approach to clinical pharmacy clearly supports the smooth running of the hospital as well as the quality of pharmaceutical care for the patient.

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**Panel 1: Discharge process**

- The discharge prescription is scrutinised to see if it differs from the current in-patient dispensing (IPD) sheet in any way
- If there are any additions or changes, then the discharge prescription will require a clinical check from a pharmacist before it can be dispensed
- If the discharge prescription matches the IPD sheet, then it can be dispensed straightaway, as the IPD sheet has already been clinically checked
- Patient packs are retrieved from the bedside locker (either those supplied by us, or patients’ own packs) and checked to ensure there is at least 14 days supply inside
- The discharge prescription is made up on the ward by the technician, using pre-printed labels where necessary
- Before discharge, the technician will thoroughly counsel the patient on how to take their medicines, and advise them to call the medicines information helpline if they have any questions after they return home

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**Tomorrow’s roles today**

Innovations tend to happen where the need for new solutions is most pressing. Although West Cumbria may seem a surprising location to encounter radical change, we were fortunate to have forward thinking individuals in the department able to respond to the challenges we faced. Now that we have seen the benefits in both productivity and service quality that our re-defined hospital pharmacy roles can offer, there will be no going back.

Today we have a young and vibrant department, with clinical pharmacists embracing the possibilities offered by supplementary prescribing, and technicians with an exciting career structure mapped out ahead of them. We look forward to the further development of our staff, and our service, in the months and years ahead.

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**References**