

# A revolution is on the doorstep — by decentralising services

Where might automation take us next? Attendees at the the UKCPA/GHP IT interest group seminar discussed how pharmacy services might look in the future. Hannah Pike reports

**A**utomation in the pharmacy department is currently supporting pharmaceutical care, but the next step towards a revolution in taking pharmacy closer to the patient involves moving automation to hospital wards, said Derek Swanson, deputy director of pharmacy at The Royal Liverpool and Broadgreen University Hospitals NHS Trust.

## Supporting care

Pharmacy department automation has been in operation for just over half a decade, Mr Swanson pointed out. It is becoming the norm in hospital pharmacies and about 100 hospitals in the UK have installed automated dispensing systems to date. "But is it only a toy? Is it a fad that is going to go away or does it actually support patient care?" he asked.

Mr Swanson said that robots must be installed as part of a system to improve patient care, and not just bought as a gimmick. "The challenge is to have it as an integral part of improving the care of patients," he said.

It is very unlikely that any automation project will end up being cost neutral, said Mr Swanson, but installing such systems will improve patient care by increasing the scope and quality of services delivered by pharmacy. Unfortunately, pharmacy services are still consistently judged by the dispensing service they provide, he said. No matter how many interventions pharmacists make at ward level the pharmacy is still judged by its discharge prescription turnaround time.

Automation will also integrate with a number of other developments such as original pack dispensing and electronic purchasing systems, Mr Swanson added.

## Where to next?

"I believe that there is a revolution that needs to happen and will happen. It will be based on

The first joint UK Clinical Pharmacy Association/Guild of Healthcare Pharmacists IT interest group seminar, entitled "The clinical application of IT" was held in Coventry on 6 June. Hannah Pike is editor of *Hospital Pharmacist*



Derek Swanson: ward-based teams are the future

ward-based teams," Mr Swanson said. Ward-based pharmacy teams are expanding in many hospitals. He described, for example, how at his hospital the medicines supply process on four wards is managed by a team comprising a pharmacist, a technician and a pharmacy support worker. Discharge prescriptions for patients on those wards are dispensed solely by that team, reducing prescription turnaround time.

Such teams can be shared by several wards, but would spend the majority of their time on the wards rather than in the dispensary, he said. The next step to streamlining the system would be to introduce ward-based automation and storage, avoiding the need for staff to search through cupboards for stock, he said.

A further step would be for medicines to be delivered directly to the wards from the suppliers, rather than first being unpacked in the dispensary. "Stock" items and "non-stock" items would become a thing of the past. This would help avoid delays in getting the drugs to the wards and enable staff to focus more on patient care, he explained.

"That brings us a decentralised pharmacy service. This is something which is not just an ideal, it is actually happening now," he said. He described how University Hospital Birmingham is building a hospital with a decentralised pharmacy system embedded

into its plans, and that the Royal Liverpool is planning a similar development.

"It will be something that could not have been conceptualised 30 years ago, but I do believe it is on the doorstep and I do believe that many of us will see it in our working lifetime," he said.

## Practicalities

Delegates posed some questions about the practicalities of a decentralised system. When asked about how cross-communication would take place between wards Mr Swanson said that his vision is for the network of ward-based automation units to interact with each other. He said that the "just in case" mentality of stockpiling products on wards must be removed, and that new systems should facilitate "just in time" stock processes.

Commenting about the paperwork involved with delivering stock directly to wards, Mr Swanson said that in his plans there will still need to be a pharmacy department, and that department will have a goods receipt area as well as areas for clinical trials etc. However, staff on the wards will need to understand how to use pharmacy stock control systems.

He said that he would envisage goods arriving in the goods receipt area of the pharmacy department and being transferred to wards. At ward level they would be checked against the delivery note and the order confirmation sent. Invoicing would be ideally be done electronically.

An alternative system would be for goods to be checked against the delivery note at the point of loading them into the robot, using a barcode system. "If we take this vision and run with it then we can help drive all of the things that need to happen," he said.

A delegate from Avantec, representing Omnicell systems, added that certain cabinets can act as "super cabinets" to hold rare and unusual medicines and possibly emergency stocks. "There is a solution to trying to use automation

in a decentralised way, but you have to sit down and plan it. It isn't correct to say 'you will be overstocked because of duplication' — there is always a solution to it, but we have to evolve that model," he said.