

Remote supervision becomes a reality

Should pharmacists be allowed to supervise a pharmacy from a remote location? It is a question that divides the profession. Next week, the results of an evaluation of the first trial of remote supervision in the UK will be presented. **Clare Bellingham** visited the pharmacy involved

Can you imagine a community pharmacy being supervised by a pharmacist who is not physically present? Instead, the pharmacist supervises the sales of medicines and dispensing of prescriptions from a remote site using a combination of the latest technology. Nothing can take place until the pharmacist has given the go-ahead: there is no over-ride button for the pharmacy staff.

This is exactly what has happened at a trial of a remote supervision system at Pharmacy Plus in Bristol. Whatever your opinion on the concept of remote supervision, it is hard not to be impressed with the standards of the system that Pharmacy Plus has designed.

Tariq Muhammad, managing director of Pharmacy Plus, says that his interest in remote supervision was borne out of frustration and sparked by internet pharmacies. "It is an enabling tool," he comments.

Mr Muhammad explains that he set up Pharmacy Plus — a chain of nine pharmacies — with the aim of pharmacists being focused on providing a clinical service. "We found that the tools to enable us to get out of the pharmacy were lacking. This, along with poor remuneration and problems with recruitment and retention, meant that we were not achieving our aims," he says. The year was 2000 and internet pharmacy was getting going in the UK. "I thought it was an interesting model. There was no face-to-face interaction between the pharmacist and patient, the patient did not automatically talk to the pharmacist and yet somehow it was legal. I wondered what the difference was between that and the patient entering a pharmacy and asking questions of a remote pharmacist."

This was the starting point and it has taken nearly four years for the system to be designed, debated, trialled and perfected.

The legalities of supervision

The reason why remote supervision is not done, and the reason why Mr Muhammad is not actually using the system despite its successful trial, comes down to the Medicines Act 1968. The Medicines Act requires that pharmacy or prescription-only medicines can only be sold or supplied under the supervision of a pharmacist. Mr Muhammad points out that the Medicines Act does not specify that the pharmacist has to be physically present in the pharmacy to do this. "It is only the test cases that have led to this conclusion. My argument is that if I can prevent a sale from happening then I have got complete control of the transaction, regardless of whether I am in the pharmacy or not." He adds, moreover, that the test cases all pre-date new technology.

The relevant test case was in 1943 after the sale of a Part I poison to a Pharmaceutical



Answering questions using the system

Society inspector by a pharmacy operated by Littlewoods Mail Order Stores Ltd. The store contended that the sale was supervised by a pharmacist who was in an upstairs stockroom and unaware of the transaction at the time. Barnsley magistrates agreed. The Society appealed and the High Court ruled that a pharmacist had to be physically in a position to supervise or superintend the activities of individual staff members making individual sales (*PJ*, 30 January 1943, p30).

However, there is a second issue. The Medicines Act requires that a pharmacy is under the personal control of a pharmacist when it comes to the sales of medicines. The Royal Pharmaceutical Society's "Medicines, ethics and practice" guide states that a pharmacy that continues to operate during the temporary absence of a pharmacist, for example, during a three-quarters-of-an-hour lunch break, is still under the personal control of the pharmacist. The same is not the case for a pharmacist who leaves the pharmacy all afternoon. This requirement for personal control is completely separate from that for supervision of the sale and supply of medicines other than general sale list medicines.

Mr Muhammad has taken legal advice and been told that his system does comply with the requirements of the Medicines Act. However, he is awaiting the opinion of the Department of Health and the Society.

Jim Smith, chief pharmaceutical officer at the Department of Health, says: "The system developed by Pharmacy Plus is an innovative and interesting approach to supervising the supply of medicines, using modern information technology. I visited Bristol to see it in operation and used the video link myself and

it appears to be technically feasible. However, it is unclear whether, under current NHS and Medicines Act requirements, this form of supervision is lawful. We are therefore taking legal advice on this point.

"Given the current workforce constraints and the continuing growth in the scope of pharmacy services, it is important that we consider carefully all options for making better use of pharmacy staff," Dr Smith says. "We will be issuing a consultation paper shortly on the wider issues of skill mix in pharmacy and we will take account of this development, in the light of legal advice."

David Pruce, director of practice and quality improvement at the Royal Pharmaceutical Society, gives the system a cautious welcome. "Pharmacy Plus has come up with an interesting experiment that might be acceptable if the rules on personal control are changed," he explains. "We are waiting for an announcement about this from the Department of Health but, at the moment, the system is not strictly speaking legal to use. Under the current definition of personal control, prolonged absence of the pharmacist is unacceptable."

Mr Pruce says that he has two major concerns. "First, a pharmacist might be looking after more than one pharmacy. Second, I would be really concerned if the system led to a pharmacist not being in a pharmacy for a significant period."

He adds: "Personally, I was impressed with Pharmacy Plus's thinking behind the system but I still have reservations. For remote supervision to work we would need to build in lots of safeguards, which the Pharmacy Plus system has." It is important to note that despite these positive words, the Society has not given Pharmacy Plus approval to proceed any further with rolling out the system.



A patient in the video booth

How the system works

The computer system that Pharmacy Plus has developed has many components. Altogether, the system is called CAPA (consolidated application for pharmacy administration) (see www.fusionhealth.co.uk). The technology it uses is a computer, a telephone, a webcam, broadband internet connection and the appropriate computer software.

Point of sale At the point of sale, the computer can operate on one of three levels. At the first setting, it works just like a till. The next level is to alert the assistant selling a pharmacy medicine to what they should be asking the customer. "This is particularly useful if we are training a new counter assistant," points out Mr Muhammad. The highest setting is for remote supervision.

At the remote supervision level, the questions are compulsory. By scanning a product, the assistant is prompted to ask a range of questions, including whether the medicine is for the person in front of them or someone else, specific questions about the presenting condition or request for medicine, and questions about allergies and other medicines being taken. The answers are then instantly transmitted to the pharmacist who is remotely supervising the sale. The system does not allow the sale to proceed until a response has come back from the pharmacist. The assistant can also send questions or additional information to the pharmacist at the same time. If for instance, the patient wants particular advice, this request can be sent to the pharmacist via a chat function, which is similar to text messaging and appears instantly in an area of the computer screen.

The supervising pharmacist can ask the patient to go to a consultation booth where communication is possible either by video (using webcams) or by telephone. Indeed, patients do not need to go to the medicines counter first at all: they can go directly to the video booth and request advice from a pharmacist.

Once the supervising pharmacist is happy that the sale is acceptable — either through the questions the assistant asked or following

the consultation with the patient — a message is sent to the sales computer and the sale can proceed. The system also has the capability to record all sales against patients' records.

Hooman Ghalamkari, director of Morph Consultancy, a consultancy agency advising Mr Muhammad, comments: "This works as a decision support tool for assistants as well. In light of the *Which?* report [see *PJ*, 7 February, p143], this system ensures that all the safety questions are gone through every single time."

Supervising prescriptions For remote supervision in the dispensary, prescriptions are scanned into the computer system and sent to the supervising pharmacist along with the name of the patient. The pharmacist makes a clinical check of the prescription, examines the patient's records and then types the details of what is to be dispensed into the computer for the label to be produced. This then appears on the dispenser's screen. The dispenser cannot make any changes to what the pharmacist has entered except for giving less than the full quantity if the pharmacy does not have sufficient stock.

Once the product has been dispensed, an accuracy check is carried out by a qualified checking technician. However, the system has one more safety feature. During the dispensing process, the barcode of the product selected for dispensing has to be scanned. It has to match what has been labelled for the process to be completed. This also means that the exact product dispensed is recorded in the patient's record.

At the head office, the pharmacist supervising the pharmacy has a screen on which supervision requests appear. Mr Ghalamkari comments: "The supervising pharmacist has access to all the information needed: the patient's medical record, a list of previous sales if



A pharmacist consults a patient via the webcam

the patient is registered and access to reference sources here."

Every aspect of the system has a standard operating procedure that sets out exactly who is responsible for what and how everything works. Mr Muhammad is keen to ensure that the system provides a good audit trail so to carry out any transaction, the pharmacist or assistant has to enter their own individual code and a record of this is kept on the computer system.

Remote supervision of both the sale and dispensing of medicines are part of the same system. All parts are networked, linked by a virtual private network to the head office system. It takes one millisecond for data to be transmitted between the head office and pharmacy.

Benefits, but guidance needed

It is clear that the system offers real benefits. "It allows a pharmacist to carry out other roles without compromising patients' access to a pharmacist," says Mr Ghalamkari. "Pharmacists need protected time in order to spend an hour doing medication reviews in a consultation area without being constantly interrupted and this system allows this to happen."

The system could also be used in rural areas where there is no pharmacy cover and in out-of-hours situations where one pharmacist could cover several pharmacies.

Another point is that it could be used to cut costs. The need to cover locum costs is one of the reasons why sessional work in primary care by community pharmacists is considered expensive. This system could allow a pharmacy to get just one hour of remote supervision rather than a half-day locum cost.

To implement remote supervision, practice guidance on how it will be used will be needed. It will have to answer questions like, in what circumstances should remote supervision be used, how long a duration can a pharmacy be remotely supervised, how many pharmacies can be supervised at once and how remote supervision should operate. The answers to these questions are a long way down the line. Even if you do not agree with the concept of remote supervision, Tariq Muhammad has been able to create a system that provide a solution to the problems the sceptics have..

Positive pilot results to be presented next week

A pilot of the system has been carried out under controlled conditions. The system was operated as envisaged but there was a pharmacist in the pharmacy who could intervene if necessary. In October last year, two pharmacies were remotely supervised: 300 pharmacy medicines were sold, 600 prescriptions were dispensed and 70 video consultations carried out. The evaluation is in two parts, examining patients' perceptions of the system and also its safety and appropriateness. The first part of this is to be presented next week at the Health Services Research and Pharmacy Practice conference in London.

Paul Bissell, lecturer in social pharmacy at Nottingham school of pharmacy, is leading the

evaluation of the system. "Patient response to the CAPA system has been positive," he says. "The top line message is that patients thought it was great in terms of increasing access to pharmacy services." In particular, they highlighted the fact that the system meant that access to a pharmacist became possible where no service was currently offered, such as in rural areas and on Saturday mornings.

However, there were some concerns. "Patients' main concern was that the technology could be used to cut the number of pharmacists in a particular area thereby reducing the availability of pharmacy services. They also expressed some concern about the impact it could have on the patient-pharmacist relationship," Dr Bissell explains.