

Electronic prescribing

— “I wannit and I wannit now!”

■ By Derek Swanson, MRPharmS

Electronic prescribing and medicines administration (EPMA) in UK hospitals has been but a dream for many years. Many of us have attended conferences describing the potential benefits, requirements and pitfalls of EPMA but few of us are lucky enough to have EPMA in our hospitals.

Considering the major advances in health care technology we have seen in recent years — such as patient administration systems, minimal access surgery, automated laboratory testing, digital radiology imaging, pharmacy automation and smart medicines (eg. gene therapy products) — it is totally unacceptable that most NHS hospitals are still using a pen and paper system that has not changed for decades for the prescribing and administration of medicines.

This is also rather ironic, since medicines management has now become a key focus in health care, and agencies such as the Healthcare Commission have turned their scrutiny to the quality of prescribing in NHS hospitals. How many industries would put up with trying to meet modern performance and quality requirements using only tools and practices that remain unchanged for over a century? There is yet a further irony — electronic prescribing is now standard in general practice yet seems light years away for most of us working in secondary care.

We can all recite the reasons for this situation — lack of central and local NHS vision,

lack of money and a focus on more urgent priorities. However, the fact remains that we urgently need competent and intelligent EPMA systems in order to raise the performance quality of the most important aspects of medicines management, and to meet the needs of 21st century health care.

■ Specification at last

As part of the National Programme for IT (NPfIT) in England, Connecting for Health has at last come up with a specification for EPMA from which to define and construct a system. However, there is still no published time frame for the release of a product or even a prototype to test. Combine this position with the sombre messages about the business state of some of the potential EP system providers and the prognosis for progressing EPMA in hospitals seems poor.

■ Which system?

There are some viable EPMA systems on the market but the choices are not as clear as they may seem. Some are only available as a part of a larger integrated health care management software package, the whole of which we may not want or be able to afford. There is also the question of an EPMA system's capability to interface with other software within the NPfIT, which is a prerequisite for sustainability. Much of the existing EPMA software is configured to work in a US health care setting and therefore has a major focus on cost management and billing. This is not really compatible with health care in the UK. In addition, US systems have a history of not being properly

anglicised by their supplier, further reducing our choice of products. The one proven UK-developed EPMA product installed in a few pilot hospitals in the early 1990s is now old and not up to the sort of developments needed for the health service today.

There is also the matter of cost. We are told that while EPMA systems approved by CfH and available via local service providers are free to hospitals, any system that is supplied independently of CfH, no matter how competent, must be paid for by the hospital that wants it. This is a dilemma because most NHS hospitals do not have the money needed to procure and maintain an EPMA system.

■ What next?

The large (over 1,000 beds) acute teaching hospital in which I work has taken the bold step to procure an EPMA system independent of CfH, with an aim to have it fully operational throughout the hospital by the end of 2010. There were several drivers for this decision, including the existence of a Department of Health-approved plan for a new hospital scheduled to open in 2014; the automation of most of the trust's laboratory testing services; the successful implementation of a radiology picture archiving and communication system; and the introduction of a new integrated order communications and reporting system for all diagnostic tests. A number of key people in the organisation consider the implementation of EPMA to be the next logical step in modernising the key systems that support hospital care.

The investment and challenges associated with any EPMA project will be huge, encompassing a number of different work streams and probably one of the biggest changes of culture and practice that staff and patients will ever see. But it has to happen and, for us, sooner rather than later.

The most significant question is what sort of system we should buy. Given the constraints of the European Union tendering process, I can only outline our specification. As well as a range of desired functionalities, we will be looking at key aspects such as compliance with CfH spine requirements, the quality of the graphical-user interface (screen presentation) and flexibility regarding the operating system and hardware.

However, buying and implementing a system is just the beginning. I guess we all want EPMA now, but not just for the present — we want the system to be future proof. For this we will need a forward thinking business partner with a flexible system that can be adapted and developed to support future health care technologies and ways of working; a product that can provide increasingly sophisticated artificial intelligence with decision support tools that are able to interpret directly imported laboratory and radiology results and begin to predict the required prescribing changes; a system that can directly relate the prescription to the dispensing needs in terms of the directions and warnings required, and then link directly to an automated dispensing robot that will pick and label the packs.

Does it sound like I'm asking for the earth? I am, because we need it and we need it now.

Derek Swanson is deputy director of pharmacy at The Royal Liverpool and Broadgreen University Hospitals NHS Trust