Hospitals must embrace electronic prescribing

To avoid medication errors acute hospital trusts must be aware that electronic prescribing systems exist and plan to implement what is on offer

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Last summer Traer and Madhavan penned a sobering article describing the low prevalence of electronic prescribing systems in acute care across the cancer networks (PJ, 8 May 2010, p453). They bemoaned the lack of a national project to help deliver and co-ordinate such electronic systems. They noted a lack of progress in the US, too, and suggested that the main barriers there were the cost of equipment, training and software. In England, however, Connecting for Health (CfH), a central programme has spent billions of pounds over the past six years on contracting local service providers (LSPs) to work with client trusts to deliver IT solutions. Significantly, these client trusts have not had to fund network hardware, connectivity, training or software, yet if we look for acute hospitals with operational electronic prescribing systems delivered via CfH, there are none. This is worth emphasising: despite the existence of a national programme and the availability of “free” software solutions to help banish handwritten prescriptions, the acute NHS hospital landscape is barren of such technology.

Hazardous

In general, professionals accept that handwritten prescriptions are hazardous. Although most pharmacists have acquired the skill of interpreting a prescriber’s scrawl, we have already witnessed a transformation in primary care with almost all prescriptions being produced on electronic systems. The challenge of correctly reading a GP’s prescription must already seem a thing of the past, yet in the part of the healthcare sector where a patient’s condition is dynamic and the medical input equally changeable, we persist with inky scrawls in the hope that pharmacy and nursing staff can understand the request. The fact is that they cannot. The problems caused are well researched, not just by professionals, but by professional bodies. The General Medical Council produced a report two years ago in which it identified three predictors of prescribing error in acute hospitals. The first was grade of doctor (with juniors being twice as poor as consultants) the second, the stage of hospital journey (with most errors being made on admission) and the third, handwritten prescriptions (with electronic systems producing 12 per cent fewer problems). The continued use of handwritten prescriptions is an avoidable contributor to latent hazardous conditions in healthcare. The progress made in removing human error in picking medicines off shelves by the use of automation will need to be replicated with prescribing systems over this next decade because it will become more difficult to defend the anachronistic practice of handwriting prescriptions.

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The Government, too, is aware of the need to make this fundamental change from pen to screen. In addition to the substantial development of the electronic prescription service in primary care, electronic prescribing has been continually supported in secondary care. Even when the national programme came under review Lord Darzi focused on a core of five IT-supported developments and this “clinical five” included electronic prescribing. Most recently, the summary care record programme has been through a review and the benefit of enabling electronic access of a core set of medical data (patient demographics, allergies, adverse events and medicines list) remains a high priority for delivery. There is a clear understanding in government that electronic transmission of medicines data is the way forward.

With a clear political steer, we can now look at how CfH has taken on the challenge of turning this government agenda into practice. Many healthcare professionals in acute care will acknowledge the delivery of some successful nationwide technology, such as the picture archiving and communications system that has revolutionised the accessibility of x-ray and other radiological images. Yet, six years into a 10-year plan, there is not one prescribing system in operation delivered via the national programme. From an IT infrastructure viewpoint, electronic prescribing was never likely to be in the first phase of delivery. There was a greater need for hospitals to update their antiquated patient administration systems (PAs). Many of these were in-house creations entering their fourth decade of use and given their primary role in managing core patient information about care episodes, diagnoses, treatments and costs were first in line for replacement. Having a reliable PAS is also a prerequisite for electronic prescribing because the latter system needs to feed off the former to eliminate the need to rely on patient identification data and to maintain a single source of accurate information. So acute hospitals armed with a new PAS and often, in parallel, results ordering and viewing have all the basic system requirements to implement electronic prescribing. But will we not see a rush of these systems in the next few years.

Recent evolutions of the LSP contracts designed to create a better, tailor-made, programme of delivery to each trust have been protracted by cost-cutting exercises before and after the current government was formed. In a number of cases, these “roadmaps” have yet to be signed off and so any planned implementation of electronic prescribing is at best 24 months away and then only if the project is first on the list of developments in the new bespoke plans. That said the implementation of electronic prescribing requires the widest clinical engagement and the effort required to ensure this occurs must not be underestimated. Most electronic prescribing systems include electronic verification by pharmacists and electronic recording of administration by nurses in addition to the eponymous prescribing functionality and so three large groups of professional must all feel involved in the programme.

Huge challenge

Additionally, in eliminating the traditional medicines administration record chart the documentation of nutritional sips and feeds along with dressings also need to be part of the transformation. The challenge then is huge and the time required developing clinical engagement should not be underestimated bearing in mind that an optimal mix of generating interest without raising expectations too high is the aim. This last point is of particular significance for any acute trusts still looking for a perfect electronic prescribing system – it does not exist. Every commercial system needs to be locally configured from the outset and then continually modified to make the majority (never all) of the users satisfied.

Could it be then, that with all the difficulties of the CfH programme electronic prescribing could not have been delivered any faster? Although difficult to answer with certainty, it is worth noting that while not one hospital within the national programme has implemented electronic prescribing, the few that have are all foundation trusts that have operated outside the programme at their own expense and risk. The main message, however, for all acute trusts is clear — to acknowledge that usable systems exist and to plan now to implement what is on offer. Either that or develop a sound defence for why yet another patient with a documented penicillin allergy has been prescribed, supplied and administered a penicillin.