

A fresh start for hospital IT systems?

The Health Informatics Report published by the Department of Health in July this year admits that delivering electronic care record systems in hospitals 'has not progressed as quickly as people would wish'. It recognizes that 'there is a need for interim initiatives so patient information can be made available across different IT systems, different care providers and different care settings ahead of strategic systems' (Department of Health, 2008). With local development no longer held back in anticipation of the 'strategic systems', where should IT developers and clinicians focus their collective efforts?

Here are five suggestions:

Allow hospital clinicians to have access to patients' GP records

The GP system provider EMIS is rolling out a web-based version of its patient record system which can be accessed by community staff (EMIS, 2008). Although not providing the full integration planned for the strategic systems, this would give huge benefits to hospital staff dealing with emergency and elective patients, allowing them access, with appropriate consent, to details of prescribed medications, allergies and previous medical problems.

Arrange for GPs and patients to have direct access to hospital electronic patient records and secure messaging to clinicians

In the author's Trust, GPs can access their own patients' hospital web-based electronic patient records via the NHS net. The system can prompt each practice with a list of patients who have had emergency care in the Trust and they can view all test results and reports. The value of giving similar access to patients has been shown for those with end stage renal failure who can access their hospital records via Renal PatientView (www.renalpatientview.org/).

Experience from the USA has shown significant benefits from giving patients secure messaging access to their clinicians (Zhou et al, 2007). Many clinicians in the author's Trust now routinely write to patients following outpatient consultations, copying the letter to the patient's GP. These

letters contain the consultant's email address and fears that email access will be abused by patients have proved unfounded.

Create an electronic inpatient handover system

Handover is one of the biggest risks to patient safety in hospitals and is ideal for a technological solution. For maximum benefit, an electronic handover system should be shared by all professions involved in patient care. As with all record systems, its use will be much greater if users are intimately involved in its design and development. Such a system need not be technologically complex but should be linked to the following two functions.

Develop a real-time patient tracking and bed management system

Simply knowing where each patient is at any one time would make doctors more productive and patients safer. If the handover system records progress with discharge planning and the anticipated discharge date, and is linked with the hospital accident and emergency system, the dream of real-time hospital bed management akin to air-traffic control becomes possible.

Develop database reports highlighting patients who need closer attention

Once patient-related data are collected into a database, rules-based enquiries can identify patients whose condition is deteriorating. Patients with high MEWS (Medical Early Warning Score) scores requiring urgent attention can be alerted to outreach teams before the nurse involved has considered calling for assistance (www.healthcareworkforce.nhs.uk/ibleep/). Renal physicians can identify diabetic patients whose renal function is deteriorating without a referral being made (Rayner et al, 2006). The effort involved in using these systems replaces that spent rescuing a more serious situation later on.

Conclusions

IT systems that link up existing records and are accessible remotely from the

patient can provide a safety net beneath the routine care of individual patients. However, to avoid unintended negative consequences they need a thoughtful review of the sharing of responsibility between clinicians. Use of the systems must add to, not replace, clinicians' responsibility for their patients' welfare, and must support education rather than de-skill the non-specialist.

These suggestions could be developed relatively quickly and cheaply, and be integrated with legacy systems using standard software. They would stimulate local innovation which could improve the design of strategic systems. This would bring enormous benefits to the working lives of clinicians and the safety of patient care. **BJHM**

Hugh C Rayner

*Consultant in Renal Medicine and Medical Director (Medicine)
Heart of England NHS Foundation Trust
Birmingham Heartlands Hospital
Bordesley Green East
Birmingham B9 5SS*

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KEY POINTS

- Delays in provision of the national hospital IT programme have created an opportunity for local systems to be developed.
- The best designs come from clinicians and developers working closely together.
- Information about patients' progress recorded in a common IT system makes it possible for specialist support to be focused on appropriate patients.
- Sharing patient information will challenge traditional relationships between clinicians.