Latecomers to the Electronic Health Record Table

Abstract:

When I read the review article â Medical Malpractice Liability in the Age of Electronic Health Recordsâ by Mangalmurti et al [1], my first reaction was to think back to a famous quotation about the telephone:

"This 'telephone' has too many shortcomings to be seriously considered as a means of communication. The device is inherently of no value to us." (Western Union memo, 1876.)

Just as the telephone was in its infancy in 1876 and not a soul would consider the possibility that we might all carry one around with us, and talk without wires 130 years later, so the Electronic Health Record (EHR) is in its infancy in the second decade of the twenty first century. The struggle to achieve the EHR will last for decades and cost billions of Euro. In Ireland we start from a low base, and we now have very few resources available to us. This means that our progress will be slow and that the gap will widen between our health information systems and those in Europe and the USA.

The article on malpractice issues around adoption of the EHR in the USA [1] discusses: implementation problems, the risks of hybrid paper and electronic systems, information overload, audit trails and logs and clinical decision support. These are risks that need to be recognised and managed and the paper does a balanced job of highlighting the issues. It finishes with the sentence â As the use of EHRs becomes commonplace, the legal standard of care will evolve, and latecomers to the EHR table may be called to accountâ . In a study of general practices in 2006, older, single-handed GPs with smaller lists and fewer support staff were more likely to be non-computerised [2]. Younger GPs and GPs working in groups of three or more doctors were all computerised. Recent research [3] shows that about 92% of general practices use practice software systems. GPs run small businesses, they know that information systems are cost effective, reduce administration workload by automating routine tasks and help them provide safe personal health care. GPs receive structured electronic messages with details of patient visits to the Out of Hours Co-ops, laboratory and radiology results, and in turn create electronic referrals to specialist cancer centres, using the detailed demographic and clinical information already contained in the patientâ s electronic health record.

The level of sophistication of information systems in general practice, and the ease of use by GPs, is not reflected in our hospitals. With a few notable exceptions, clinical information systems are absent from our hospitals. The implementation of the National Integrated Medical Imaging System (NIMIS) project will provide digital radiology, but there are clear gaps in terms of clinical records, prescribing and clinical decision support for problems such as drug interactions and allergy alerts. Modern health care is dependent on multidisciplinary teams providing coordinated care for brief hectic periods of time. How can we support this without an electronic health record? How can one paper record even be available to all the people who need to look at it? How can a care provider hope to pull together the bits of information relating to a patient that are in paper and electronic format: the lab results, the clinical notes, the medication, and the nursing notes. And even if you do get it all in the one place, can you read the handwriting? The lack of EHRs in our hospitals is unsafe.

Implementation of EHRs worldwide tends to succeed or fail based on the level of clinical buy in and clinical leadership [4]. Where is the clinical leadership for adoption of the EHR in Ireland? The pattern seems to be that young clinicians returning to Ireland from the UK and the USA retain their enthusiasm for the EHR for a brief period of time, before they become worn down by lack of progress and high workload. At some stage, three or four or five years in post, they give up on the EHR. It is likely we will continue to find the money to buy increasingly sophisticated and increasingly expensive devices for diagnosis and treatment. But we will have difficulty finding the money to provide the information systems to tie all the patient data together. High technology, data fragmented environments lead to information overload, information loss and medical errors.

We are already losing our young doctors to greener fields overseas. These green fields are likely to be highly computerised. The medical students that follow them risk being trained in an EHR free environment. This will lead them to leave these shores as early as possible to ensure they have the requisite health informatics skills and will reduce the appeal of Irish medical schools as training environments.
What needs to happen? There needs to be a clear understanding by clinicians in all specialities of their needs in respect of EHRs. There needs to be a co-ordinated approach to implementing the clinical information systems in Irish hospitals. Not a big bang, one size fits all approach, but a regional approach, based around hospital groups. What does need to be National is an agreement on the Standards to be used for coding and classification, technical interoperability and training. There is a need to develop health informatics as a specialty and appoint clinicians as chief information officers in our hospitals and health services. The EHR is not an end point; it is a journey. Weâ re late to the table.

Disclaimer
The opinions expressed are personal and do not reflect the views of the organisations and agencies I work with.

B Oâ Mahony
Specialist in Health Informatics
Email: omahonyb@gmail.com

References
1. Mangalmurti SS, Murtagh L, Mello MM. Medical Malpractice Liability in the Age of Electronic Health Records. N Engl J Med 2010; 363:2060-2067.
2. Oâ Mahony B, Power L, Oâ Reilly C, Murray F. To IT or not to IT. Journal of the Irish College of General Practitioners 2006; 23:34.
3. Mc Hugh S, O'Keeffe J, Fitzpatrick A, de Sî"n A, O'Mullane M, Perry I, Bradley C; National Diabetes Register Project (NDRP). Diabetes care in Ireland: a survey of general practitioners. Prim Care Diabetes. 2009; 3:225-31.
4. Bruun-Rasmussen, Morten. HIQA eHealth Workshop, April 17th 2011. Presentation available from http://www.hiqa.ie/system/files/Morten_eHealthWorkshop.pdf

Comments: