In this issue

Usability: a neglected theme in informatics

Simon de Lusignan BSc MBBS MSc MD (Res) FBCS CITP FRCGP
Reader in General Practice and Informatics, St George’s – University of London, UK

Usability

An international group of authors call for usability testing to become a mandated part of system development. It is remarkable that systems are often developed using a process which starts with 'Ascertaining requirements', develops the application in camera, and then deploys it with very little involvement of users in the intermediate development steps. The intermediate development steps: 'Scope', 'Design and system test' and 'Integrated test' all take place without user involvement. This stepwise or iterative approach is also called the 'waterfall' development method. Waterfall development is fraught with all the difficulties you might expect when system design and development is remote from users. This issue’s Editorial calls for usability testing to be incorporated into routine development to avoid the pitfalls of developing applications which can’t be readily integrated into clinical workflow. This goes further than Catwell and Sheikh’s call for more user involvement, and may go some way towards explaining why some clinical applications get bogged down.

Critical to the authors’ recommendations is that laboratory and clinical simulations as well as early controlled releases of any application must be able to be fed back into the development cycle.

Using data in EPR systems

The key finding of a study of referral from primary care is that longer referral letters are more likely to meet quality criteria. This resonated with those of us who remember when some general practitioners used to write very short referral letters – describing the principal symptom in one word and providing very little else: 'This lady has a ... Please see and advise'. It is interesting that the length of letter was more discriminating than other factors such as whether the referral was described as 'urgent'.

Next in the journal is a paper from Meredith describing the implementation of an electronic patient record (EPR) system in a community mental health service. He reports a successful implementation with around 75% use of the system and high levels of satisfaction. Accessibility and usability (again) appear to be important factors in the success of the implementation.

Thiru et al remind us that there remain gaps in data quality and that search accuracy can be improved by incorporating surrogate markers of disease, particularly medication. Diagnostic codes only identified 81% of people with heart disease; the implications of this study may be that pay-for-performance data (the Quality and Outcomes Framework) based on a single disease code may be too simplistic. These findings reinforce Brown and Warmington’s work on using data quality probes to improve data quality; and show that we always need to be mindful of the Laws of Informatics (First law – Data can only be used for the purpose for which it is recorded; Second law – You can break the first law if you fully understand the context of the data recording).

Leadership and getting things done

Grad et al inform us that left to their own devices a quarter of family physicians don’t update their handheld computers (PDA – portable digital assistant). A larger proportion don’t fully update them – the solution, semi-automatic updates, is better but still only achieves around a 60% success rate. Food for thought as to how we primary care physicians could be better managed.
Prescribing

A cluster randomised trial of the use of smart forms to improve the prescribing of antibiotics in acute respiratory illness did not show any improvement. The informatics community has yet to deliver a paradigm of how to deliver effective decision support. However, we need to continue to make strides in this direction.

A second prescribing paper reports how Swedish GPs who use electronic prescribing report significant benefits from using it; this is compared with the attitude of Austrian doctors who are not yet using e-prescribing and are more reticent about its utility.

Physicians have little to fear from online rating

It appears that online rating of physicians is generally positive. Black et al report that online ratings are generally positive both in the rating and in the narrative. They question whether there is any need for physicians to attempt to restrict patients from commenting about them on these sites and argue that we should welcome this type of feedback. The dilemma is how to interpret and make sense of generally very positive feedback.

Conference report: personalised electronic health records (PEHR)

This international conference report is a fitting finale for this issue. The report argues that with improved web technologies and increasing bandwidth the personal electronic health record (PEHR) is here to stay. Although cost savings are NOT expected, the PEHR may become a tool to promote equity and quality. Regardless of the strength of the case for these records, the PEHR is here to stay. Your Editor’s view is that these are welcome but should never become a substitute for healthcare provider comprehensive clinical records.

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