Editorial

Developing primary care informatics

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This issue of *Informatics in Primary Care* adds to our knowledge base, setting out how we might develop the use of IT in family practice. The issue contains a number of thought provoking articles about what influences the uptake of IT,¹ how it can catalyse change² and our expectations for the next generation of electronic patient records³ as well as insights into how computerised decision support^{4,5} and access grid technologies (high powered video conferencing) can facilitate primary care research.⁶

A recent international consensus conference described current initiatives and barriers to developing primary care IT:⁷

- The electronic patient record (EPR) is increasingly seen as a tool to improve quality. The EPR prompts to improve management and reduce prescribing errors, as well as facilitating the provision of feedback and financial incentives to reinforce high quality practice.
- Basic EPR systems, some might say legacy systems, can support good clinical practice with minimal linkage. Pragmatic methods of achieving clinical data exchange can be achieved where this is needed to improve clinical care.
- Better coordination of IT deployment across a health system, incentives for practitioners and greater use of standards are required for the successful deployment of IT.
- Any IT system should be capable of integration into the clinical consultation or other workflow within primary care.

The papers in this edition reinforce these themes, but offer new thoughts about the use and deployment of IT and also raise whether we should once again consider better problem orientation of records?

Evans *et al* describe in their paper¹ how structural characteristics of practices bear no relationship to their uptake of IT, except where a practice team member uses IT to support a specific clinical activity. They report how nurses and GPs involved in diabetes care stimulated EPR use. This paper also depicts how initial enthusiasm for an IT project subsequently falls off,

and how diabetes educated nurses then promote resurgence in its use. This disease management focus is a potential new strategy for overcoming the barriers to implementing IT systems.

The use of IT to improve disease management (DM) is also taken up in the paper by Lester *et al.*² They reinforce the themes that emerged in the consensus conference about the importance of developing systems which can be easily integrated into clinical workflows. What they add is a model which might be used for appraising DM applications. Developers of new applications might usefully adopt this as a checklist for their initial evaluation. If this model had been available to the developers of the Choose and Book application, it might be easier to incorporate into the clinical consultation (Choose and Book is a UK application which enables hospital appointments to be booked in real time during a primary care consultation; it is a good idea but cumbersome to use in the clinical consultation.^{8,9})

Christensen and Grimsmo,³ in their study of the next generation of primary care ERP systems, support the need for IT that can be integrated into the consultation and for better decision support, reinforcing the findings of Lester *et al.* However, they also re-open discussion as to whether we should move towards a problem orientated record?¹⁰ The problem orientated record (POMR) has a long history^{11,12} and has been widely used in primary care.¹³ The POMR consist of three components:

- 1 a problem list both physical and social problems
- 2 background information
- 3 progress notes which contain four elements: Subjective – view of the patient; Objective – the clinician's observations and test; Analysis of the problem; the Plan of what to do (SOAP).

Many GPs, including the Editor, started their careers making 'SOAP' progress notes in written medical records. This approach is good at capturing the psychological and social aspects of problems. It is possible that the more structured and codified nature of the computerised record has led to a greater orientation 2

towards biomedicine. Christensen and Grimsmo flag that problem-orientation should be considered in the next generation of records.

The next two papers in this edition look at the use of computerised decision support systems (CDSS): the first of these to improve the management of heart failure⁴ and the second at the role of training to improve the accuracy of a new technology (called spectrophotometric intracutaneous analysis – SIA) to identify malignant melanomata (cancerous skin lesions).⁵ The issue of training is important within informatics as for some technologies (e.g. mobile phones) none is provided; for many EPR systems little is provided and we need to develop an evidence base as to whether such investment is likely to achieve a return in quality of care and patient safety.

The final paper in this issue looks at the use of access grid technologies in primary care research networks (PCRN) in the USA.⁶ This should be of interest to the new emerging PCRN in the UK, whilst some are organised geographically others are subject specific for example researching diabetes. This technology also has potential in research allowing high quality remote observation.¹⁴ However, Delaney explains in his commentary that it is probably not feasible to introduce these technologies into the UK PCRN right now.¹⁵ Finally, we have also published an 'Informatics curio' – prescribing decision support that recommends more expensive treatment. I would welcome screen shots of any other informatics curios that readers might like to submit.

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