

Information mastery and 21st century general practice

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A solution in search of a problem?

At first glance, the modish and engaging concept of “information mastery” is a reasonable one to apply to general practice, but on closer inspection, it may be a misdirected application of current information technology (IT). There are four reasons for this.

First, computerised information systems have some way to go before they can usefully contribute to a general practice consultation in the manner proposed. The process of searching for and retrieving information from a clinical database currently takes several minutes at best. The search engine, Google, gives hope that improved search algorithms and computer interfaces will reduce this, but even if relevant information were provided instantly, time is still required by humans to read and understand it. The process of retrieving and digesting information distracts doctors from relating to patients, which is the primary task in a consultation. So, while there is an essential requirement for evidence to inform practice, it is difficult to see IT offering a major improvement on how this can be done *during* the consultation.

Second, the application of IT to “information mastery” overlooks a simpler, currently more useful, aspect of computing which can be integrated into current GP work practice. Computers are good at simple, repetitive tasks; humans are not. There is abundant evidence of the value that computers can bring to quality assurance processes, such as checking drug doses and drug–drug interactions.¹ A number of Divisions of General Practice have developed computerised systems which ensure that patients with chronic diseases receive interventions proven to improve their outcomes. These applications are simple things done consistently, and do not require the more abstract objective of “information mastery”.

Third, the application of IT in health care is high risk: it is infrequently and inadequately assessed, and when it is assessed, it is often found not to be cost-effective.² It follows that there is no advantage in being an early adopter of IT. A more effective strategy is to let others test whether a particular application works and wait for the costs to fall — they always have in IT!

Finally, and not uncommonly in IT, “information mastery” seems to be a solution in search of a problem: even if it were to deliver the benefit it promises, it offers more of the same, not an improvement. Throughput may increase, but quality need not. If our objective is to improve health care, then we need to start with health care problems. This may lead us to IT as a tool to provide relevant and timely information, but it needs to do so in a manner that supports patient care, rather than dictating it.

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References

- 1 Kaushal R, Shojania KG, Bates DW. Effects of computerized physician order entry and clinical decision support systems on medication safety: a systematic review. *Arch Intern Med* 2003; 163: 1409-1416.
- 2 Kuhn KA, Giuse DA. From hospital information systems to health information systems. Problems, challenges, perspectives. *Methods Inf Med* 2001; 40: 275-287. □