EDITORIAL

Electronic prescribing in general practice: one small step

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The use of computers in general practice has grown dramatically over the past 12 months. A study of general practice computerisation undertaken for the (then) Commonwealth Department of Health and Family Services in 1997[1] reported that 31% of Australian general practices used computers primarily for administrative purposes such as appointments and billing. At that time, only 15% of general practitioners used computers for activities such as prescription writing or other clinical purposes at the time of consultation. Only 7% of general practitioners reported the use of electronic clinical records.

The introduction of the 'Information Technology' component of the Practice Incentives Program (PIP) has been the major contributor to the recent acceleration in the use of computers in Australian general practice. This program offers financial incentives to general practices which use computers for electronic prescribing and those with the capacity for electronic communications. There has also been a dramatic improvement in the quality of general practice prescribing software.

Recent figures provided by the Department of Health and Aged Care indicate very high participation in the PIP. By February 2000, 5088 practices were participating in the program.* Of these practices, 65% qualified for the 'electronic prescribing' component of the payment, which requires the majority of doctors in the practice to use an electronic prescribing package to write the majority of their scripts. Seventy-six per cent of participating practices qualified for the 'data connectivity' component, requiring an e-mail address and a modem. While not directly comparable to the earlier study, these figures certainly suggest a dramatic increase in the number of computers in use in Australian general practice.

A great deal of effort has been undertaken to support general practitioners making this transition to electronic prescribing. Funding provided by the Department of Health and Aged Care to Divisions of General Practice has enabled the appointment of information technology support officers in most divisions. These officers aim to provide practical assistance to general practitioners. This may be in the form of training programs, assistance with set-up and trouble-shooting, or mediation with computer vendors and software providers. Many such officers report enormous demands on their services along with a great deal of success in 'getting general practitioners started'. While some divisions have made a significant commitment to information technology support for several years, many of these programs are less than 12 months old and more formal evaluation data are needed to tell us about their effectiveness.[2]

With such a rapid increase in the number of doctors using computers to generate prescriptions, and the level of resources being spent supporting this change, it is fair to ask what impact we might expect in general practice and in patient health.

Much of the international research analysing the effect of computers in general practice has been less than positive.[3] Computerisation is generally costly, whether measured in

In this issue...

The increased use of computers is changing prescribing in general practice. The legibility of a printed prescription gives the computer a clear advantage over the pen. Frank Quinlan explains why electronic prescribing may be the precursor of even greater changes in practice, but Andrew Nolan questions the wisdom of exposing doctors to advertisements during the consultation.

Advertising may contribute to the public popularity of paracetamol. Peter Hewson reminds us that parents can sometimes give too much of this drug, particularly if their child is feverish.

Head lice are also a problem for children. Most cases will, however, respond to the approach suggested by Orli Wargon.

Drugs which affect acid secretion feature regularly in *Australian Prescriber*'s Top 10 Drugs. Neville Yeomans reviews these drugs with an emphasis on the different actions of H_2-receptor antagonists and proton pump inhibitors.

* These practices serviced approximately 75% of Australia's SWPEs (standard whole patient equivalents) providing an approximation of the percentage of Australian practices that are part of the program i.e. 75%. The actual number of practices in Australia is currently unknown.

terms of capital outlay, training, maintenance, length of consultation or organisational change. There is also concern that the computer may interfere with the doctor-patient relationship or overload doctors with large amounts of information, such as rare and clinically unimportant drug interactions. Consisting of a range of independent practices, general practice does not have access to the support services available from the information technology departments of large organisations.

The main benefits anticipated from electronic prescribing include decision support with drug interaction and allergy warnings, greater legibility of prescriptions and an improved medication history. Other potential benefits include improved public health and greater efficiency in the health system. As computer systems allow the immediate transfer of data, the doctor will always have the very latest information available. The data available to health planners will also be up to date.

Many general practitioners remain unconvinced of the benefits of computerisation, with any benefits taking some time to achieve.[3] In the longer term, however, electronic prescribing is likely to yield great benefits to the general practitioner, the patient and the health system as a whole. Only through greater levels of computerisation and improved information management are we likely to realise benefits such as:

- improved patient care through recall and reminder systems
- the timely provision of consumer medicines information
- greater evaluation and assessment at the practice or divisional level through age/sex/disease registers and other data analysis
- improved practice through greater implementation of evidence-based treatments and guidelines
- improved public health planning through enhanced data analysis
- better targeting of resources through notification and early warning systems.

Electronic prescribing offers many general practitioners an opportunity to commence the process of computerisation; one step towards improved information management. This will be the first step towards a complete electronic patient record. A great deal of effort is currently being spent developing the standards and infrastructure that will allow the computer-using general practitioner to realise all the potential benefits.[4] Those who have now commenced this process will be well placed to reap the benefits.

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Electronic prescribing: a personal view

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Many doctors have been suspicious of computers and easily deterred from using them in their practices. I viewed with some trepidation what I thought would be a long and painful learning experience in moving to electronic prescribing.

Like most converts, I am now a zealot. The learning period was surprisingly short and now the painful part of the experience is limited to having occasionally to write a paper prescription. How did I ever manage before! The time and frustration saved is sizeable. The program inserts names, addresses and PBS quantities and a repeat prescription is but two keystrokes. For Authority scripts, all the patient information is automatically displayed and inserted, the Authority phone number is given, the words needed to be read appear on the screen and the cursor is in the box ready for the phone approval number.

Perhaps above all, the impression of being in control is the most important. I now have a comprehensive list of all medications that the patient has had and when they have been prescribed, all without having to wade through reams of handwritten notes. As well as dosage information, I have instant answers to all those difficult patient questions, such as, 'Should I take it with or without food, doctor?'. The system knows more reliably than my memory what drugs the patient is taking, so it flags interactions and allergies that I might well miss. The invaluable electronic Therapeutic Guidelines are but a mouse click away.

So, if you haven't already done so, don't just sit there, jump in!