Electronic medical records

A recent editorial by Ken Flegel repeats the purported advantages of keeping electronic medical records. The results of the electronic conversion of paper records in other industries suggest that such a conversion in medicine will be a boon to patients, payers and providers. Surprisingly, however, there is a paucity of trials measuring the benefits of introducing electronic medical records.

The best study, conducted in Montréal, found that physicians and nurses needed considerably more time for electronic than for traditional medical record-keeping. A small office-based study found that it took about an extra one-half clinic day per week to keep electronic medical records compared with paper charts. On a positive note, a systematic review found that the need for repeat investigational interventions and drug use decreased in a primary care setting with the use of electronic medical records. However, the main effect reported in this US study was an improvement in the billing profile of the physicians who used it. Other researchers have questioned whether the widespread introduction of electronic medical records will save money.

What is clear is that the current proposals by Canadian payers (the provinces) to support physicians who adopt electronic medical record-keeping fall far short of what is needed. It is informative to look at countries such as the Netherlands, where the penetration of electronic medical records is greater than 98%: not only are all hardware and software costs completely reimbursed, the remuneration system has been changed from a simple fee-for-service system to a blended scheme that reimburses physicians for the extra time needed to keep electronic records. In addition, hospital-based call centres have been supported, which are manned by community-based physicians who rely greatly on the electronic medical records for one another’s patients.

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I appreciated the timely and informative editorial on electronic medical records. I am a family physician, and I have recently finished the transition to electronic medical record-keeping and have kept an online diary at http://drgreiver.blogspot.com/. One of the many reasons I chose to convert was patient access; both Romanow and Kirby advocated for this. It would be hard for me to manage my household budget if I could only access my banking data once every 3 months and then only if I remembered to ask.

As mentioned in an earlier CMAJ editorial, the burden of making the transition from paper to electronic record-keeping continues to fall mainly on the shoulders of physicians, whereas the benefits accrue largely to patients and the health care system. Those of us who have transferred our records continue to deal with incoming paper-based data that must be scanned in as well as many outgoing paper-based referral forms in proprietary formats that are not compatible with our systems. A RAND report found that reducing these “network externalities” is a crucial factor in accelerating the transition to electronic record-keeping. However, the electronic island phenomenon (in which an office is an electronic island in a sea of paper) is alive and well, illustrating regulatory inertia and the continuing existence of silos in our health care system.

According to the theory of diffusion of innovations, innovations that offer a larger relative advantage will diffuse faster than those that offer a smaller relative advantage. Consistent and ongoing funding and increased assistance with the transition to electronic record-keeping would help; our regulatory colleges must ensure that they do not unnecessarily impede the movement to electronic medical records. The e-will and e-work have to be shared across the entire health care system, and we should involve our patients. We will all be users of the system at some point.