This issue's letters

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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.²

The best study, conducted in Montréal, found that physicians and nurses needed considerably more time for electronic than for traditional medical record-keeping.3 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.4 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.5 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.6

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.

Gerald J.M. Tevaarwerk MD

Professor Emeritus, University of Western Ontario, Victoria, BC

Competing interests: None declared.

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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. 2,3 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,4 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 paperbased 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 recordkeeping. 5 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

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point in our lives; would anyone reading this not wish they could access their own chart, should the need arise?

Michelle Greiver MD

Family Physician, North York, Ont.

Competing interests: None declared.

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The language of living wills

In a recent article in The Left Atrium, Mark Belletrutti and Ingrid DeKock present and highly recommend a living will from "Edward," one of their patients. They write that "unlike many of today's legally prepared documents, Edward's document" gave real "insight into Edward's views on life, death, infirmity and the burden of illness on family." It "portrayed his deep personal conviction on end-of-life issues."

In fact, Edward's living will was professionally prepared. It was first published by distinguished bioethicists in *JAMA* nearly 25 years ago.² Since then it has been widely reprinted as a "form" living will.^{3–5}

Granted, just because Edward used a "form" living will does not mean that its language did not reflect his preferences for end-of-life treatment. However, the language of this living will does not clearly indicate what Edward's or any patient's preferences actually are. What physical disabilities trigger the refusal of treatment? What measures are considered heroic? It is unreasonable to expect Edward to have

thought through all of the possibilities much less to have lucidly articulated preferences for every possible scenario. Consequently, perhaps it is time to abandon the living will and focus instead on the appointment of substitute decision-makers.⁶

Thaddeus M. Pope JD PhD

Visiting Assistant Professor of Law, Widener University, Wilmington, Del.

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[The authors respond:]

Thaddeus Pope rightly points out that our patient's living will¹ was a standard one that has appeared in several publications, including this journal.² Although his living will was professionally prepared using a standard template, our patient had to choose this document and its language over another living will that may not have adequately reflected his life situation and views at the time.

Pope also raises a more important issue, which is the need to focus on the appointment of substitute decision-makers to properly convey the wishes of a patient when he or she is unable to articulate his or her own wishes. The increase in the use of living wills is certainly beneficial, but an informed substitute decision-maker must assume the responsibility for taking the broad language of the living will and applying it to the current situation of the patient.

As pointed out by Pope, the language of the living will we presented in our Left Atrium article does not clearly indicate the patient's preferences because it is impossible to prepare for all clinical situations. This living will was an important first step in ensuring that proper discussions took place with our patient's immediate family regarding the appropriate level of intervention at the end of his life. Ideally, this is the role the living will should play: it should be the starting point for productive discussions with the patient's family and should afford the patient a voice when he or she is not able to speak for himself or herself.

Mark Belletrutti MD

Fellow in Pediatric Hematology, Oncology and Palliative Care, Stollery Children's Hospital

Ingrid DeKock MD MBChB

Regional Palliative Care Program, Grey Nuns Community Hospital, Edmonton, Alta.

Competing interests: None declared.

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Corrections

A News article in the Feb. 12 issue about shortages of medical specialists contained an error. The Canadian Association of Emergency Physicians did participate in *CMAJ*'s canvass of specialty associations by providing a report on the issue.¹

REFERENCE

 Howell, E. Physician, count thyself. CMAJ 2008; 178:381-2.

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We clarify that the death from rabies in Canada reported in the Feb. 26 issue¹ is the same case as that reported in the Feb. 29, 2008, issue of *Morbidity and Mortality Weekly Report*.²

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