What if electronic medical records were unnecessary?



Roger Ladouceur MD MSc CCMF FCMF, ASSOCIATE SCIENTIFIC EDITOR

n this month's issue of Canadian Family Physician, we present a debate on electronic medical records (EMRs). Manca extols their virtues (page 846), while Greiver counters with their drawbacks (page 847).²

It might seem strange to debate the merits of EMRs when most physicians are already using them. Indeed, according to the most recent National Physician Survey (2014), close to 80% of Canadian physicians (family physicians or general practitioners, and other specialists) already use a combination of paper and electronic charts to enter and retrieve patient clinical data and 42% use electronic charts exclusively. Moreover, when asked how the quality of patient care had changed since electronic charts were implemented, most survey respondents (65.4%) reported that patient care was "much better" or "better." Clearly, with these numbers, it would be difficult to convince proponents that EMRs were not all they seemed to be. And yet ...

While Manca's arguments have merit, Greiver's arguments make me stop and think. Greiver was one of the early adopters of the EMR; in 2012, she won the award for best original research article in Canadian Family Physician for her work in this field.⁴ And yet now she is saying that most of the evidence pointing to an improvement in patient care is either contradictory or neutral. There is little evidence that EMRs improve patient health or increase the provision of preventive care, and there is a dearth of evidence of greater physician efficiency or greater patient satisfaction. Damning evidence for a costly "innovation" that consumes so much time and energy!

Greiver is not the only researcher to question the benefits of EMRs. Many reports and meta-analyses arrive at similar conclusions. In 2012, Lau et al conducted a systematic review of the literature on the effect of EMRs on physician practice in office settings. They found that 22 of 43 studies (51.2%) and 50 of 109 individual measures (45.9%) revealed a positive effect, and 8 of 43 studies (18.6%) and 20 of 109 measures (18.3%) revealed a negative effect; the other studies revealed no effect at all.5

A 2014 report from the Ottawa Hospital Research Institute answered a number of questions that are often asked about electronic health records (EHRs). In response to the question "Will EHRs improve the quality of care?" the report stated that while earlier systematic reviews and some primary studies indicated that EHRs had a positive effect on quality of care, later systematic reviews seemed to show a neutral effect and the

evidence regarding EHRs and quality of care was conflicting. In response to the question "Will EHRs improve patient health outcomes?" the report stated that there was a paucity of evidence associating EHRs with patient outcomes and the existing evidence showed no effect.6

Quite apart from their effect on quality of care, there is a strong likelihood that EMRs compromise doctor-patient communication. As soon as you shift your gaze from your patient to your computer screen—or screens—to type in your clinical notes, look for test results, look at x-ray scans, search for a consultant's opinion, or open the patient's master file, your connection with your patient is broken. Think about what happens when you are with your children or your friends and they start checking their tablets or smartphones. They seem to have disengaged, even when this is not the case or their intention. It is not surprising that EMRs are often called "the elephant in the room." We all know that doctor-patient communication is at the heart of the therapeutic relationship. As stated in the fundamental principles of family medicine, "The patient-physician relationship is central to the role of the family physician."7 Try as we might to improve EMRs by installing voice recognition systems, making them easier to consult, designing more user-friendly templates, and creating faster links, they have yet to prove themselves.

Paradoxically, even if we were to decide that EMRs were not necessary and hindered communication, there is nothing we could do about it. Electronic medical records are here to stay, just like telephones, televisions, cell phones, and the Internet.

We need to remember that EMRs are simply a tool invented to help us to do our job—nothing more. They will never replace the doctor-patient relationship, and they will never replace human relationships.

References

- 1. Manca DP. Do electronic medical records improve quality of care? Yes [Debates]. Can Fam Physician 2015;61:846-7 (Eng), 850-1 (Fr).
- 2. Greiver M. Do electronic medical records improve quality of care? No [Debates]. Can Fam Physician 2015;61:847-9 (Eng), 852-3 (Fr).
- 3. College of Family Physicians of Canada, Canadian Medical Association, Royal College of Physicians and Surgeons of Canada. 2014 National Physician Survey. Mississauga, ON: College of Family Physicians of Canada; 2014. Available from: www.nationalphysiciansurvey.ca. Accessed 2015 Sep 10. 4. Greiver M, Barnsley J, Glazier RH, Moineddin R, Harvey BJ. Implementation of elec-
- tronic medical records. Effect on the provision of preventive services in a pay-forperformance environment. *Can Fam Physician* 2011;57:e381-9. Available from: www.cfp.ca/content/57/10/e381.full.pdf+html. Accessed 2015 Sep 8.

 5. Lau F, Price M, Boyd J, Partridge C, Bell H, Raworth R. Impact of electronic medical
- record on physician practice in office settings: a systematic review. BMC Med Inform Decis Mak 2012:12:10.
- 6. Khangura S, Grimshaw J, Moher D. Evidence summary: electronic health records (EHRs). Ottawa, ON: Ottawa Hospital Research Institute, Champlain Local Health Integration Network; 2014. Available from: www.ohri.ca/kta/docs/KTA-EHR-Evidence-Review.pdf. Accessed 2015 Sep 8.
- 7. College of Family Physicians of Canada [website]. Four principles of family medicine. Mississauga, ON: College of Family Physicians of Canada. Available from: www.cfpc. ca/Principles/. Accessed 2015 Sep 10.

Cet article se trouve aussi en français à la page 831.