Electronic Medical Records

EMRs facilitate enhanced diabetes identification and management

by OntarioMD

Chronic Disease Management (CDM) requires that family physicians track and process large amounts of information over long periods of time for many patients. Adding to the complexity is the need to co-ordinate and collaborate with patients, other health-care professionals and other health services. EMRs have the data processing and communications capabilities needed to create and support practice-wide CDM programs.

In this two-part article, we show how some Ontario physicians are using their EMR systems to help improve the level of care for their patients with diabetes. Part 1, below, focuses on how the physicians use EMRs to identify and manage patients with diabetes. Part 2 will deal with how physicians use EMRs during patient visits, and for electronic communications with patients.

Dr. Catherine Faulds of the London Family Health Team has been an EMR user since 2008. She is the Ontario recipient of the 2010 Family Physician of the Year Award, presented by the College of Family Physicians of Canada. Dr. Faulds won because of the exceptional patient care she offers, including her 116 patients with diabetes. Aided by her EMR, Dr. Faulds worked with her patients and obtained significant improvements in health outcomes. Between June 2008 and March 2011, Dr. Faulds achieved the following:

- Optometrist visits for retinopathy testing went from 45% to 91%.
- Patients with LDL under 2.0 went from 23% to 73%.
- Patients with an HbA1c under 7.0 went from 64% to 72%.
- Patients with self-management goals went from 18% to 100%.

“We concentrated on helping our patients with diabetes,” says Dr. Faulds. “We put a nurse in place. We put a program in place. But we couldn’t have achieved our improved outcomes without the EMR.”

Helping manage information

Dr. Faulds can search the EMR database and produce reports that give her valuable insights.

“Using the EMR, I was able to see that there were 116 patients with diabetes on my roster, but I was seeing only 88 of them. People were getting lost, but now we follow up with each of them. We know who they are. We have their lab results at our fingertips. We take the attitude that we can improve the outcomes — and that is what has happened. We’ve seen the numbers improve dramatically since the start. It has really changed the whole style of how I practise,” she says.

In a similar manner, Dr. Sanjeev Goel, of White Elephant Downtown Brampton Family Health Team, is using his EMR to identify patients who need special, ongoing attention.

Dr. Goel explains, “We’ll look at the whole list of patients with diabetes and see who hasn’t come in for a while, who is uncontrolled, and we’ll call them in. That wasn’t possible before. We didn’t have that picture of the whole practice.”

Dr. Betty Choi-Fung, of Scarborough Academic Health Team, has more than 300 patients with diabetes in her practice. She felt that she was scrambling to care for them. With her EMR, Dr.

Diabetes in Ontario

The Canadian Diabetes Association estimates that 1.1 million people or 8.3% of the Ontario population had diabetes in 2010. This is estimated to grow to 1.9 million people, or 12% of the population, by 2020.

Diabetes is a provincial CDM priority. Ontario’s Diabetes Strategy provides physicians with numerous tools and incentives to combat this disease.
Choi-Fung is able to approach the management of diabetes patients systematically. She cites the following example: “Two of my patients were able to come off medication. It wouldn’t have been possible without an EMR. With it, we can recall and remind them. Whenever our patients with diabetes call the office, even if it’s about something else, our receptionists check the EMR. If it’s time for their blood test, we tell them. It reminds our patients that they have a role to play in maintaining their health and it keeps them on their toes.”

One of the reasons why EMRs are so useful for controlling diabetes is the fact that the three largest community labs can send the test results directly to OntarioMD-certified EMRs. This and other information is fed into flowsheets. “Right away, the lab information is populated into the flowsheet and marked if it’s above or below target,” explains Dr. Goel. “We have the global picture of the patient. Are they hitting targets? With paper, it was difficult to flag things and find information quickly. Now, with the EMR, we’re much less likely to miss something because of time constraints.”

EMRs can also help improve the efficiency of visits. EMRs have flags to automate tasks at the front desk, and staff can keep track of the location of patients within the clinic during a visit. Is the patient in an examination room or the waiting room? Is the patient alone or with a caregiver?

Dr. Michelle Greiver of the North York Family Health Team uses this capability to improve the office experience of her patients with diabetes. She says, “We aim to have patients spend most of their visit time on activities that are useful, and less time just sitting in the waiting room. We flag diabetics in the scheduler so that the secretaries do an automated blood pressure and a weight and enter those in the EMR before the patient sees the doctor or nurse. In February 2011, the time our patients spent in the office averaged 35 minutes. Visits are much smoother and quicker.”

An additional benefit of EMRs is their capacity to help plan and track services tied to bonuses, or that can be billed only a specific number of times per year. The associated codes for these services are entered into a patient’s record. Subsequently, reminders appear over the course of the year until the services have been carried out.

Dr. Faulds explains, “I have a reminder system that’s built into the patient’s chart. For example, I can tag a patient record to remind me to perform three K codes and one Q code on that patient per year. Later in the year, if I see that these are still outstanding, then I can investigate. Has the patient not been in? Have I been billing incorrectly? So it’s a good check on your billing too.”

Conclusion
In summarizing her EMR experience, Dr. Faulds notes, “My EMR has made a huge difference to quality improvement implementation. I know all my patients with diabetes. I see them on a regular basis and I believe their measures for optimal care have improved. I can look at trends in patient care, evaluate them and effectively implement quality improvements.”

Dr. Goel also has a vision for using his EMR in the care of his patients with diabetes.

“I want to take my EMR to the next stage,” he says. “I want to take it beyond being just a medical record. I want to transform it into a practice management tool for tracking values and outcomes for our patients with diabetes as a whole.”

EMRs enable physicians to improve the management of chronic diseases. This article shows how four doctors use their EMR’s capability to effectively identify and manage their patients with diabetes, thereby offering better care.