

Reliant Medical Group Pushes EHR to New Frontiers for Diabetes Care

When Reliant Medical Group began employing effective uses for its electronic health record (EHR) system, a program to monitor and manage diabetes within its patient population quickly emerged.

The numbers help to tell the story. Diabetes is among the leading chronic diseases in the United States, affecting nearly 28 million adults and children, according to recent most recent figures from the American Diabetes Association. That equates to more than eight percent of the U.S. population.

The cost of diabetes care is staggering. In 2012, the U.S. health care system spent \$176 billion on direct medical costs; another \$69 billion is attributed to reduced productivity as a result of the disease.

“It’s a disease that’s very expensive in our country, and it’s getting more expensive as we’ve been having more problems with obesity,” said Larry Garber, M.D., Medical Director for Informatics at Reliant. “It’s also a disease that’s very treatable. There are good standard formulas for how to treat diabetics and improve their health.”

Dr. Garber and his team at Reliant, a non-profit multi-specialty group of community-based medical practices located throughout central Massachusetts and part of the Atrius Health family, have worked to push EHR adoption to the limit since first implementing an Epic EHR system seven years ago. He largely attributes the program’s success to the depth and breadth of the “buy in” from physicians and staff across the practices that use the system. Special attention is given to learning all the processes involved, agreeing on the best course of action, and developing a workflow that maximizes the EHR’s potential, the efficiency of its users, and the care given to their patients.

This is where the EHR intersects with diabetes management. Garber and his colleagues have taken an initiative that incorporates several redundancies in the patient notification,



treatment and follow-up process that is designed to ensure diabetics are adhering to their care programs and that the care team has the most relevant information.

“We have a really comprehensive program focused on diabetic care, and it really has shown dramatic improvements in the quality of care as well as the cost of care per diabetic,” said Garber, who is also a fellow with the Office of the National Coordinator for Health Information Technology (ONC).

A significant starting point with the patient interaction arrives one week prior to the scheduled office visit. Diabetic education nurses who help manage the patients receive an EHR alert that informs them on how the patient is doing with their diabetes education program. There are about 10 different topics a patient is educated on, including what to do if their blood sugar gets low or what steps to take if they become ill.

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The nurses cycle through the series of education lectures with the patient, each of which are triggered by an upcoming appointment.

“So when I see (the patients) for the visit, I know what education they’ve received, I know what problems have been identified by the nurses, and I can reinforce that education during my visit,” said Garber.

The process continues once patients are placed on medication and need to be monitored with blood tests.

“You want to find out how their sugar is doing, how their cholesterol is doing, how their kidneys or eyes are doing,” said Garber. “So we have strategies about making sure all that testing is done that’s necessary to monitor the treatments that we do or to monitor their diabetes.”

The first step is to make sure that the tests get ordered. Prior to when patients are scheduled for follow-up visits, the EHR alerts the appointment staff of what tests need to be ordered based on whether the patient has diabetes, is on medication, is of a certain age or gender, the last time the tests were done, and whether the necessary tests have already been ordered.

The patients are then reminded to go to the lab to get the tests done by the appointment staff, the diabetic education nurses, and an automated reminder phone call triggered by the EHR.

If the patient shows up for the doctor’s visit without getting the tests done, the EHR alerts the doctor to remind the patient to go for the tests; a new order does not have to be put in. If the patient still misses the appointment, the system automatically sends them a letter informing them of the missed appointment and stresses the importance of getting the test completed.

And if the patient still doesn’t go to the lab and get the testing done, Reliant has a registry of its diabetics that searches for patients who are falling through the cracks. Some patients may have missed tests, appointments, eye exams and other procedures that are deemed integral to their care. Medical Assistant “Health Coaches” managing the registry will call them, and if they cannot be reached by phone, a certified letter is sent.

The outreach doesn’t stop there - each patient automatically receives a letter on his or her birthday with all the tests and related items they are due that have not been completed.

“Happy 50th birthday! Please call my office to schedule a colonoscopy,” said Garber with a smile.

“We hit them multiple times to make sure the patients are not slipping through the cracks and making sure they’re being followed up appropriately,” said Garber. “It makes a difference. When you put all of these systems into place it really makes a difference in the outcomes that our patients see.”

To help diabetics who also have high blood pressure, Reliant has distributed 200 blood pressure monitors that can be taken home and plugged into home computers. The blood pressure readings are automatically loaded into their computer and sent to Reliant’s EHR. The readings go to the management nurses who can then determine if changes in medication or other treatments are needed.

Tracking diabetic patients through the EHR did not yield an immediately noticeable result. In fact, it wasn’t until the alert and reminder systems were implemented that a marked improvement in outcomes and costs began to materialize.

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Reliant also receives reports from Medicare informing them of how their cost for diabetes care compares to other group practices around the country. Its average cost for treating a Medicare diabetic patient is less than 96 percent of other group practices across the country.

“So here we are. We’re doing more testing, they’re getting more visits and it’s costing less. So that means giving good quality care actually costs less,” said Garber.

As Reliant pushes forward with its successful diabetes management program, one certainty is that the EHR will continue to play an integral role.

“The fact is that the electronic health record can allow you to search for information, filter the information, sort the information, and present it in a more meaningful way,” said Garber. “That just makes it so much easier to manage these large amounts of information. The data was often there in the paper world. You just couldn’t find it or put it into context. What’s the trend in my patient’s blood sugar? On paper it would take several minutes to find after getting the chart. With my EHR, I do it with one click!”