



## DIABETES STRATEGY

# Active Management Allows Practice to Improve Diabetes Outcomes

All providers find it challenging to help diabetes patients maintain blood glucose control. But at Southeast Texas Medical Associates (SETMA), providers have designed a coordinated, multifaceted set of initiatives that have prompted a steady 10-year decline in their patients' mean hemoglobin A1c (HbA1c). In 2001, mean HbA1c was 7.48; by 2011, it had fallen to 6.54.

SETMA has 36 providers including primary care physicians, specialists, nurse practitioners, and diabetes educators. "We have focused heavily on adopting strategies to improve our diabetes care," says James (Larry) Holly, MD, SETMA's CEO, adding that the practice currently treats more than 8,000 patients with diabetes. "Today, we are a Joslin Diabetes Center Affiliate, and all of our providers have earned National Committee for Quality Assurance (NCQA) recognition for excellence in diabetes care."

Components of SETMA's care model include using an electronic medical record (EMR) to track quality metrics and fill gaps in care; auditing care by population group; providing diabetes self-management education; ensuring that messaging stimulates patient empowerment; performing statistical

analyses to identify areas for improvement; publicly reporting data by provider; and setting up a foundation to support the care of financially vulnerable patients.

### Investing in Technology

The practice adopted an EMR in 1995. "We realized that the value of the EMR would not come from simply documenting patient encounters electronically, but rather would depend upon exploiting data integration and computation capacity to improve care and outcomes," Holly says.

In 1998, the practice designed a diabetes disease management tool, which is accessed through the EMR. The tool includes a suite of templates that guide providers in providing optimal diabetes care. The first template summarizes critical information such as the patient's vital signs, laboratory values, smoking status, and compliance with various care indicators. From this screen, the physician can access a series of templates that ensure that all aspects of diabetes care are provided.

The EMR also incorporates multiple diabetes data sets from organizations such as the Physician Consortium of Performance Improvement, the American Medical Association, the

Centers for Medicare Services, the National Quality Forum, the Joslin Diabetes Center, NCQA, the Healthcare Effectiveness Data and Information Set, and the American Diabetes Association (ADA). "With the click of a button, providers can determine whether they have met all quality metrics for that patient, and if not, they can click on an automatic order for the necessary laboratory test or specialty referral," explains Holly.

Using a tool built into the EMR, SETMA's providers routinely generate the 12 Framingham risk scores to let each patient know what his or her cardiovascular, cerebrovascular, and other risks are. "Normally, it would take about 30 minutes to calculate these risk scores by hand, but because they are incorporated into the EMR, we can generate all of these scores in one second," says Holly. "By presenting these scores to patients, we encourage them to make a change that can improve their health in the near-term. For example, we might show a patient how much his risk score would improve if he lost just 10% of his body weight."

SETMA also uses statistical analyses to inform population-based quality improvement initiatives. In 2009, SETMA purchased a business intelligence software program, IBM Cognos, and modified it for health outcomes. "We wanted to analyze our diabetes care over time so we could identify patterns in outcomes," Holly explains. "We look for leverage points: where is the maximum opportunity to improve population health?" For example, several years ago the physicians discovered that many diabetes patients were losing control of their condition in October, November and December—not surprising, since these months include many holidays that involve eating. "Further analysis indicated that the patients who were losing control were being seen less frequently at the end of the year. In September, we wrote a letter to all of our diabetes patients and alerted them to this trend. We invited them to sign a

contract in which they agreed to come in at least twice during the final three months of the year to meet with a provider, to have their diabetes tested, and to maintain their exercise and diet. As a result, the end-of-year spike in mean HbA1c did not occur.”

### Improving Outcomes

In order to reduce patients’ risk scores and improve diabetes outcomes, SETMA physicians realized that there were three lifestyle changes they wanted their patients to make. The practice designed a preventive health program, called the LESS initiative (Lose weight, Exercise, and Stop Smoking), to prompt these changes.

“Along with a sedentary lifestyle, even a small amount of excess weight can place a person at a higher risk of developing diabetes,” says Holly. “And people with diabetes have such a high cardiovascular risk burden that smoking cessation is of critical importance to their health. But the good news is that we can meaningfully ameliorate this risk with lifestyle changes. We tell people, if you can lose even 10% of your body weight, your cardiovascular risk will decline significantly. This is a manageable goal and gives people hope.”

The LESS initiative includes weight management, diabetes risk, and diabetes-specific exercise assessments

along with a smoking cessation model for providers. At nearly every visit, nurses complete the LESS templates in the EMR. The nurse then prints a 10-15 page care plan for the patient that includes realistic weight management goals, a customized exercise “prescrip-

### Excellence in care quality has business benefits, including quality-based incentives paid by insurers.

tion,” and smoking cessation strategies. Thanks in no small part to the LESS program, the average body mass index of patients has remained stable over the last 10 years, and nearly 3,000 patients have quit smoking. LESS has also been a factor in helping the practice reduce its average HbA1c levels.

Holly says it takes nurses less than 30 seconds to complete the tool. “This is a very effective way to deal with a set of complex lifestyle issues that many diabetes patients struggle with,” he adds.

### Empowering Patients

SETMA physicians also recognized that patient education and empowerment would be a critical factor in improving diabetes outcomes. In 2004, the practice adopted the ADA’s diabetes self-management education program. “The program has two elements: medical nutri-

tion therapy and diabetes self-management education,” says Holly. “The program received ADA certification and has maintained it since 2005.”

Diabetes patients are further empowered by messages that emphasize the practice’s commitment to their health, as well as their own role in their care. “Everything—laboratory values, care goals, treatment steps—is thoroughly explained to patients, and providers tell them they should not leave the office unless they understand what they need to do to improve or maintain their health,” explains Holly.

A poster in the waiting room depicts a baton, which represents the patient’s care and treatment plan as it is transmitted from the provider to the patient. The poster illustrates that the patient must receive, understand, and assume responsibility for the plan if he or she is to carry it forward successfully. SETMA also developed what it calls the “Seven Stations” for diabetes treatment. These seven elements of success, which are described and displayed in framed posters hanging in the waiting room, help guide patients in their self-management efforts. The stations include self-monitoring of blood glucose; HbA1c control; the LESS initiative; the need for active self-management; the physician-patient partnership; care coordination and overcoming barriers to care; and the

## DIABETES MANAGEMENT TOOL PROMPTS COMPREHENSIVE CARE

SE Southeast Texas Medical Associates (SETMA) created a comprehensive diabetes disease management tool to help physicians document care and prevent critical steps in diabetes care from falling through the cracks. The tool, accessed through the practice’s electronic medical record offers a series of templates that prompt providers to collect and document data related to the patient’s diabetes history, a review of diabetes systems, the diabetes care plan (i.e., meal requirements, laboratory/procedure orders, management steps, medications and doses, and education requirements), care management steps (i.e., HbA1c testing, eye care, foot care, lipid testing, flu shot, blood pressure monitoring,

and urinalysis), various physical exams (e.g., foot, eye, nasopharynx, cardiovascular, neurological, motor, and cranial nerves), and patient compliance with various aspects of care such as medications, diet, exercise and education.

Providers can also review diagnostic criteria, screening criteria, important diabetes concepts, evidence-based clinical recommendations, medication lists, and the patient’s blood sugar history. Finally, providers can print the diabetes care plan and education materials related to various subjects to distribute to the patient.

The diabetes disease management tool’s templates are available for viewing at [www.setma.com/Tutorial\\_Diabetes.cfm](http://www.setma.com/Tutorial_Diabetes.cfm). —DJN

principles of a medical home.

As of 2008, SETMA reports 250 quality metrics on its website by provider name. “Although physicians were initially concerned about public reporting of data, they now realize that this gives all of us motivation for improving care,” Holly says. “We empower our patients to review our quality and expect excellent care.”

### Ongoing Initiatives

Focus on best practices is a critical feature of the practice. “Each month, we close our office for half a day and discuss our diabetes care performance data and best practices,” Holly says. “In this way, quality improvement does not occur in a blameful or punitive environment. It has become a natural and ongoing discussion.”

Diabetes prevention is another key focus at SETMA. “Because the best strategy in diabetes care is to prevent its onset,” asserts Holly, “we developed a diabetes prevention program.” The program includes algorithms that guide how often patients should be screened for diabetes. “Patients with prediabetes are placed in a special treatment program that helps us reverse the course of the disease.”

SETMA’s most recent diabetes care enhancement was to become a patient-centered medical home (PCMH). “In 2010 we received formal recognition as a PCMH by both NCQA and the Accreditation Association for

Ambulatory Health Care,” says Holly. “This required us to develop a very robust plan of care for our patients with diabetes. We give them a document at the end of the visit that includes their data, goals, and assessments, with

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—James Holly, MD, CEO,  
Southeast Texas Medical Associates

instructions and educational materials to help them participate successfully in their own care.” As a PCMH, SETMA also offers a team approach to diabetes care, with diabetes educators, nutritionists, and endocrinologists on staff.

The practice is also sensitive to ethnic disparities. “We evaluate the HbA1c status of our African-American patients to ensure that they receive the same quality of care and exhibit the same outcomes as our Caucasian patients,” says Holly, noting that other ethnic minorities are not heavily represented in the practice. Over time, the practice has virtually eliminated racial disparities in diabetes and hypertension outcomes.

“We also considered whether some patients faced financial barriers to care by analyzing different populations and insurance products,” Holly continues. “We worked with our major HMO to eliminate copays for our patients, some of whom might find even a \$5 copay to

be a barrier.” Notably, in 2008 SETMA created a foundation that the practice funds with \$500,000 annually; the foundation pays for medications, surgeries, and copayments to non-SETMA physicians on behalf of financially vulnerable patients, thereby improving outcomes for that vulnerable population.

“Each year we have seen significant improvements in our diabetes outcomes, indicating that the initiatives we were adopting were having a meaningful impact,” says Holly. He notes that excellence in care quality has business benefits, including quality-based incentives paid by insurers; the practice is currently building an accountable care organization, which should hopefully create additional financial benefits. “But our real reward is not monetary, it is improving the lives of the people we serve. That sounds corny, but it really is what motivates us.”

Holly says that all practices can improve their diabetes outcomes if they have passion and vision. “Small practices can pursue joint initiatives, or see what kind of assistance insurance companies can offer,” he notes, adding that physicians can “help themselves” to anything they want from the SETMA website ([www.setma.com](http://www.setma.com)). “If they use SETMA’s initiatives to improve the care of their own patients, that’s reward enough for us.” ■

—Reported and written by Deborah J. Neveleff, in North Potomac, Md.

## WIRELESS GLUCOMETERS ENHANCE CARE QUALITY

Always interested in trying new technological enhancements, the physicians at Southeast Texas Medical Associates (SETMA) now encourage patients to use a wireless glucometer manufactured by TelCare ([www.telcare.com](http://www.telcare.com)). “Patients do their glucometer checks at home as usual,” explains James Holly, MD, SETMA’s CEO. “The glucometer then automatically reports their blood glucose values to our EMR [electronic medical record system] via a wireless connection.”

Using the EMR, the physicians can view and analyze all of their

patients’ data, meaning that they don’t have to manually download meters or review paper logbooks. The EMR allows physicians to quickly identify which patients are out of their acceptable glucose range or are not adhering to glucose testing.

This technology allows the physicians to display time series data in graphic form and observe daily averages and trends. “This enables us to conduct surveillance of our patients’ health, even when they are not here for a visit,” says Holly.

—DJN