

# Diabetes Care



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Today



Sample screens from the many smartphone apps available today for planning, monitoring and measuring required in diabetes self-care.

## Advances on Multiple Fronts in Diabetes Management

Diabetes care today is a dynamic field with developments driven by the prevalence and impact of the condition, and thus its priority in disease management. Progress is not defined by any one specific advance but by many—including new technology for insulin delivery and glucose self-monitoring, and new medications.

“Recent data indicates that nearly half of the adult population in the U.S. is either diabetic or prediabetic—a staggering statistic that is rallying resources and systems to this problem,” said Parveen Verma, DO, FACE, Chief of Endocrinology and Metabolism at Our Lady of Lourdes Medical Center.

Highlights in advances for diabetes care include these areas:

- **Mobile apps.** Managing one’s diabetes requires time, memory, math skills and lots of dedication. Assisting patients and simplifying this challenge are phone and tablet apps, many of which are free and can receive data from the patient’s glucose monitor. Lourdes endocrinologists advise patients on choosing and using these aids, which can alert the user to glucose levels; calculate insulin dose; set reminders; generate spreadsheets and graphs of the patient’s data; track medications, exercise and weight-loss; provide for journaling and meal planning; create a photo log of meals and offer recipes and food guidance; give verbal feedback; and connect in various ways to providers and caregivers to share data updates.

Two notable insulin pumps currently on the market: the new Medtronic closed-loop unit (below left) and the Omnipod pump patch and wireless control system.



- **Glucose measures & insulin delivery.** Leading strides in this area are devices that provide continuous glucose monitoring (CGM)—including those that communicate wirelessly—and insulin pumps that work in conjunction, especially the new closed-loop system. For the monitors, a tiny sensor probe in the interstitial tissue reads glucose levels. For the pumps, patients insert a fine catheter through the skin and into fatty tissue, then tape the catheter in place. The small computerized devices deliver insulin in a continuous dose and in surge doses at the user’s direction.

“Many patients—those willing to have a pump under their clothes and attached to them most of the time—prefer this system over injections,” says Dr. Verma, who estimates that about 20 percent of her practice’s patients now have pumps. “Most of our Type 1 patients do, and an increasing portion of Type 2 patients as well.”

The pumps can pause delivery during sleep to avoid nighttime lows. They can maintain steadier blood glucose levels and improve A1C. The most recently approved version, a closed-loop system, receives data from the CGM, calculates the needed insulin and administers it, though patients still need to enter mealtime doses. Patients receive in-office training for pumps, the data from which can be downloaded to a computer and shared with care providers. Cost is a challenge for the monitors and pumps, but insurance often covers them.

“Over time, the initial cost tends to balance out the cost of materials for conventional manual administration,” noted Dr. Verma.

- **Medications.** New drug classes for diabetes bring many more options, including medications that have a synergistic effect with one another and can delay the need for insulin treatment. Those that also decrease organ impact of Type 2 diabetes and improve survival include sodium glucose co-transporter-2 (SGLT-2) inhibitors (such as empagliflozin). But insurance coverage for these drugs may remain a challenge. Similarly, the cost of insulin has continued to rise, partly due to the availability of new forms of insulin, prompting a return among some practices and patients to generic forms.

- **Systems of care.** Coordinated, multidisciplinary care programs across referral networks and health systems—programs such as the diabetes council created within Lourdes—are making a difference for patients, including by pushing out diabetes care to patients who initially interface with providers for other reasons.

- **Education.** Patient self-care knowledge is essential.

## Program Addresses the First Line of Diabetes Defense: Patient Behavior and Knowledge

Good self-care is the most important aspect of managing diabetes. With nearly 10 percent of the U.S. population suffering from the disease—and a much higher portion in certain communities—the need for diabetes education has never been greater.

About half of diabetics will die from cardiovascular disease, and those odds reach 70 percent after the age of 65. Amidst this risk, millions of diabetics are struggling to manage their costly, daily care.

“Diet, exercise and BMI maintenance are the best ways to keep prediabetes in check, but once patients develop diabetes their care becomes more complicated,” said Lourdes endocrinologist Parveen Verma, DO, FACE.

Lourdes is addressing the need for diabetes education head on. It’s successful patient education program continues to grow. Patients enroll through provider referral or self-referral. (Unless patients are self-pay, the program seeks provider authorization to bill insurance.)



*Lourdes offers popular diabetes education sessions at three locations.*

**The Lourdes Diabetes Education Program** is a skill-building intervention designed specifically for people who have developed diabetes. Participants in this group education program gain the skills necessary to self-manage their condition and work effectively with their healthcare professionals. Certified diabetes educators conduct the monthly, three-week program (one session per week, 3.5 hours per session) on weekdays, 5:30 to 9 p.m., and Saturdays, 9:30 a.m. to 1 p.m.

Lourdes offers this important program at four convenient locations:

- Our Lady of Lourdes Medical Center, 1600 Haddon Avenue, Camden
- Lourdes Medical Center of Burlington County, 218 Sunset Road, Willingboro
- LourdesCare at Cherry Hill, 1 Brace Road, Cherry Hill
- Margaret Heggan Library, 606 Delsea Drive, Sewell

**For more information or to register: 877-533-4222.**

**The Lourdes Diabetes Support Group** meets monthly in an informal setting to share information, resources, experiences and best practices among community members. No pre-registration is required. A certified diabetes educator leads all sessions:

- 2nd Tuesday of each month from 2 to 3 p.m. at Lourdes Medical Center of Burlington County, Willingboro
- 3rd Monday of each month from 6:30 to 7:30 p.m. at LourdesCare at Cherry Hill

**For questions: 877-533-4222.** 

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