Health Matters

U.S. Teen Is First Pediatric Patient In The World To Use Breakthrough Smart Insulin Pump That Personalizes Treatment For Type 1 Diabetes

New MiniMed 670G Insulin Pump System Can Automatically Monitor And Stabilize Blood Sugar Levels So People Can Spend Less Time Managing Their Diabetes

(NAPSA)—Just days shy of Claire Bickel's fifth birthday, her mother, Francesca, noticed Claire was experiencing some unusual symptoms; she was growing increasingly thirsty, hungry, and she was constantly urinating. At first, Francesca chalked Claire's symptoms up to a virus or allergies and kept her home from school to rest. But when her symptoms persisted, Francesca knew it was something more serious and took her daughter to the doctor, where results from a blood test showed higher-than-normal blood glucose levels. After a three-day stay at Yale New Haven Hospital, and much to her family's disbelief, Claire was diagnosed with Type 1 diabetes.

Stories like Claire's are not unusual. An estimated 1.25 million Americans are living with Type 1 diabetes, and an estimated 200,000 people under the age of 20 are affected. Formerly referred to as "juvenile diabetes," Type 1 diabetes is an autoimmune disorder in which the body attacks cells in the pancreas that make the insulin needed to extract energy from food. While people living with Type 1 diabetes can live normal, healthy lives, they need to continuously monitor their glucose levels and rely on daily injections of insulin to keep their blood sugar levels in check.

"So much goes through your mind when your child is diagnosed with a chronic, potentially life-threatening illness. It was a constant source of worry, particularly at night when blood sugar levels can dip dangerously low to the point that they may not wake up," said Francesca. "I was waking up several times a night to check her sugar levels to make sure everything was OK. It's a scary thought, and it can be exhausting."

A new breakthrough called the MiniMed 670G system featuring SmartGuard™ HCL Technology is easing the daily burden of diabetes management for people like Claire by making the delivery of insulin more automated and personalized, giving people with Type 1 diabetes and their caregivers more freedom to focus on their day-to-day lives.

A new insulin pump system stabilizes blood sugar levels with less input from patients.

New Breakthrough for Patients

Fewer than one-third of people with Type 1 diabetes in the U.S. achieve target blood glucose control levels, but new advancements promise to simplify and improve diabetes management.[1] In September 2016, the U.S. Food and Drug Administration approved Medtronic's new MiniMed 670G insulin pump system, the world's first hybrid closed-loop system that continuously monitors glucose levels and automatically sends that information to an insulin pump every five minutes. Based on this data, a personalized amount of insulin is delivered to keep blood sugar levels within a target range, helping to relieve the burden of diabetes management and reducing the occurrence of high and low spikes in blood glucose levels. As the system's algorithm learns more about a person's body, people using the system have more freedom and can enjoy greater peace of mind throughout the day and night.

When the Bickels first learned about the technology, they immediately signed up for Medtronic's MiniMed 670G Priority Access program so they could be first in line to receive the new pump once it became commercially available. Little did they know that Claire would soon become the world's first pediatric patient to use this new breakthrough technology.

"It gives me more freedom to focus on things like field hockey and track without having to constantly think about diabetes management," said Claire about her new pump. "I'm excited about all the things that will be easier to do now, like overnight trips and even going away to college—it's less stressful to think about now."

After seeing Claire's diagnosis and the ups and downs associated with diabetes management, Claire's mother is confident the new pump will simplify Claire's lifestyle and allow her to just focus on being a teenager.

"I would encourage parents to seek out information about new technologies and choose the ones that are the best fit for their child and family," Francesca advises people who may be hesitant to try new treatments. "This system is amazing for my daughter and our family because it allows me to worry less and be assured of a full night's sleep."

How to Get the MiniMed 670G Insulin Pump System

To learn more about the MiniMed 670G or sign up for the Priority Access program while it's still available, visit www.medtronicdiabetes.com/products/minimed-670g-insulin-pump-system.

MiniMed 670G is approved for type 1 ages 14 and over. May not be safe < 7 or using < 8 units insulin/day. See bit.ly/670grisks.

[1]*Medtronic Fact Sheet. www.medtronic.com/content/dam/medtronic-com/us-en/newsroom/media-resources/media-kits/diabetes-management/documents/minimed-670g-fact-sheet-final.pdf*

Important Safety Information: MiniMed® 670G System

The Medtronic MiniMed 670G system is intended for continuous delivery of basal insulin (at user selectable rates) and administration of insulin boluses (in user selectable amounts) for the management of type 1 diabetes mellitus in persons, fourteen years of age and older, requiring insulin as well as for the continuous monitoring and trending of glucose levels in the fluid under the skin. The MiniMed 670G system includes SmartGuard technology, which can be programmed to automatically adjust delivery of basal insulin based on continuous glucose monitor sensor glucose values, and can suspend delivery of insulin when the sensor glucose value falls below or is predicted to fall below predefined threshold values. The system requires a prescription. The Guardian Sensor (3) glucose values are not intended to be used directly for making therapy adjustments, but rather to provide an indication of when a fingerstick may be required. A confirmatory finger stick test via the CONTOUR®NEXT LINK 2.4 blood glucose meter is required prior to making adjustments to diabetes therapy. All therapy adjustments should be based on measurements obtained using the CONTOUR®NEXT LINK 2.4 blood glucose meter and not on values provided by the Guardian Sensor (3). Always check the pump display to ensure the glucose result shown agrees with the glucose results shown on the CONTOUR®NEXT LINK 2.4 blood glucose meter. Do not calibrate your CGM device or calculate a bolus using a blood glucose meter result taken from an alternative site (palm) or from a control solution test. Do not calibrate your CGM device when sensor or blood glucose values are changing rapidly, e.g., following a meal or physical exercise. If a control solution test is out of range, please note that the result may be transmitted to your pump when in the "Always" send mode. WARNING: Medtronic performed an evaluation of the MiniMed 670G system and determined that it may not be safe for use in children under the age of 7 because of the way that the system is designed and the daily insulin requirements. Therefore this device should not be used in anyone under the age of 7 years old. This device should also not be used in patients who require less than a total daily insulin dose of 8 units per day because the device requires a minimum of 8 units per day to operate safely. Only use rapid acting U100 insulin with this system. Pump therapy is not recommended for people whose vision or hearing does not allow recognition of pump signals and alarms. Pump therapy is not recommended for people who are unwilling or unable to maintain contact with their healthcare professional. The safety of the MiniMed 670G system has not been studied in pregnant women. For complete details, including product and important safety information concerning the system and its components, please consult http://www.medtronicdiabetes.com/important-safety-information#minimed-670g and the appropriate user guide at http://www.medtronicdiabetes.com/download-library.

MiniMed is a registered trademark and SmartGuard is a trademark of Medtronic, MiniMed Inc.