

## Patient Story Matt – *Beating the Odds*

From the beginning, Matt has beaten the odds. His mother, Debbie, had been diagnosed with long QT syndrome, a serious defect in the heart's electrical system that can lead to fainting and, in some cases, sudden cardiac arrest and death. Debbie gave birth to Matt in July 1986, after a difficult pregnancy and delivery.

Matt was presumed to be healthy during much of his early childhood and was tested regularly for the Long QT condition due to his mother's struggles. Those tests had always proved negative, so he was allowed to participate in rigorous activities. In fact, by the age of nine, he was playing on a traveling hockey all-star team and dreaming of a future hockey career.

### *The Discovery*

But one night after hockey practice, everything changed. "I was taking a shower and felt very faint," Matt recalled. "We made a jaunt over to the doctor's office, where I had an electrocardiogram. I remember riding with my mom in the elevator as she looked at the ECG results. Tears streamed down her face. 'I have it, don't I?' I asked. She sadly nodded 'yes.'"

### *A Grinding Halt*

Suddenly, Matt's full life of sports and activity came to a grinding halt. In the years ahead, he became increasingly frustrated with his physical restrictions.

### *A Spark of Hope*

Late in his eighth-grade year, Matt started seeing a new physician and a heart rhythm specialist – a doctor who specializes in treating conditions related to the electrical system of the heart.

"I had started to become interested in bicycling again, and I told my doctor about it," Matt said. "His response was different from that of any other doctor I had seen. He said: 'You let me put in an implantable cardioverter defibrillator, and you can race bicycles.' I weighted the factors, but the decision wasn't really that difficult."

So on July 17, 2000, his doctor implanted a Medtronic implantable cardioverter defibrillator (ICD).

"That procedure changed my life," Matt said. "As I entered high school, I was able to participate in gym class again. I was able to attend activities like prom and have fun like any other kid my age. At the same time, I was able to get back into cycling."

### *Giving Back*

After receiving his ICD, Matt continued to get back into shape and train. Later that year, he took first place in a cycling race. Today, as a college student, he's president of the cycling team. And, after more than 20,000 bicycle training miles, he's become a category two semi-pro level racer.

"I'm currently studying biomedical engineering and I hope to design ICDs one day," Matt said.



# Living with an Implantable Defibrillator: *What Is Normal?*

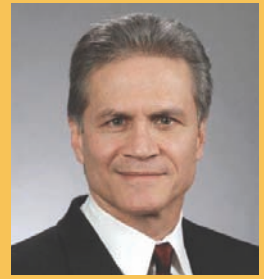
Many people with implantable defibrillators wonder whether their own experiences with arrhythmias and an implantable heart device are “normal.” Some report that they constantly monitor their heart rate and think about their device every day. Others say that they seldom think about either their heart condition or their implantable defibrillator.

Further, some people with implantable heart devices focus on the future and others say that thinking about the future is difficult for them. When it comes to adjusting to your heart condition, your implantable defibrillator, and your beliefs about the future, what is “normal” for you?

Here are *Nine Keys* for shaping positive adjustment when you receive your implantable heart device<sup>1</sup>:

- 1 Accept**  
Work to accept the pros and cons of the implantable defibrillator and develop a hopeful attitude about your future.
- 2 Believe!**  
Know that research indicates that the quality of life for people with implantable defibrillators is at least equal, and, often, is better than quality of life for those who take anti-arrhythmic medications.<sup>2</sup>
- 3 Resolve Concerns**  
you might have about your bodily appearance with your heart device.
- 4 Learn Coping Strategies**  
that help soothe your psychological distress. Key here is to dismiss negative thinking. Avoid imagining worst-case scenarios. Remind yourself that most people with implantable defibrillators view them as overwhelmingly positive.
- 5 Remind Yourself**  
The implantable defibrillator increases your safety from irregular heartbeats. It will serve as a “lifeguard” if you need it.
- 6 Make Plans for a Full Life**  
Take inventory of the activities that you enjoy and are meaningful, and discuss plans to return to those activities with your healthcare team.
- 7 Learn**  
Increase your knowledge about your device and your heart condition.
- 8 Plan**  
Develop steps you will take if you receive a lifesaving shock.
- 9 Communicate**  
Communicate questions and concerns with your doctor and family.

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**Wayne M. Sotile, PhD**  
Dr. Sotile, a Fellow in the American Association of Cardiovascular and Pulmonary Rehabilitation in the Winston-Salem, North Carolina area, is a pioneering health psychologist. He is a winner of several lifetime achievement awards for his work promoting resilience for medical patients as well as for medical professionals.



**Samuel F. Sears, PhD**  
Dr. Sears is an expert in the psychological and behavioral aspects of quality of life and patient acceptance of cardiovascular device therapies. He is a nationally recognized and frequent speaker to healthcare providers and support groups around the country. Dr. Sears serves as Professor and Director of Health Psychology at East Carolina University.

<sup>1</sup> Burns JL, Serber ER, Keim S, Sears SF. Measuring patient acceptance of implantable cardiac device therapy: initial psychometric investigation of the Florida Patient Acceptance Survey (F-PAS). *J Cardiovasc Electrophysiol*. April 2005;16(4):384-390.

<sup>2</sup> Schron EB, Exner DV, Yao Q, et al. Quality of life in the antiarrhythmics versus implantable defibrillators trial: impact of therapy and influence of adverse symptoms and defibrillator shocks. *Circulation*. February 5, 2002;105(5):589-594.

## *You Asked, Medtronic Listened*

# *Device Longevity*

More than 90% of the responses received from the spring newsletter indicated it would be helpful to have more information on device replacement.

### *Getting Your Next Device*

Your implanted heart device is powered by a lithium battery. This battery is sealed inside the titanium case of your heart device. Eventually, when the battery power is low, your heart device will need to be replaced. How long the battery will last depends on many factors, including how often your heart device provides therapy to your heart. Generally, the average Medtronic device battery lasts four to seven years after implant.

A heart device replacement procedure is typically easier and quicker than the initial implant

procedure. Your doctor makes a new incision, removes the current heart device, and checks the leads. Your implanted leads may be used with your new heart device if they are still in good working condition. If not, your doctor will implant new leads.

The leads are connected to your new heart device, and the heart device is tested and usually implanted in the same place as your first heart device. Then the doctor closes the incision and sets the features of your new heart device.

Talk with your doctor for specific information about your device's estimated longevity.

## *Sudden Cardiac Arrest Association (SCAA)*

### *Voice for ICD Patients –*

The Sudden Cardiac Arrest Association (SCAA) is an independent not-for-profit organization building a grassroots membership of individuals who share the vision of preventing death from sudden cardiac arrest (SCA). SCAA's members include SCA survivors, ICD patients, family, friends, medical professionals, emergency response providers, and others working together to increase the number of SCA survivors and to ensure that all survivors and those at risk of SCA have access to emergency and ongoing medical services and therapies, principally ICDs.

SCAA's programs include ICD awareness and education, peer-to-peer support, a speakers bureau and public policy advocacy. SCAA is forming local affiliates to unite ICD patients and SCA survivors and to initiate community programs. Membership is FREE. For more information or to join SCAA, go to [www.suddencardiacarrest.org](http://www.suddencardiacarrest.org) or call toll-free 1 (866) 972-SCAA.

## *Medtronic Patient Registration Services*

If you have a change to your contact information, please call 1 (800) 551-5544, between 7 am and 6 pm Central time, Monday through Friday.

## *Tell a Friend or Family Member about HeartHelp Resource Center*

If you know heart patients who are considering implantable heart device therapy and would like to learn more, please have them contact one of our Patient Education Specialists at 1 (800) 930-9374.



Medtronic patient Laura with her Mother one snowy afternoon



## Additional Device Information

### **Implantable Pulse Generator (IPG) systems and Cardiac Resynchronization Therapy (CRT) IPG systems**

An implantable pacemaker system relieves symptoms of heart rhythm disturbances. They do this by restoring normal heart rates. A normal heart rate provides your body with the proper amount of blood circulation. The pacemaker system is intended for patients who need rate-adaptive pacing or chronic pacing or for patients who may benefit from synchronizing the pumping of the heart chambers.

Risks associated with pacemaker system implant include, but are not limited to, infection at the surgical site and/or sensitivity to the device material, failure to deliver therapy when it is needed, or receiving extra therapy when it is not needed. After receiving an implantable pacemaker system, you will have limitations with magnetic and electromagnetic radiation, electric or gas-powered appliances, and tools with which you are allowed to be in contact.

### **Implantable Cardioverter-Defibrillators (ICD) systems and Cardiac Resynchronization Therapy (CRT) ICD systems**

An implantable cardioverter defibrillator (ICD) system delivers therapies to treat patients with heart rhythm disorders or who are at significant risk of developing heart rhythm disorders. An ICD is placed inside your body and works automatically.

A cardiac resynchronization therapy (CRT) implantable cardioverter defibrillator (ICD) system delivers therapies to treat patients who may benefit from synchronizing the pumping of the heart chambers. A CRT ICD also delivers therapies to treat patients with heart rhythm disorders or who are at significant risk of developing heart rhythm disorders. A CRT ICD is placed inside your body and works automatically.

Risks associated with an ICD or CRT ICD system implant include, but are not limited to, infection at the surgical site and/or sensitivity to the device material, failure to deliver therapy when it is needed, or receiving extra therapy when it is not needed. After receiving CRT ICD system, you will have limitations with magnetic and electromagnetic radiation, electric or gas-powered appliances and tools with which you are allowed to be in contact.

### **Reveal® Plus Insertable Loop Recorder**

The Reveal Plus Insertable Loop Recorder (ILR) is an implantable patient-activated monitoring system that records subcutaneous ECG and is indicated for patients who experience transient symptoms that may suggest a cardiac arrhythmia or for patients with clinical syndromes or situations that put them at increased risk of cardiac arrhythmias.

Risks associated with the implant of a Reveal Plus Insertable Loop Recorder include, but are not limited to, infection at the surgical site and/or sensitivity to the device material.

*Treatment with an IPG, CRT-IPG, ICD, or CRT ICD system or with Reveal Plus ILR is prescribed by your physician. This treatment is not for everyone. Please talk to your doctor to see if it is right for you. Your physician should discuss all potential benefits and risks with you. Although many patients benefit from the use of this treatment, results may vary. For further information, please call the Medtronic toll-free number at 1 (800) 551-5544 (7:00 a.m. to 6:00 p.m., Monday–Friday, Central Time) or see the Medtronic website at [www.medtronic.com](http://www.medtronic.com).*



**Medtronic**

*Alleviating Pain · Restoring Health · Extending Life*

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