



GLENN BOVARD. PHOTO BY STACIE SCOTT

HAVE A HEART

When the heart fails, it's time to consider a transplant

By Terri Yablonsky Stat

Glenn Bovard didn't realize he'd had a heart attack six years ago. *The Valparaiso, Ind., resident had been having trouble breathing while lying down at night. He was fatigued, too, but he assumed it was from working long hours as a state trooper.*

There may have been other factors, too. "I didn't have the best diet or exercise," says Bovard, 64, who retired in 2007. Doctors already knew he had an enlarged heart. He was placed on medication to relieve a blockage.

Then, on Dec. 24, 2009, Bovard had a second heart attack; a massive one this time. In heart failure, his Indiana doctors sent him to Chicago for treatment. Christmas Day, doctors at the University of Chicago Medical Center (UCMC) implanted a mechanical pump in Bovard's chest to keep him alive until a donor heart became available.

Bovard was in good hands. Chicago has some of the most advanced technology and highly trained doctors to treat heart failure, which affects about 5.8 million people in the United States and takes the lives of nearly 300,000 people a year, according to the Na-

tional Heart Lung and Blood Institute.

Heart failure occurs when the heart muscle can't pump as much blood as the body needs. Symptoms include shortness of breath, fatigue, swelling in the legs and ankles, inability to exercise and sudden weight gain from fluid retention. The condition is brought on by any disease that damages or weakens the heart such as coronary artery disease, heart attack, valve disease, a genetic abnormality, diabetes or untreated high blood pressure.

Because it's progressive, symptoms get worse over time, and it's becoming more and more common as longevity of the population increases. "Heart failure is the one cardiovascular disease that's increasing in incidence," says Dr. Allen Anderson, director of the Advanced Heart Failure Program

and medical director of the Cardiac Transplant Service at UCMC.

However, more people are surviving cardiovascular conditions like heart attacks because of techniques such as bypass surgery, so they're living with a damaged heart. And without further proper care, heart failure develops. Fortunately, effective treatments can help people live longer and feel better, and it can slow the progression of heart failure.

"We do everything we can to treat the problem [and] prevent people from needing a transplant," says Anderson. "Once patients do have heart damage, then technologies like pacemakers, implantable defibrillators and medications [like ACE inhibitors, angiotensin II receptor blockers, beta-blockers and vasodilators] can help them live longer with a better quality of life." ►

Despite these therapies, some patients continue to decline; it's then time to consider a transplant.

These patients must undergo an extensive medical evaluation. All other treatments must have been tried or ruled out. Patients can't have any cancers or active infections since transplant involves suppressing the immune system. They also must be able to follow a complicated medication regimen after surgery. Those who qualify are usually under the age of 70.

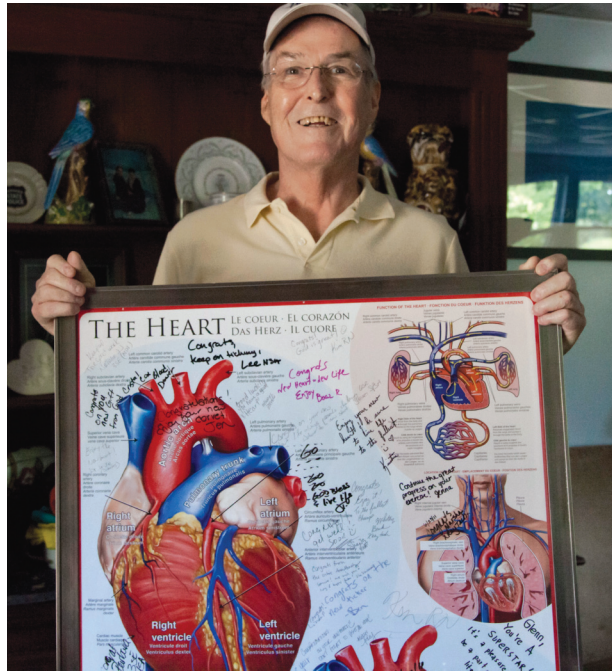
Once patients are vetted, they're placed on the transplant wait list. How long they wait varies, depending on how sick they are, their body size and blood type.

"There's a shortage of organs, so doctors are highly selective," says Anderson. "For those who are sick enough and don't require special matching, there's a very good chance they'll get a transplant." About a third of all people on the list get a transplant.

In the meantime, patients awaiting transplant have options. Surgically implanted mechanical pumps called ventricular assist devices (VADs) can extend lives. In fact, VADs are a bridge to transplant for 65 to 70 percent of patients on the transplant wait list.

In April 2010, the HeartMate II VAD was approved by the Food and Drug Administration (FDA) for the long-term support of patients with advanced heart failure who don't fit the criteria for transplant. HeartMate II is the only FDA-approved device for long-term support and is designed to last five to 10 years.

"Patients with heart failure are critically ill and whose quality of life has been very poor," says Dr. Geetha Bhat, medical director of the Center for Heart Transplant and Assist Devices at Oak Lawn's Advocate Christ Medical Center. "The pump gives



BOVARD HOLDS A POSTER OF THE HUMAN HEART WITH PERSONAL MESSAGES FROM THE HOSPITAL STAFF. PHOTO BY STACIE SCOTT

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them improved chance for survival and quality of life. With advanced heart failure, you can barely walk or sleep at night. With a VAD, patients can breathe normally, travel and spend time with their family."

The hospital has been a leader in providing VADs. It is the first hospital in the United States to implant a new, miniaturized heart pump for permanent use in patients with severe heart failure as part of a national clinical trial of a device called the Heartware. The device can be used permanently or as a bridge to transplant.

Advocate Christ started its heart transplant program in 2007. In 2011, the doctors performed 16 heart transplants. They're on pace for implanting over 80 VADs this year.

UCMC does about 25 transplants and implants 60 to 70 pumps a year. Around 85 to 95 percent of transplant patients are alive after one year, and 75 percent are still living three to five years after the surgery. Patients run the risk of dying from potential transplant complications like organ rejection, transplant coronary disease and cancers because of immunosuppressive drugs or infections.

"If you take 100 people who make it through the first year, half are living 14 years later," says Anderson. "That's success. Of those

100, most would not have made it through the first or second year without a transplant. Several of our patients have survived 20 years, and there are similar long-term survivors in many programs."

The cost of a transplant can range from \$200,000 up to \$1 million if the patient is very sick. Both VADs and transplants are covered by insurance. Lack of financial resources does keep some patients from getting a transplant, but hospital transplant programs have a staff that assists patients by reviewing options with them.

Bovard had a heart transplant last June. He spent 13 days in the hospital following the nine-hour surgery, but "I woke up the next day and was out of bed and in a chair within a matter of hours," he says.

And today he feels great. "I have to take drugs and steroids, but I feel pretty damn good," he says. He's working up to walking five miles a day. Once a month, he returns to UCMC for follow-ups.

"They took great care of me. They also took great care of my wife and supported her throughout all of this. I'm so grateful." +

