Glenview Man Rewrites His Family’s Heart Health History

Neurology Team Combats Parkinson’s Disease With Advanced Surgery

Diagnosis: Cancer-Free

Innovative melanoma treatment rewards Libertyville mom with a second chance at life
Landmark Cardiac Study Shows Dramatic Results

By Martha Floberg

Groundbreaking research led by Ted Feldman, MD, Director of the Cardiac Catheterization Laboratory at NorthShore University HealthSystem (NorthShore), shows that treating mitral valve regurgitation with the nonsurgical MitraClip is much safer than surgery, and that heart muscle function and symptoms improved dramatically.

Dr. Feldman was the first physician in the U.S. to perform the MitraClip procedure in 2003 at NorthShore Evanston Hospital. Results of the study were recently published in The New England Journal of Medicine.

“In EVEREST II, which stands for the Endovascular Valve Edge-to-Edge REpair STudy, we compared the safety and effectiveness of the catheter-based MitraClip treatment with open-heart surgery,” said Dr. Feldman, who also holds an academic appointment at the University of Chicago Pritzker School of Medicine. “We demonstrated good results and a better safety profile with a much less invasive procedure.”

The real value of the study is seen in the life-changing improvements in patient symptoms. “The changes are phenomenal,” said Dr. Feldman. Mitral valve regurgitation causes blood to leak, or flow, backwards into the heart. It makes the heart work harder, which can lead to heart failure, heart attack or death. Patients with this condition struggle with shortness of breath and fatigue.

“The morning after having the procedure, their lives are transformed,” he said.

Mary Ann Bernal, 78, of Niles, the first woman in the country to undergo the MitraClip procedure in 2004, couldn’t agree more. “Before I had the MitraClip, I was tired all the time, and it was very hard to breathe. Just a few weeks after the procedure, I was doing water aerobics. Now, I work out on the treadmill and am looking for a tennis partner.”

During a MitraClip procedure, physicians insert the tiny clip device into the heart through a catheter in a blood vessel in the thigh. The technique mimics surgery by fastening the two edges of the mitral valve to improve blood flow through the heart.

“The EVEREST II study was possible at NorthShore because of the strong institutional support for both innovative programs and interdepartmental collaboration,” said Dr. Feldman.

$5 Million Gift Advances Urologic Care

NorthShore has received a $5 million gift from John R. and Carol A. Walter to establish a comprehensive, state-of-the-art center for urologic care and advanced research.

The John and Carol Walter Center for Urologic Health, to open in 2012 at NorthShore Glenbrook Hospital, will be led by Charles Brendler, MD, and Michael McGuire, MD. It will offer medical care, as well as advanced diagnosis and treatment of all urologic diseases affecting both men and women.

“The Walter Center will create the ideal clinical setting to ensure the absolute best care for our patients and the most effective collaboration for our medical team,” said Dr. Brendler. “The Walters’ desire, and our desire, is treatment for the whole patient and not just the disease,” added Dr. McGuire.
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NorthShore Kellogg Cancer Center helps Libertyville mom battle deadly skin cancer.

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FRONT COVER: Megan Behnke cherishes every day with her four kids after successful treatment for Stage IV malignant melanoma. Clockwise from top left: Megan Behnke, son Will, 13, daughters Molly, 11, Elizabeth, 9, and Emily, 15.
Making a Case for the Flu Shot

Deerfield Man Rebounds From Life-Threatening Battle

By Martha Floberg

Mark Michaels knows he’s lucky to be alive. The 52-year-old Deerfield man, who typically takes good care of his health, came down with a strain of the H1N1 flu virus last winter and it nearly cost him his life.

“I never used to get a flu shot because I never got the flu, and I thought I was healthy enough to fight it,” he said. “Now, I’m the perfect ‘poster child’ for getting the vaccine.”

In early February 2011, Michaels came down with a fever but initially thought nothing of it. Over the next three days, his body temperature continued to rise. He was weak and dehydrated. “I had a horrible cough and could barely breathe,” he said.

Then Michaels began coughing up blood, which led him to call 911 in the middle of the night for an ambulance ride to NorthShore Highland Park Hospital. He was admitted to the Intensive Care Unit (ICU), where physicians had to act fast because Michaels’ breathing was labored, his fever was high, and he was in and out of consciousness. They placed him on a ventilator so he could continue breathing and put him in a medically induced coma to help his body fight the infection.

“He went into multiple organ failure with every organ system in his body involved in the illness,” said Moncy Varughese, MD, an internal medicine specialist who holds an academic appointment at the University of Chicago Pritzker School of Medicine. Dr. Varughese led a team of medical professionals, including an infectious disease specialist, kidney specialist, pulmonologist, cardiologist and neurologist, to keep Michaels alive.

For the next four weeks, Michaels fought for his life. He lost 40 pounds of muscle mass and was in a coma for 16 days. He went home after a month’s stay in the hospital, and gradually, his health returned.

“The flu hit me further than left field,” he said, “but I knew I was in good hands at Highland Park Hospital, and my family was in good hands, too. I was in a life-threatening situation, and the hospital staff stepped right up. Rhonda Cohen, a medical social worker, was especially helpful and supported my wife and kids tremendously throughout the whole ordeal.”

Why a Flu Shot?

The answer is simple: The best way to protect yourself is to get vaccinated.

A flu vaccine helps the body build up antibodies to protect you from three types of viruses that are expected to be most common during the upcoming season.

Doctors recommend that anyone older than six months be vaccinated. To schedule your flu shot this fall, contact your primary care physician, or if you need a physician please call NorthShore Medical Group at (847) 492-5700 (Ext. 1255).
Determination and Teamwork Result in Diagnosis of Rare Disorder

By Barb Hailey

Judy Rutkowski enjoys eating shellfish. In November 2009 she awoke in the middle of the night with numb lips and facial swelling after dining out on shrimp and crab legs. Despite having no history of allergies, she presumed she was experiencing an allergic reaction from her dinner. Her assumption was way off—Rutkowski’s symptoms were actually from a rare disease, uncovered by the knowledge and perseverance of an integrated team of NorthShore University HealthSystem physicians.

Rutkowski, 64, formerly of Glenview, assumed Benadryl would help with the swelling. It didn’t. Rutkowski’s lips were so swollen she couldn’t close her mouth, and her facial features appeared shockingly out of proportion. Her husband took one look and emphatically said she was going to the Emergency Department at NorthShore Glenbrook Hospital, several blocks away.

“I thought I was going to die,” Rutkowski said.

Indeed, Rutkowski’s facial swelling was quite serious. She was admitted to the Intensive Care Unit (ICU) for close monitoring and treatment to ensure that her swelling did not worsen.

The ICU staff consulted with a variety of physicians, including NorthShore-affiliated allergist Keith Lemmon, MD, to determine the cause of the swelling. Through a battery of blood work and other tests, Dr. Lemmon ruled out a nonallergic reaction. “It’s rare to have these symptoms not be allergy-related,” Dr. Lemmon said, noting that the findings made him more determined to find the root of Rutkowski’s swelling. “As a physician, it’s important to remain persistent and continue to search for answers.”

“Dr. Lemmon is a real go-getter,” Rutkowski said. “He would not give up.”

Dr. Lemmon consulted with NorthShore clinical pathologist Irene Check, PhD. Although Rutkowski had normal blood counts, he decided as a last resort to order a flow cytometry test. A highly sensitive and sophisticated test, flow cytometry uses light properties to measure cell surface protein markers as well as cell characteristics like size and shape. Abnormal results can sometimes be the result of malignant cell changes.

The results of the flow cytometry test were consistent for lymphoma, a cancer that begins in certain cells of the immune system. In only a rare number of patients, including Rutkowski, lymphoma triggers acquired angioedema, the cause of her facial swelling.

Rutkowski was referred to NorthShore Kellogg Cancer Center hematologist/oncologist Lynne Kaminer, MD. She confirmed the diagnosis of lymphoma, which was detected quite early, as well as the acquired angioedema.

With the underlying cause of Rutkowski’s facial swelling diagnosed, Dr. Kaminer was able to treat her for both lymphoma and acquired angioedema.

Drs. Check, Kaminer and Lemmon all hold academic appointments at the University of Chicago Pritzker School of Medicine. The NorthShore team of physicians—from Emergency Department physicians, allergists and oncologists, to pathologists and infusion therapy staff—proved beneficial for Rutkowski. “Everyone is very accessible,” said Dr. Lemmon. “It helps streamline things, and the patient benefits from it.”

The stress that came with the unpredictability of Rutkowski’s diagnosis is easing. Now living in Colorado, her lymphoma is in remission and the acquired angioedema is responding well to medication. Rutkowski is looking forward to theater outings and traveling, as well as spending time with her newest grandchild.
Playing basketball and other sports helps Northbrook resident Chris Ning relax and keep fit as he embarks on his new career as project manager for a software manufacturer. Yet when a recurrent left shoulder dislocation compromised Ning’s athletic ability, he sought a long-term solution to guarantee he could still shoot hoops and swing a golf club.

Ning first dislocated his shoulder playing basketball in 2008. His shoulder was manipulated back into place and he was fine—until he slipped on some ice, causing another dislocation. He dislocated his shoulder several more times, including while snowboarding and once while sleeping.

“I thought it would eventually stop happening,” Ning, 22, said. However, with each dislocation, his shoulder ligaments were tearing, resulting in a cumulative “erosion” of the bony socket, or glenoid, of the shoulder joint, further increasing Ning’s chances of recurrent dislocation, said NorthShore orthopaedic surgeon Steven Levin, MD. Dr. Levin holds an academic appointment at the University of Chicago Pritzker School of Medicine and is also on faculty for courses offered by the American Academy of Orthopaedic Surgeons/American Shoulder and Elbow Society.

Dr. Levin and other NorthShore orthopaedic surgeons share their knowledge in training medical residents in new surgical techniques. In July, NorthShore University HealthSystem implemented two new full-year fellowships with the University of Chicago—one in sports medicine and the other in hand surgery. These fellows train using leading-edge techniques to help future patients.

Such expertise helped Ning, who was referred to Dr. Levin after CT scans revealed approximately 25 to 30 percent bone loss in his socket. Dr. Levin recommended two possible procedures—minimally invasive arthroscopic surgery or a bone graft procedure. Ning chose the arthroscopic procedure, which uses small incisions and a tiny camera to inspect the ligaments before they are reconstructed. Given Ning’s youth, Dr. Levin felt it was a reasonable option.

During surgery, Dr. Levin noted significant damage to the ligaments and bone of Ning’s shoulder, but he reconstructed them. Ning initially did well, but he ultimately re-dislocated. Dr. Levin then recommended and performed a novel procedure on Ning: distal tibia (ankle bone) allograft, which uses a section of ankle bone from a cadaver that is grafted onto the shoulder socket. Dr. Levin is one of a handful of Chicago area orthopaedic surgeons performing this advanced procedure.

“The curvature of the ankle bone is a natural match to that of the shoulder bone socket, allowing more leeway to make the best fit,” said Dr. Levin. He likens the shoulder joint to a golf ball resting on a tee. The golf ball represents the ball of the shoulder bone and the tee, the socket. If the rim of the tee/socket wears down or breaks off, the ball/humeral head falls off or dislocates. The distal tibia allograft allows for a precise reconstruction of the socket, preventing further dislocation episodes.

“Dr. Levin was so great at explaining my options,” said Ning. He no longer has that nagging worry of his shoulder popping out of joint as he continues to enjoy basketball and golf.

To learn more about NorthShore’s advanced orthopaedic and sports medicine expertise, please call (847) 492-5700 (Ext. 1257).
Megan Behnke has been cancer-free for two years, following immunotherapy at NorthShore—an innovative treatment for late-stage, malignant melanoma.

Innovative Treatment Packs a Punch Against Melanoma

NorthShore Kellogg Cancer Center Helps Libertyville Mom Battle Deadly Skin Cancer
I’m never sick,” chuckled Megan Behnke after recounting a tenacious battle with life-threatening malignant melanoma. The 46-year-old mother’s ability to laugh in the face of a serious health challenge speaks volumes of her family ties, faith and determination. Ultimately, her good health—and the skill and compassion of the physicians and staff at NorthShore Kellogg Cancer Center—helped Behnke defy this cancer’s deadly odds.

With red hair and fair, freckled skin, Behnke was at higher risk for melanoma, the most deadly form of skin cancer. She was diagnosed and treated for Stage II malignant melanoma in 2002. The melanoma was removed. Seven years later, however, in February 2009, Behnke’s internist as well as her father, also a physician, urged her to have a biopsy on some swollen lymph nodes. This time the news was much worse—Stage IV malignant melanoma that had spread to her liver, lungs and bones.

“As a mother of four children, the diagnosis was the scariest thing I could hear,” Behnke recalled.

More common skin cancers like basal cell carcinoma and squamous cell carcinoma are highly curable. Malignant melanoma, particularly when it has spread to
organs and bones, has an extremely low cure rate, said Behnke’s oncologist Bruce Brockstein, MD, Head of the Division of Hematology/Oncology at NorthShore Kellogg Cancer Center.

“This was obviously a horrifying situation for her, particularly because cure is so rare and survival often very short,” said Dr. Brockstein, who holds an academic appointment at the University of Chicago Pritzker School of Medicine. Behnke had several treatment options: standard chemotherapy, which uses drugs that kill rapidly dividing cancer cells (but also can kill healthy cells), immunotherapy using the drug interleukin-2 or experimental treatments.

“Interleukin-2 physiologically mimics what happens when people have an overwhelming infection,” said Dr. Brockstein. “It enhances the body’s own immunity directed at the cancer.” Although it has been effective in only a small percentage of patients, interleukin-2 is currently the most promising treatment for late-stage melanoma. For patients healthy enough to handle the serious and debilitating side effects, the survival rate is still just 10 percent.

Behnke wanted a treatment option that gave her the best odds of being around for her husband and children. Being in good health—she has competed in triathlons—

“Interleukin-2 gave me the greatest odds of the cancer not returning,” she said.

Behnke said the staff at Kellogg Cancer Center eased both the emotional and practical issues that come with a cancer diagnosis for a busy mom who also runs a home day care. “The Kellogg staff anticipated everything,” she said. “Nurse Karin Rogers called everyone who needed to arrange appointments and wouldn’t let me leave until they were all confirmed.”

Every eight hours for five days, Behnke was given interleukin-2 in NorthShore Evanston Hospital’s Intensive Care Unit (ICU), spent two days recovering on an inpatient unit and then was given time to recover at home before resuming the same round of treatment. Her four treatments, each lasting a week in the hospital, finished after three months.

“I have a big family. Everyone came to the hospital,” Behnke said. “The nurses in the ICU were phenomenal. Dr. Brockstein came every day.”

While Behnke was enduring interleukin-2’s grueling side effects, including the painful peeling of her skin and 30 pounds of fluid retention, the treatment was working. PET scans after her second round of treatment showed much of the cancer was gone. After four rounds of treatment, a biopsy of the last abnormal area on the PET scan proved normal. Now two years later, no signs of cancer remain.

“I have a totally different lease on life. I am so grateful,” Behnke said. “I am so blessed that I have every day that I have been given.”

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**Skin Cancer Self-Exam**

The best screening for skin cancer is a self-exam using the “ABCDEs” of melanoma.

Any signs or symptoms should be discussed with your physician:

- **Asymmetry**: Moles that are unequal in size from one half to the other
- **Border**: Moles with irregular, scalloped or undefined border
- **Color**: Variations in mole color (including tan to brown, black, red or blue)
- **Diameter**: Moles with a diameter larger than a pencil eraser (greater than 6 mm)
- **Evolving**: Any change in size, shape, color, elevation or another trait, or any new symptom such as bleeding, itching or crusting
With guidance from NorthShore’s Cardiopulmonary Rehabilitation Program, Ed Phillips dropped 60 pounds and built daily exercise into his routine, including bike rides through the Chicago Botanic Garden.
E d Phillips is now an impassioned advocate for a heart-healthy lifestyle, but it took a wake-up call in the form of a heart attack for him to change his ways.

Phillips’ father suffered a fatal heart attack at age 60. From the time he was 16, the younger Phillips was acutely aware of his own hereditary risk for heart disease, yet by his own admission he was for most of his life “a member of the clean plate club” and a yo-yo dieter with a sedentary lifestyle.

Last August, Phillips experienced unusual, though not intense, pain and a tightness in his chest and shoulders. He wasted no time in getting to the Emergency Department at NorthShore Glenbrook Hospital where he was admitted, and a cardiac exam revealed that he had indeed suffered a heart attack.

“Thankfully, it was not my father’s heart attack,” said 65-year-old Phillips. “The doctors told me I had no permanent damage to my cardiovascular system because I got to the hospital in the early stages where it could be controlled.”

Phillips’ heart attack was due to a piece of plaque that ruptured inside his coronary artery. An angiogram determined there was no need for surgery or stents, and Phillips’ prescription for recovery was medication, diet and exercise—a program he has whole-heartedly embraced.

Phillips credits the Cardiopulmonary Rehabilitation team at NorthShore Evanston Hospital with giving him the confidence, guidance and knowledge to begin a steady, progressive exercise program and overhaul his diet. The experience has given him a brighter future and may be changing what once looked like his destiny.

About 60 pounds lighter than he was at the time of his heart attack, Phillips now walks and cycles almost daily and follows a healthy diet, a radical change from the way he used to eat.

“Now I am committed to it. When I make my schedule for each day, I start with ‘where is my time to exercise,’ ” said Phillips, who following retirement from a sales career launched a new business this year providing transportation and errand services for local seniors.
“Thankfully, it was not my father’s heart attack.”

“It started with the encouragement and coaching in the rehab program. I never allowed myself to get into a denial routine, and I listened and did what they said,” Phillips said. “I took full advantage of the 12-week program.” Knowing he was under the supervision of nurses and rehab specialists who were monitoring his heart rate and blood pressure gave Phillips the confidence to gradually work harder, increasing speed and intensity without fear of hurting himself, he said.

Phillips lost 36 pounds during the 12 weeks of rehab and felt more fit than he had in 15 years. But the real success is the fact that nine months later he is still going strong, continuing to drop pounds and closing in on his total weight loss goal. He was able to retire a CPAP machine as his breathing during sleep returned to normal. The chronic pain in his ankles, knees and hips also disappeared.

Valerie Carroll, RN, Staff Nurse and Phillips’ primary coach, acknowledged that weight loss is generally the toughest lifestyle change for most people following a heart attack. That is why the multidisciplinary, structured rehab program is such an important resource for those looking to improve their health and avoid another heart attack.

“We are an advocate for the patient. The rehab program itself reminds them of what happened and helps reinforce the desire to make their health a real priority,” Carroll said.

“Valerie had such a positive attitude and was always encouraging, and willing to spend lots of one-on-one time with me, responding to all my questions,” Phillips said of Carroll. “At the end of the 12 weeks, I was concerned how I would keep the momentum going and she gave me a little tough love, pushing me out the door with positive feedback.”

Phillips also met with a dietitian as part of the program, who he said was immeasurably helpful in providing specific guidelines for a low-fat, low-sugar and low-sodium diet.

“We also work to help patients manage stress and try and support positive behavior changes,” Carroll said. “It is very gratifying to see people improving, having more energy and feeling good.”

“It’s more about changing your lifestyle than committing to a diet for a short period of time,” Phillips said. “For me, I can’t ever take my eye off the ball. I have to remain committed to the principles I learned in the program. It doesn’t mean that I can’t go out to dinner, but I know that I can’t just order anything off the menu. Food can’t be the reward; good health has to be the reward.”

Jason Robin, MD, a NorthShore-affiliated cardiologist who holds an academic appointment at the University of Chicago Pritzker School of Medicine, cares for Phillips. Dr. Robin credits diet, exercise and cholesterol-lowering medication with decreasing Phillips’ risk of another cardiac event by at least 50 percent.

“He’s doing this the right way,” Dr. Robin said. “Having a heart attack is no longer a death sentence or a guarantee that you’ll have another one. It’s a wake up call that things need to change.” The Cardiopulmonary Rehabilitation Program is a safe environment for patients to get stronger. It heals their psyche as well, as many patients who have heart attacks start to experience anxiety or depression after their attack.

“If all of our other patients could have even 20 percent of Ed’s enthusiasm, we’d see far fewer heart attacks,” Dr. Robin added.

**KNOW THE SIGNS OF A HEART ATTACK**

Warning signs of a heart attack include chest discomfort, pain or discomfort in other areas of the upper body including the jaw or shoulders, shortness of breath, breaking out in a cold sweat, nausea or lightheadedness. Experts agree it is critical to call 911 or get to a hospital as soon as possible when experiencing these symptoms.

Risk factors include a family history of heart attack, high cholesterol, high blood pressure, obesity, a sedentary lifestyle and smoking. NorthShore-affiliated cardiologist Jason Robin, MD, advises men and women with a combination of these risk factors to see their physician who can assess risk and offer guidelines for lifestyle modification and other effective prevention.

For more information about NorthShore’s Cardiopulmonary Rehabilitation Program, please call (847) 492-5700 (Ext. 1256).
Rapid Recovery
Home Health Team Delivers Comprehensive Care to Hip Replacement Patient

By Susan J. White

In the 1980s, hip replacement patients used to stay in the hospital for 17 days, and that was for the uncomplicated cases in healthy people. Today, most patients undergoing a total hip replacement stay just about three days, according to James Kudrna, MD, PhD, NorthShore Orthopaedics Adult Reconstruction Division Head.

William Blair has had both hips replaced in the last four years, and he knows firsthand the rigors of rehabilitation and the joy associated with a return to an active and pain-free life following surgery.

Blair credits not only his surgeon Dr. Kudrna, whom he describes as an “ultimate advocate for his patients,” but also the entire care team including the NorthShore Home Health nurses and physical therapists with his successful recovery. Dr. Kudrna and the team made the transition from hospital to home safe and easy as Blair worked to regain strength and mobility.

An avid cyclist, Blair reached the point before his hip surgery where it was a chore just to get his leg up and over the wheel to get on the bike. And forget keeping up with his grandchildren. Now, the 61-year-old longtime general manager of Hackney’s on Harms restaurant is back to cycling, looking forward to his next trip out west to visit grandchildren and ski, and is no longer restricted by pain and lack of mobility.

While the first procedure might have been a bit daunting, Blair said Dr. Kudrna inspired immediate confidence and his Home Health nurses and physical therapists were invaluable in keeping him comfortable and moving forward with a speedy recovery.

The convenience factor of having nurses check the wound, help with pain management and answer any questions, and having physical therapists come to his home to instruct and assist in stretching and strengthening exercises was great, said Blair. “My wife didn’t have to drive me to appointments,” he said. “And they were always professional and friendly and pushed me to do as much as I could manage.”

Dr. Kudrna, who holds an academic appointment at the University of Chicago Pritzker School of Medicine, was asked some years ago with his colleagues to streamline the joint replacement program. He knows just how critical quality home care is to his patients’ healing and return to independence. A renowned physician, Dr. Kudrna routinely operates on patients from around the region and across the country.

“Every patient is unique and the environment they live in is unique as well, which makes it a challenge for home health providers. We have an outstanding group of people at NorthShore,” said Dr. Kudrna.

“We’re part of a team, with the patient at the center of that team,” said NorthShore Home Health Nurse Mary Abiera, RN, who helped care for Blair. “It’s great to be a part of the process that helps people get back to their regular lives.”

To learn more about NorthShore’s Home Health Services, please call (847) 492-5700 (Ext. 1258).
Only 56 when she was first diagnosed with Parkinson’s disease, Sister Leanne Hartmann had trouble sleeping and mild balance issues she chalked up to an earlier knee replacement. A serious and life-changing condition like Parkinson's was the furthest thing from her mind when she got the shocking news in spring 2007.

As treasurer of the Chicago Province of the Felician Sisters, Hartmann held an important and demanding job, and as the disease progressed she grew increasingly weak and less able to manage her role. Writing became difficult; she stopped signing checks and was unable to even address an envelope.

“I was frustrated because it inhibited me from doing what I wanted to do,” Hartmann said. “I was sleeping so poorly, and I couldn’t put in the time or the focus to do the job.”

While medications initially helped control her symptoms, her doses had to be increased every three to four months and ultimately she was no longer responsive to medical treatment.

Hartmann was also losing the ability to enjoy many of the activities she found fulfilling on her own time, including walks on the grounds. “I also liked to journal, but it became impossible to concentrate on writing due to the involuntary movements associated with Parkinson’s,” she said.

Hartmann then faced another dramatic change in her life, this time a positive transformation following Deep Brain Stimulation (DBS), an advanced surgical procedure performed by a team of experts at NorthShore Neurological Institute (NNI).

Neurologist Arif Dalvi, MD, first told Hartmann about the possibility of DBS and suggested they would both know when the time was right. “The best time to consider surgery is when the medications stop working in a reliable manner,” Dr. Dalvi explained.

In Parkinson’s, certain areas of the brain become overactive and act as a brake on the motor system resulting in slow movements, muscle stiffness and tremor. DBS involves placing an electrode in the brain to deliver continuous high-frequency electrical stimulation to these areas. The technique works by jamming the abnormal electrical signaling and resets the motor system to more normal levels.

Hartmann benefited from NorthShore’s collaborative and interdisciplinary team, including neurosurgeon Ted Eller, MD, neurophysiologist Lawrence Bernstein, MD, and movement disorders neurologist Dr. Dalvi, who each hold academic appointments at the University of Chicago Pritzker School of Medicine.

“I never saw it as a risk. I was ready and I wanted to have my life back,” Hartmann recalled. The results were nearly immediate and, according to Hartmann “incredible.”

She no longer needed a walker, began to regain strength and was able to use her camera for the first time in more than a year. “I felt strength I hadn’t had before physically, emotionally and mentally,” Hartmann said.

“It’s truly amazing to see how much impact this has on her quality of life,” said Dr. Dalvi.

For information about NNI’s advanced procedures, please call (847) 492-5700 (Ext. 1259) or visit northshore.org/neuroaug11.
When Time Doesn’t Heal

NorthShore Center Offers Specialized Treatment for Chronic Wounds

By Phil Rozen

At first, Barbara Marran didn’t know what hit her. Marran, 76, and her husband Jim were enjoying a day in the park in Wilmette last summer, when out of nowhere a baseball smacked into her lower right shin, just above the ankle.

The ball accidentally missed its target, the glove of a nearby youngster playing catch. Initially, Marran passed it off as a minor injury. But weeks later the pain persisted and a lump, the size of a golf ball, had formed. This grandmother of seven was forced off her feet and out of her active routine, including volunteer work tutoring English.

“I never in a million years expected it to be this big of a deal,” said Marran. “But I’ve learned it’s the worst place to get hit because there is nothing around that part of your leg to protect it.”

Marran’s NorthShore-affiliated internist Stephen Bundra, MD, monitored the wound closely and treated her with antibiotics to prevent infection. Both Dr. Bundra and Marran’s NorthShore-affiliated cardiologist David Koenigsberg, MD, also directed Marran to get a Doppler ultrasound to assess blood flow in her legs. It revealed a blockage in the arteries resulting in her wound not getting sufficient blood flow to heal.

The doctors referred Marran to the Wound Care Center at NorthShore Highland Park Hospital, which offers comprehensive, specialized treatment for chronic or non-healing wounds. Reluctant to have surgery, Marran was initially treated with a variety of nonsurgical approaches—from medication to a negative pressure vacuum device—but the stubborn wound prevailed.

Marran eventually realized her best option was a femoral endarterectomy, a surgical procedure through the groin to help break the arterial logjam, clearing out the blockage to restore normal blood flow. Last fall Marran consulted with NorthShore vascular surgeons Omar Morcos, MD, and Tina Desai, MD, members of the Wound Care Center team who hold academic appointments at the University of Chicago Pritzker School of Medicine.

“Barbara’s arterial disease was not amenable to minimally invasive intervention,” said Dr. Desai. “We respected her initial desire not to have surgery, but we felt, and she ultimately agreed, it would be the most effective way to remove the blockage and improve blood flow.”

Within weeks after surgery last December, Dr. Desai began to see steady healing. The following four months, Marran came to the Center weekly for treatments including debridement, a thorough cleansing of the wound. She also wore special compression stockings to further promote blood flow. The painstaking protocol paid off, and by May Marran’s wound finally closed.

“It was a slow process,” said Marran, “but my doctors and nurses were up front about that. They kept me informed.”

Along with her office visits, Marran stayed connected to her care team via email using NorthShoreConnect. Now, she is ready to resume her active life.

“My care was extraordinary,” added Marran. “I’m so grateful to the Wound Care Center’s professionals and their painstaking focus on healing.”

To make an appointment at NorthShore’s Wound Care Center, please call (847) 492-5700 (Ext. 1260).
New NorthShore Center Advances Breakthroughs in Complex Diseases

By Martha Floberg

NorthShore University Health-System is now home to one of the first centers of its kind in the country to study the many interrelated factors in the disease process. The Center for the Study of Complex Diseases, funded by a $1.5 million gift from the Keyser Family Research Fund, holds enormous promise to improve patient care by providing new insight into the causes of specific diseases and pioneering innovative treatment options.

“NorthShore is setting the precedent to develop alternative ways to fund research initiatives like this new Center through private foundations,” said Eli D. Ehrenpreis, MD, Medical Director of the Center and Chief of Gastroenterology at NorthShore Highland Park Hospital. Dr. Ehrenpreis also holds an academic appointment at the University of Chicago Pritzker School of Medicine. “Mr. and Mrs. Keyser’s insight to adapt techniques first used in business and other industries to the field of medicine is visionary,” he said. “We are tremendously appreciative of their generosity.”

Established earlier this year at the NorthShore Research Institute, the Center relies on dynamic systems modeling and sophisticated computer simulation to answer important questions about the underlying factors that cause disease, the interrelationships of these components to each other and to the course of the disease, and the effects of treatment interventions under a variety of conditions. This capability illuminates new therapeutic breakthroughs more quickly than traditional medical studies.

In addition, the Center encourages interdisciplinary problem solving to understand diseases and demonstrates how NorthShore’s award-winning Electronic Medical Record (EMR) system, which offers a wealth of data, can play a crucial research role to advance patient care.

Dynamic systems modeling is a powerful tool that helps researchers study and manipulate multiple factors simultaneously in evaluating complex diseases. Using STELLA (Structural Thinking Experiential Learning Laboratory with Animation) and other modeling software, the method parallels, or simulates, the way systems and processes actually interact in reality.

By studying a disease in a dynamic state, researchers can glean valuable information to follow the effect of a disease on different parts of the body, monitor the way systems in the body interact, analyze how drugs are metabolized, evaluate the effectiveness of various drug therapies and develop preventive strategies.

“For instance, in one of our Institutional Review Board (IRB)-approved studies, we obtained data from EMR about the drug infliximab (Remicade), used to treat Crohn’s disease and some rheumatologic conditions,” said Dr. Ehrenpreis. The drug is administered intravenously and has serious side effects. As a result, patient usage frequently drops off over time.

“As it currently stands, our model can predict improvement in the likelihood that patients will remain on infliximab following specific interventions,” said Dr. Ehrenpreis. “Simulations generated from the model also may improve drug usage by patients and develop regimens with greater effectiveness and compliance.” This model has potential for studying other drugs that are difficult to tolerate, such as those used for cancer therapy.

Aside from studies of ulcerative colitis and Crohn’s disease (two forms of inflammatory bowel disease, or IBD), the Center has also developed dynamic models in collaboration with physician-scientists at NorthShore specializing in nephrology and obstetrics and gynecology.
The demand for mental health services for underserved teens, even in seemingly affluent communities, is “huge” and has been growing for at least the last eight years, according to Glenbrook South High School Nurse Barb Marzillo, RN.

Thanks to a new partnership with The Josselyn Center, Glenbrook High School District 225 and NorthShore’s Family Care Center Family Residency Program, NorthShore Glenbrook Hospital is funding a pilot program to provide the much-needed services.

The Community Mental Health Partnership for Youth is a collaborative effort designed to provide:
- psychiatric coordination of care for post-hospitalized, low-income students
- psychiatric evaluation for medications for students already being treated by other community programs
- evaluation risk assessment for students whose safety is a concern
- nonemergency evaluation for psychiatric services

The new program began in the spring and serves teens grappling with a variety of issues, including depression, anxiety and family struggles.

“The mental health of adolescents is a clear priority for NorthShore, where we provide an array of services. Identifying and treating mental health issues early spares the youth and family from suffering and importantly helps to get kids back on track as soon as possible,” said Frederick Miller, MD, PhD, NorthShore Chairman of Psychiatry, who holds an academic appointment at the University of Chicago Pritzker School of Medicine.

“This is a great way to provide critical services and keep these kids in school,” Marzillo said.

“I love the access of this program. It’s awesome, and it’s nice to know there’s somebody out there who cares,” said the mother of one of the first students to be treated by the program. Her son had already missed many days of school due to anxiety and depression, and the family could not afford psychiatric care elsewhere.

“It’s so exciting to start helping these families, one by one, and see the ripple effect,” Marzillo said. “We’re thrilled and grateful to NorthShore for the funding. This could be a model for other hospitals and communities.”

Services are provided by appointment only and through referrals. To schedule an appointment, please call Joanne Medak at (847) 486-4749.

Sharply Focused on Our Communities

NorthShore’s mission “to preserve and improve human life” goes beyond the walls of our hospitals. It is carried out into the communities we serve with a broad range of community benefit initiatives and financial support.

NorthShore was one of only two health systems in the United States, and the only in Illinois, to receive the 2011 VHA Leadership Award for Community Benefit Excellence.

Total community benefits rose last year to nearly $201 million (see breakdown by category to the right).

For more information on NorthShore’s Community Benefits, visit northshore.org/community-events/community/community-benefits-report.
When Jim Garard was told there was nothing more that could be done for his wife Irene, who was diagnosed with cancer in October 2009, he sought needed help and comfort for her final days.

Garard called his good friend, Janardan Khandekar, MD, Medical Director of NorthShore’s Center for Molecular Medicine and past Chairman of the Department of Medicine, to seek recommendations for her care. Garard, a NorthShore Board member and now Life Director for more than 40 years, was surprised and heartened to learn from Dr. Khandekar that NorthShore itself had a very accomplished Hospice Program.

Irene Garard was referred to the program when the Northfield couple returned from their winter home in Florida, shortly before she died in May of 2010. Her care was a welcome relief for her husband and children, who recognized that NorthShore’s Hospice Program provided the comfort, dignity and compassion she needed.

“Within 10 minutes of arriving back to our home, the hospice team was in place and at our front door,” Garard said. “Irene was never uncomfortable or fearful, and that meant the world to me. I was very pleased with the care she received.”

The family’s positive experience encouraged Garard to meet with hospice administrators and NorthShore Foundation staff to talk about the program’s needs. Just a few months ago, Garard established the Hospice Communications and Education Fund with a generous gift to increase the visibility of NorthShore’s Hospice Program through communication and education.

The idea is to share the stories about a myriad of services—from support groups to newsletters to informational booklets and even preserving the patient’s life story in a video—that are all available to help families through the ordeal of losing a loved one.

“I want everyone to know what hospice is because I had no grasp of that in the beginning. And I would encourage people to use it sooner,” said Garard, who calls the services comprehensive and empathetic for the patient and his or her family. He learned hospice nurses like Serena Luksik give patients relief from disease-related symptoms to improve their quality of life, making the best of each day during the last stages of advanced disease.

“I wanted to fund this communications gift so that the concept of hospice and its availability is open to everyone because people generally don’t think about it until they need it or it’s too late.”

“We are most appreciative of Mr. Garard’s gift, which will allow us to better reach out to members of our community who will benefit from the unique support that hospice offers,” said Margaret Thomas, MA, MD, Associate Medical Director of NorthShore Palliative Care and Hospice Services. Both Drs. Thomas and Khandekar hold academic appointments at the University of Chicago Pritzker School of Medicine.

“It also helps us to educate and support the physicians, nurses and other healthcare professionals who are on the front line helping patients and families navigate these complex physical, emotional and spiritual end-of-life issues,” added Dr. Thomas.
Demystifying Anesthesia

Answers to Your FAQs

By Barb Hailey

NorthShore physicians and staff strive to keep patients well informed about what to expect when they undergo any type of surgery. This communication helps patients make smart choices and lessens anxiety they might have regarding important healthcare decisions. Anesthesia is an important part of any surgical procedure, and NorthShore’s Chairman of Anesthesiology and Harris Family Foundation Chair of Anesthesiology, Jeffery Vender, MD, answers commonly asked questions about anesthesia.

Question: What is the role of my anesthesiologist?

Answer: In the operating room, the anesthesiologist is a key member of the team responsible for your care, as well as being a patient advocate. In addition to evaluating patients before surgery, we provide the patients intraoperative clinical care, balancing specific surgical and patient needs including the reduction and prevention of pain. Our focus is always on your safety and quality of care.

NorthShore anesthesiologists are board-certified. Many of our anesthesiologists have subspecialized certifications in areas including cardiac surgery, pediatrics, critical care, neurosurgery, obstetrics and pain management. The anesthesia care team also includes specialty nurses—Certified Registered Nurse Anesthetists.

In addition to clinical care, our anesthesiologists are active both nationally and internationally in promoting scholarly excellence. Many of our anesthesiologists hold academic and leadership appointments at the University of Chicago Pritzker School of Medicine, the Illinois Society of Anesthesiology and the American Society of Anesthesiologists. We have a robust clinical research program.

Q: Are there different types of anesthesia?

A: There are four basic types of anesthesia:

- **General Anesthesia** puts you to sleep throughout your surgical experience.
- **Spinal Anesthesia/Epidural Anesthesia** anesthetizes a large area typically from the upper abdomen or the waist down. Many of these patients also receive sedation.
- **Regional Anesthesia** anesthetizes the specific part of your body where surgery is to take place, such as an arm, hand or leg.
- **Monitored Anesthesia Care (MAC)** refers to the administration of sedatives and narcotics to you through an intravenous catheter as a supplement to local anesthetic injected around your surgical site to numb the area.

Additionally, anesthesiologists perform selective nerve blocks to better manage postoperative pain. Selective interventional procedures are often used to treat chronic pain or pain associated with cancer.

Q: What is important for the anesthesia provider to know?

A: A medical history is taken before your surgery. Make sure you inform your care providers about any medications you are taking, including herbal supplements, blood thinners, metformin and steroids. Additionally, it is important to inform your physicians about any significant past medical history, including allergies, specific medical problems (e.g., heart, kidney, thyroid or liver, hypertension and sleep apnea), and previous anesthesia issues.

Q: What is recovery like after anesthesia?

A: Recovery varies depending on the specific procedure, the type of anesthesia used, the underlying medical condition of the patient and the amount of postoperative pain. Nausea or vomiting is one of the most common issues, although we typically use medications to reduce this problem. Patients who are intubated (a breathing tube inserted into your trachea) for general anesthesia may have a sore throat. Specific side effects or risks should be discussed with your anesthesia care provider. Our anesthesiologist-led care teams monitor patients for any potential acute postoperative complications.
You have complete access to NorthShore’s nationally-recognized system of care, with teams of medical experts working together at convenient locations throughout Lake County. NorthShore provides what you and your family deserve—exceptional healthcare, right in your community.

At NorthShore University HealthSystem, **excellence is all around you.**
You’re always at the center of exceptional care.

At NorthShore University HealthSystem, our team of experts works together to guide your care—collaborating at every step, sharing knowledge and always staying connected. We promise to surround you with a healthcare experience so complete, you’ll feel like our only patient.

At NorthShore University HealthSystem, excellence is all around you.