Winter 2017

Better Medicine

Lehigh Valley Health Network

Putting a New Focus on Birth Plans

By Anmol Bhambhwani, MD

About the author: Anmol Bhambhwani, MD, is an Obstetrician/Gynecologist at LVPG Obstetrics and Gynecology–Valley Center Parkway.

Anmol Bhambhwani, MD
Obstetrics and gynecology

In our obstetrics practice, we encourage every patient to consider a birth plan to we can understand her birth preferences and give her the best birth experience possible. A birth plan is basically a guide for your health care provider regarding your values and preferences about labor and delivery. Birth plans help you and your health care provider make informed decisions together about the kind of birth experience you want and also keep in mind the health and safety of you and your baby. Until recently the actual creation of and communication surrounding birth plans were usually left up to each individual clinician.

That will now change as a result of Lehigh Valley Health Network's (LVHN) new maternity care pathway, which we implemented this fall. By standardizing the process for educating and interacting with patients, we will ensure that all clinicians discuss birth plans at the appropriate times and that all aspects of the plan are covered.

Beginning the process

We start helping patients develop their birth plans from the first visit by giving them a maternal preferences list, which asks about issues ranging from prenatal care, to anesthesia and other labor/delivery choices, to postpartum care and breastfeeding. We are careful not to overwhelm the patient with questions or have them fill out the list immediately. Rather, the list provides a framework for future discussions with the patient's obstetrician and certified nurse-midwife. At each visit, clinicians know exactly what to address at that particular point in the pregnancy.

Birth plans also help clinicians set realistic expectations. We assure every patient that we will do our best to accommodate her preferences, but we also leave room for flexibility.

Family-focused approach

Women choose LVHN for our comprehensive care, convenient locations and access to specialists with a family-focused approach, including pediatric specialists within Lehigh Valley Children's Hospital. The new Family Birth and Newborn Center at the Lehigh Valley Hospital–Muhlenberg campus, which opens in summer 2017, will enhance our ability to provide world-class obstetric and newborn services.

We hope that our renewed emphasis on birth plans will help patients understand and control their care and experience pregnancy and delivery in a peaceful, joyful way.

To refer a patient to obstetrics and gynecology, call 888-402-LVHN.

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The Ascendancy of Physician Leadership in Medicine

By Thomas Whalen, MD, MMM

About the author: Thomas Whalen, MD, MMM, has served as Chief Medical Officer at Lehigh Valley Health Network (LVHN) since 2011. He served as Chair of the Department of Surgery at LVHN from 2006 to 2011. A pediatric surgeon, he retired from the U.S. Navy Reserve after 28 years in the medical corps for the Navy and Navy Reserve.

Thomas Whalen, MD, MMM
Chief medical officer

My lifelong fascination with medicine began in high school when I worked as a hospital orderly. Back then, most hospitals were directed by an administrator, often a nonmedical person who was seldom seen or heard that essentially directed operations. The medical side was led by a chief of staff, a largely ceremonial position occupied by a physician who neither had the time nor the inclination to get very involved with hospital business.

The concept of a physician as a hospital director wasn't something you heard much. In fact, in those days if a physician did get involved in administration, the perception was that physician must not have been cutting it as a doctor. Administrators were supposed to be people with an acumen for business. Physicians were supposed to concentrate on medicine.

Physicians take the initiative

But as time passed, medical institutions in general began to understand the value of becoming more patient-centric top to bottom. Traditional administrators might have been able to improve the bottom line, but they didn't have the clinical heart to understand what patients and their families dealt with on a daily basis. Physicians took the initiative and began to pursue advanced degrees in order to take that clinical understanding and utilize it more in day-to-day operations. Personally, I'm thankful to those who helped me to realize how valuable pursuing a master's degree in medical management could be as medicine evolved.

Of the top 50 hospitals in the U.S. today, nine of the top 10 have physicians as chief executive officers (CEOs).

LVHN has been well ahead of this curve as far back as 1993, when Elliot Sussman, MD, took over as CEO. Currently, more than 70 LVHN physicians carry advanced degrees.

So where is this realization leading us?

We're in the people business, a business that is much more about operating at a margin level that enables us to offer the best care possible for our patients. If someone is looking to make all kinds of money and be granted stock options, health care really isn't the place for them. As we have evolved at LVHN, it appears the merging of the medical side with the administrative side was inevitable if we really wanted to live up to our mission – to heal, comfort and care for our community.

Patient-centered focus

We're only going to see this patient-centered focus be emphasized more across the nation going forward. Federal initiatives like MACRA (Medicare Access and CHIP Reauthorization Act) have established new ways to pay physicians for their service to Medicare patients, where providers are rewarded for the quality and effectiveness of their care rather than volume. Being that physicians make up about 10 percent of all health care and yet are responsible for about 80 percent of health care spending, this presents an automatic cost control mechanism as well.

Today, aspiring physicians are learning leadership skills as part of medical school programs such as LVHN's SELECT initiative with the University of South Florida Health Morsani College of Medicine. I believe the future of medicine is in good hands.

Interventional Radiology Services Now Available in Hazleton

Imaging modalities can be used to diagnose and manage multiple diseases

Patients seeking interventional radiology (IR) services at Lehigh Valley Health Network (LVHN) can now receive them at two locations – Lehigh Valley Hospital (LVH)–Cedar Crest in Allentown and, as of December 2016, LVH–Hazleton.

Larry Braunstein, MD
Diagnostic radiology

"We're now offering the service in Hazleton to make it more convenient for patients locally," says Larry Braunstein, MD, a board-certified interventional radiologist. Braunstein, who was fellowship-trained in interventional radiology at the University of Virginia, has returned to LVH–Hazleton after practicing IR there from 1998 to 2000. "I'm back in the place where I began, and I'm hoping to add to the already excellent medical and surgical care in the community," he says.

Real-time imaging

IR is on the leading edge of medicine, although little actual cutting is involved. Interventional radiologists like Braunstein use imaging modalities, such as X-rays and MRI, to advance a catheter in an artery to treat disease at the source internally.

Requiring only a nick in the skin or a needle stick, minimally invasive techniques can be used to diagnose and manage multiple diseases throughout the body, such as cancer of the bone, breast, kidney, liver and lung; peripheral artery disease; stroke; abdominal aortic aneurysm; deep vein thrombosis; osteoporosis; uterine fibroids; varicoceles; and varicose veins. General anesthesia is not required for many IR procedures.

Forefront of medicine

IR is just one of many treatment options patients may have for their conditions. Those who aren't good candidates for IR will be referred to the appropriate provider for surgery or other care, if needed. "We work closely with our local surgeons and specialty providers," Braunstein says.

Patients with questions about IR should feel free to contact Braunstein and his team. “We encourage anybody in the community who has a question to get in touch with us directly or talk to their doctors and have their doctors get in touch with us,” he says.

IR, which is typically covered by insurance, came about in the late 1960s and the field has been expanding since. “The technology is at the forefront of medicine,” Braunstein says.

To refer a patient for interventional radiology services, call 888-402-LVHN.

Expanding Options in Gastrointestinal Oncology

Lehigh Valley Health Network (LVHN) is committed to providing the latest surgical techniques for the treatment of gastrointestinal and hepatopancreatoniliary cancers.

As part of that effort, LVHN welcomes a new surgical oncologist, Aaron Blackham, MD, to LVPG Surgical Oncology–1240 Cedar Crest. He brings expertise in malignancies involving the esophagus, stomach, liver, pancreas, bile ducts and gall bladder, as well as colon and rectal cancers.

After attending medical school at the University of Cincinnati, Blackham did his general surgery residency at Wake Forest Baptist Medical Center in Winston-Salem, N.C. There, he performed two additional years of research in surgical oncology focusing on oncolytic viral therapies for melanoma and pancreatic cancer. Following residency, he completed a surgical oncology fellowship at Moffitt Cancer Center in Tampa, Fla. Blackham is among the first surgeons in the country eligible for board certification in Complex

Aaron Blackham, MD
Surgical oncology
Watch a video to learn more about him.

General Surgical Oncology.

Complex oncologic resections In addition to conventional GI procedures, Blackham brings extensive training in robotic surgery for complex oncologic resections, including esophagectomy and gastrectomies for appropriate patients.

“Surgery for esophageal cancer is traditionally performed through large abdominal and thoracic incisions,” Blackham says. “With the robotic platform, we can perform the same oncologic resection through incisions of just a few centimeters. The advantage is patients experience less pain, allowing them to breathe easier and have earlier mobility, leading to an overall quicker recovery.”

Blackham is also helping to bring new ablation technology to LVHN called irreversible electroporation (IRE). The technique uses low-energy electrical current to ablate soft tissue without relying on heat.

“The advantage of IRE is its ability to target malignant tissue adjacent to vital structures like vessels, bile ducts and bowel, where thermal ablation techniques are contraindicated,” Blackham says. “We are using IRE for select patients with unresectable pancreas cancer and liver tumors to provide local treatment when surgery is not an option.”

Looking ahead

In the coming years, Blackham hopes to expand LVHN’s use of robotic surgery for a wide range of oncologic procedures. He looks forward to working with the multidisciplinary oncology team to continue bringing new therapies to the Lehigh Valley.

“I’ve been extremely impressed with the cancer care that’s already in place here,” Blackham says. “We have great oncology providers and support staff, excellent resources for patients, and a total team approach.”

To refer a patient for a bariatric surgery consultation, call 888-402-LVHN.

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Bringing World-Class Breast Cancer Treatment to the Lehigh Valley

Like all cancer centers, Lehigh Valley Health Network (LVHN) has ongoing review committees tasked with synthesizing new information in the treatment of breast caner. However, LVHN goes a step further. Through its partnership with Memorial Sloan Kettering (MSK) Cancer Center – the MSKAlliance – LVHN's breast cancer disease management team (DMT) continually validates its standards and practices against one of the world's leading cancer research institutions.

Nicholas Lamparella, DO
Hematology oncology

"There are many options in the treatment of cancer for all of the different disciplines," says Nicholas Lamparella, DO, medical oncologist with LVPG Hematology Oncology–1240 Cedar Crest. "The DMT lets us ensure that we're giving patients the highest standard of care, and that all patients are being treated consistently."

Inside the DMT

The breast cancer DMT brings together professionals across every discipline. It includes surgical oncologists Lori Alfonse, DO, and Heiwon Chung, MD, of LVPG Surgical Oncology–1240 Cedar Crest; medical oncologists Nicholas Lamparella, DO, Savitri Skandan, MD, and Ranju Gupta, MD, of LVPG Hematology Oncology; radiation oncologist Jeanette Blauth, MD, of Allentown Radiation Oncology Associates; and other specialists. Supporting the team are Linda Sesa, CRNP, specializing in breast health; and Oncology Quality and Evidence-Based Practice Specialists Donna Colabroy, RN, MSN, CCM, AOCNS, and Megan Derr, RN, MSN.

Each month, the group discusses emerging

Jeanette Blauth, MD
Radiation oncology

research and treatment regimens that will impact LVHN patients. The DMT also has the opportunity to communicate with multidisciplinary specialists from MSK, to ensure that LVHN practices are aligned with the very latest MSK standards.

“We have the privilege of interacting with MSK Breast Cancer Specialists who are engaged in research and development of new strategies for treating breast malignancy,” Colabroy says. “The fact that these experts are so involved in bringing their insights to the community hospital level. You can’t even estimate the value of that.”

Continually evaluating standards

Within the DMT, each clinical discipline works to implement the latest evidence- based practices for breast cancer. In medical oncology, for example, the team recently implemented changes to biopsy protocols for patients who appear to have metastatic disease. In radiation oncology, the team implemented a hypofractionated course of radiation for patients with early favorable disease.

“That’s been a major touch point between LVHN and MSK, assuring that we’re fully aligned on that standard and offering it to appropriate patients,” Blauth says.

A unique collaboration

The ongoing DMT review process, combined with third-party validation against MSK standards, is unlike anything available at most community cancer centers. The result is that patients in the Lehigh Valley area can receive breast cancer treatment close to home that is on par with the leading national cancer centers.

“I’ve participated in tumor boards and committees for several hospitals, and none have had the level of interdisciplinary involvement or infrastructure that we have at LVHN,” Colabroy says. “We can provide care that parallels with what’s available at MSK, and that’s really amazing.”

To refer a patient for a bariatric surgery consultation, call 888-402-LVHN.

Offering Expertise for Patients with Heart Murmurs

Cardiac auscultation remains one of the most useful primary investigative methods for assessing heart function. The lub-dub, lub-dub you hear while routinely listening to a patient's chest with a stethoscope is an auditory indication of the mitral and tricuspid valves closing at the beginning of systole, and the aortic and pulmonary valves opening and closing at the beginning of diastole. But the laminar flow of blood itself through the circulatory system is quiet.

Signaling an abnormality

"Normal blood flow through the heart is like sitting

Sanjay Mehta, MD
Cardiothoracic surgery
Watch a video to learn more about him.

next to a lake," says Lehigh Valley Health Network (LVHN) cardiothoracic surgeon Sanjay Mehta, MD, Associate Chief of Cardiothoracic Surgery at Lehigh Valley Hospital (LVH)–Muhlenberg Heart and Vascular Center. "The water may be moving, but you don't hear anything because it's nice and smooth."

Conversely, a heart with a murmur – an extra sound produced during a heartbeat – is akin to a turbulent brook. It produces a swooshing that can be faint or loud. "It's the sound of energy being lost because of abnormal flow of blood through the heart," Mehta says.

Most heart murmurs are innocent; they don't signify cardiac disease or necessarily warrant treatment. Patients can have murmurs based on anemia, thyrotoxicosis, pregnancy and other functional issues that have nothing to do with the heart. However, a small percentage of murmurs are abnormal. The murmur is a clue to the presence of underlying congenital or other structural abnormalities of the heart that may require surgical intervention.

Yet, it's impossible to tell murmurs apart without further evaluation. "Abnormal heart murmurs don't necessarily sound significantly different from the innocent ones," Mehta says. Moreover, heart\ murmurs can be difficult to detect. Studies of primary care physicians found proficiency of less than 40 percent. With the exception of severe cases of valve disease, most patients with heart murmurs don't have additional symptoms.

Primary care physicians play a vital role in helping patients with heart murmurs receive the care they need to clinically assess their situations and medically manage the condition, if necessary, for the best possible outcome. Here's the process of referral that patients with heart murmur can benefit from and come to expect.

Echocardiogram and cardiology referral

Referring patients with a heart murmur for an echocardiogram (ECG) at LVH–Muhlenberg is the first step in the evaluation process. The noninvasive imaging test can provide specific quantitative information about the significance of a patient's heart murmur.

If the patient's ECG is normal, then no structural abnormality is present. Cardiac treatment isn't necessary.

Patients with a mild heart valve abnormality that elicits a murmur may not require anything more than serial ECGs.

Patients with an abnormal ECG should be referred to a LVHN cardiologist for further workup, which may include chest X-ray and echocardiography. Depending on the patient, a watchful waiting approach is sometimes necessary too. For example, LVHN internal medicine physician Joseph Candio, MD, of LVPG Internal Medicine–1230 Cedar Crest, diagnosed and followed patient Mike Guman for three years before Guman was referred to LVHN cardiologist Matthew Martinez, MD, of LVPG Cardiology–1250 Cedar Crest. Martinez determined Guman ultimately needed valve surgery, and referred him on for a cardiothoracic surgical evaluation. “We rarely see patients before they see a cardiologist,” Mehta says.

Cardiothoracic surgical evaluation

Severe cardiac valve problems that may require surgery can be congenital, brought about by infection – such as infective endocarditis or rheumatic fever– or related to aging. Laxity of the valve can develop over time, causing valves to become leaky. With age, heart valves can also become tight.

“The most common entity we see is senile aortic stenosis, which implies an aging aortic valve,” Mehta says.

Wear and tear on the valve trileaflets or congenital bicuspid valve can cause calcification or scarring, resulting in damage to the valve and restricted blood flow through the cardiac chambers.

Valve replacement and repair

Surgical interventions to correct valve disease depend on the valve affected. “Mitral and tricuspid valves are more commonly repaired and aortic valves are usually replaced,” Mehta says. Patients with aortic stenosis requiring aortic valve replacement may be eligible for standard aortic valve replacement or trans-catheter aortic valve replacement (TAVR).

As a high-volume TAVR center, LVHN offers patients an expert team approach and specialized facilities to perform the delicate surgery. TAVR delivers a fully collapsible replacement valve through a catheter to the valve site and wedges the replacement valve into the aortic valve’s place. Once the new valve expands, the old valve leaflets are pushed aside and tissue in the replacement valve takes over the job of regulating blood flow.

Patients with heart murmur may require surgery on more than one valve. For example, Joe Krevanchi was referred to Mehta and underwent the surgical repair of his aortic valve. He ended up receiving a mitral valve replacement as well. “His mitral valve was relatively abnormal so we made the game-time decision to address the mitral valve at the same time,” Mehta says.

Mehta, Martinez and Candio are examples of the skillful collaboration and expertise LVH–Muhlenberg’s Heart and Vascular Center can offer patients with heart murmurs that require treatment.

To refer a patient with a heart murmur to LVH-Muhlehnberg’s Heart and Vascular Center, call 888-402-LVHN.

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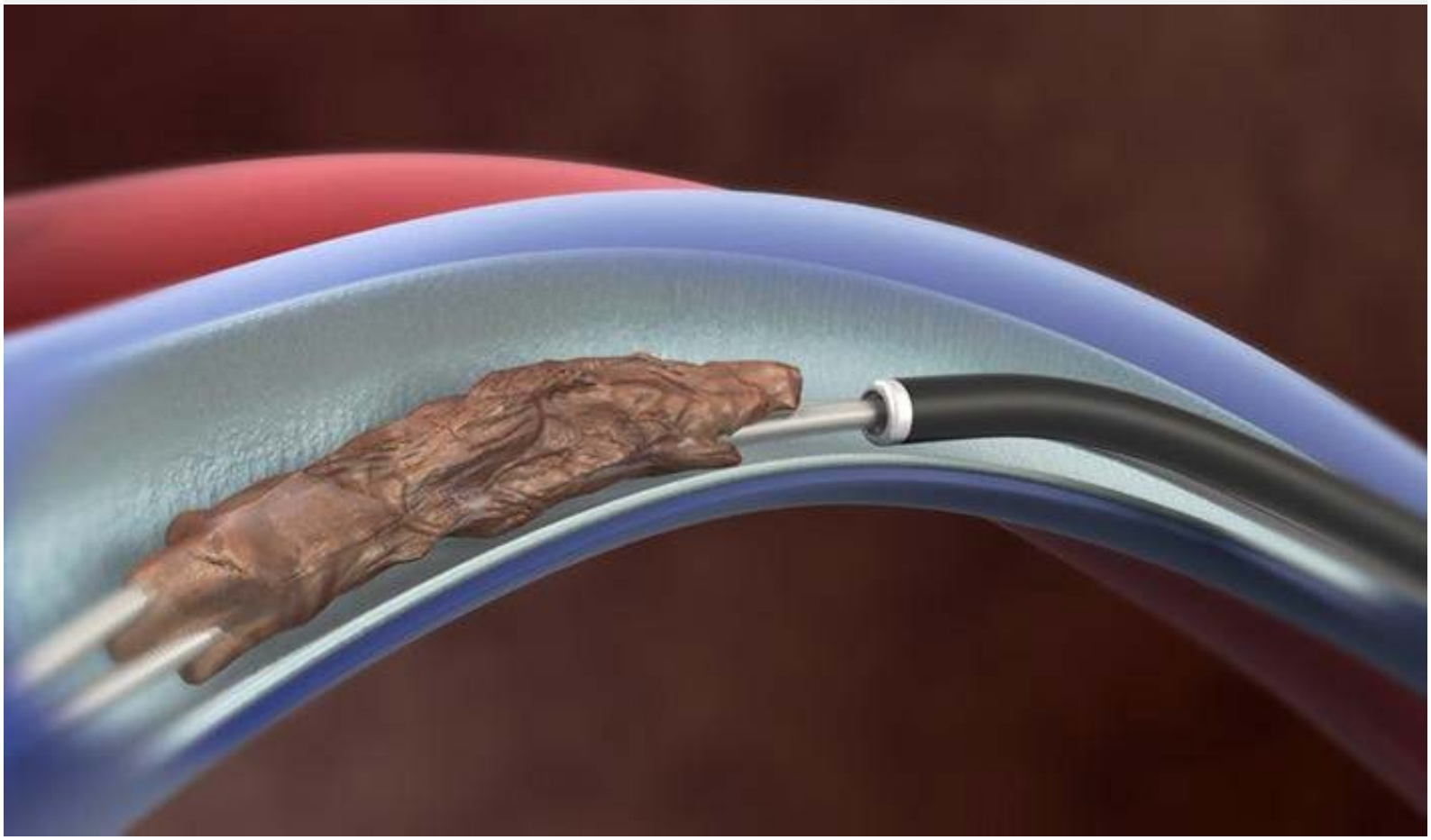


Lead Extraction Surgery Benefits Pacemaker, ICD Patients

Damage, infection and recalls can drive need for procedure

Pacemakers and implantable cardioverter defibrillators (ICD) are life-saving devices that use thin, flexible wiry cardiac leads to deliver energy to a patient's heart. They can malfunction or stop working for any number of reasons, such as damage or infection. They may also need to be replaced because of recall or a necessary upgrade.

Still, surgically extracting cardiac leads can be difficult. Over time, “scar tissue can form where the lead connects to the subclavian vein, the vena cava and the inside the heart itself,” says James Wu, MD,

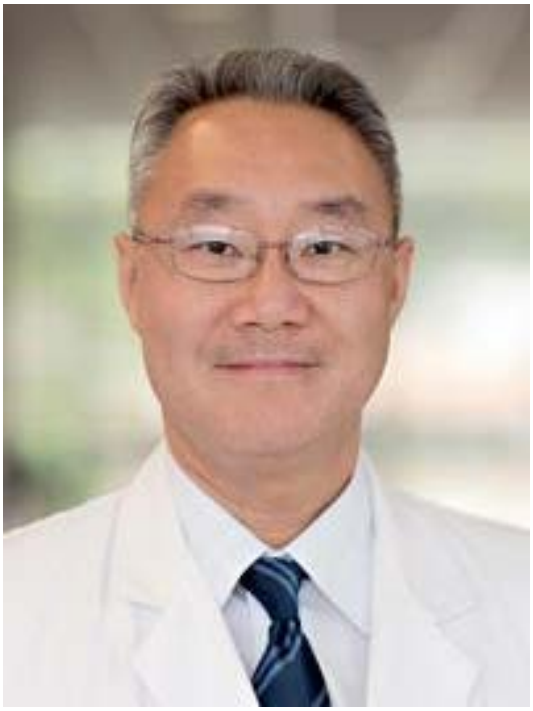
Chief, Section of Cardiothoracic Surgery, of LVPG Cardiac and Thoracic Surgery–1250 Cedar Crest. “The lead is stuck. If you use a blunt instrument to shear it off, you could cause internal bleeding.”

Promoting best outcomes

To safely remove one or more cardiac leads in patients who require it, Wu and Lehigh Valley Health Network (LVHN) cardiologists who are part of the lead extraction team offer the skill and expertise to perform laser lead extraction, which offers the safest possible outcome for patients.

During the complex surgery – which takes roughly two hours in the operating room and for patients involves an overnight hospital stay or longer, depending on their situations – a small chest incision is made to remove the battery from the patient’s pacemaker/ICD and disconnect it from the lead. A laser sheath is then placed inside the patient’s cardiac vein and gently advanced around the defective lead until it reaches the heart.

The sheath’s laser energy is used to ablate the scar tissue from around the tip of the lead, where it is attached to the heart. The lead is then withdrawn from the patient, followed by the laser and sheath, before a new lead is implanted. Fresh batteries may also be inserted in the patient’s pacemaker or ICD during the surgery, if necessary.



James Wu, MD
Cardiac surgery
Watch a video to learn more about him.

Hari Joshi, MD
Cardiology
Watch a video to learn more about him.

Minimally invasive procedure

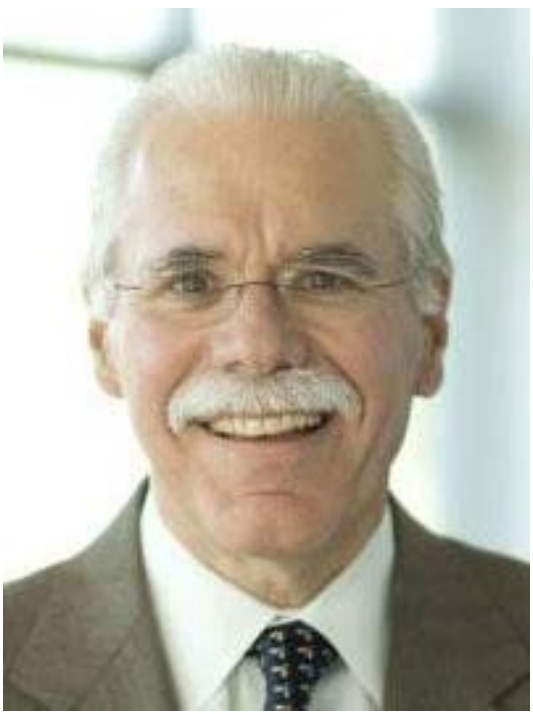
Laser lead extraction carries some risk, such as damage to a blood vessel or heart valve, says Hari Joshi, MD, of LVPG Cardiology–Muhlenberg, who also performs the procedure. Still, the minimally invasive surgery has been proven to be safe and effective. “Internal bleeding is less than 1 percent of complications,” Joshi says.

Patients with a pacemaker or ICD requiring laser lead extraction may have damage to the inside or outside of a lead, large amounts of scar tissue at the tip of the lead that requires more energy than the device can deliver, or an infection or blockage at the site of the device. Patients may remain asymptomatic, however.

To refer a patient with a pacemaker or ICD for possible lead extraction, call 888-402-LVHN.

Standardized Colon-Rectal Surgery Pathway Reduces Length of Stay

Data show that length of stay (LOS) for patients undergoing elective colon-rectal surgery at Lehigh Valley Health Network (LVHN) has been reduced by more than two days and readmissions have been cut in half through use of the Enhanced Recovery After Surgery (ERAS) protocol that minimizes stress to the body and seeks to restore normal function as quickly as possible.



Pat Toselli, DO
General Surgery

The ERAS pathway, implemented in April 2015, is employed for all elective colon-rectal surgeries – including laparoscopic and open colon resections – for both benign and malignant disease.

A bundled approach

More than 220 LVHN patients have benefitted from ERAS. “The goal of ERAS is to decrease variability in care, which increases quality of care,” says LVHN general surgeon Pat Toselli, DO, Vice Chair, Department of Surgery, Lehigh Valley Hospital–Muhlenberg, of LVPG General Surgery. “The approach is successful because it puts together a bundle of basic tenets of surgery and allows us to replicate them consistently.”

Research demonstrates the ERAS approach reduces LOS, complications and health care costs.[1-3] “ERAS challenges many traditional surgical care practices, such as prolonged fasting, and instead focuses on proven tenets of perioperative care,” says LVHN surgeon Robert Sinnott, DO, Associate Chief, Division of Colon & Rectal Surgery, of Colon-Rectal Surgery Associates, PC.

The ERAS tenets are:

Robert Sinnott, DO
Colon and rectal surgery

- Create a non-starved state prior to surgery. Patients are encouraged to drink liquids up to two hours before surgery.
- Use intraoperative, goal-directed fluid therapy. Noninvasive monitoring tracks fluid status throughout the procedure.
- Provide adequate pain control. An anesthetic and analgesic protocol avoids opioids or narcotics.
- Proactively recognize and prevent postoperative nausea and vomiting. The care team uses a checklist that helps prevent patients feeling ill following surgery.
- Promote early mobilization and ambulation. Patients are encouraged to walk and to eat/drink soon after surgery.
- Utilize preoperative patient education, engagement and expectation-setting. A dedicated nurse practitioner provides preoperative education, visits patients in the recovery room and on the unit, and follows up with daily phone calls to patients for at least one week post-discharge. “The success of the program is driven by the nurse practitioners and nursing staff who see patients every day,” Sinnott says. “Patients know what to expect, which improves their care experience.”

Striving for sustained success

While LVHN achieved reduced LOS immediately upon implementing the ERAS protocol, Toselli, Sinnott, and the multidisciplinary team of nurses, nurse practitioners, anesthesiologists, pharmacists and administrators began meeting regularly to review data and identify areas for improvement. “It’s imperative that we work together for a same purpose – predictable, positive outcomes that are sustained over time,” Sinnott says.

“We have learned from our daily post-discharge phone calls, which take place a minimum of seven days following discharge, that our patients are overwhelmingly satisfied with ERAS,” Toselli says.

Citations

1. “The enhanced recovery after surgery (ERAS) pathway for patients undergoing major elective open

colorectal surgery: a meta-analysis of randomized controlled trials." K. Varadhan et al. Clinical Nutrition. 2010; 29(4): 434–40.
2. "Enhanced recovery pathways optimize health outcomes and resource utilization: a meta-analysis of randomized controlled trials in colorectal surgery." M. Adamina et al. Surgery. 2011; 149(6): 830-40.
3. "Enhanced recovery for enhanced outcomes: the Mayo Clinic in Arizona experience." K. Krishnan et al. American College of Healthcare Executive website. https://ache.org/pubs/research/mgmtinnovationsPDFs/images/Krishnan.pdf.

To refer a patient for colon-rectal surgery, call 888-402-LVHN.

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Deep Brain Stimulation Available at LVHN for Parkinson’s Disease

Fellowship-trained physician specializes in functional neurosurgery

Lehigh Valley Health Network (LVHN) is now providing deep brain stimulation (DBS) for movement disorders such as Parkinson's disease (PD). Approved by the Food and Drug Administration, DBS is widely used as treatment for patients with PD who do not respond to medication.[1] An estimated 50,000 Americans are diagnosed with PD each year and approximately 1 million Americans have the condition.[1]

Gold standard of care

A surgical procedure that uses implanted electrical

Efkan Colpan, MD
Neurological surgery

impulses, DBS is performed at LVHN to treat movement disorders such as Parkinson's disease and essential tremor in patients whose condition can't be adequately controlled by medication. "Deep brain stimulation is the accepted gold standard of care," says LVHN functional neurosurgeon Efkan Colpan, MD, of LVPG Neurosurgery–1250 Cedar Crest. "While complication risks are low, we are very focused on the teamwork that is necessary to ensure positive outcomes."

The pacemaker-like DBS device does not provide a cure for the patient's condition, but does stop tremor and other movement disorder symptoms. Specifically, the procedure is used to stimulate the subthalamic nucleus (STN), globus pallidus interna (GPi) or the thalamus regions of the brain. GPi and STN stimulation reduces tremor, bradykinesia or rigidity, while stimulation of the thalamus is used to reduce tremor. Stimulation parameters can be adjusted, and Colpan, along with neurologists specializing in movement disorders, monitors patients closely for several months to determine whether the battery-operated device is having intended effects.

"The patient needs to be an active participant both before and after the procedure," Colpan says. "We work with a physical therapist and neuropsychologist to determine whether the patient has enough physical balance and activity, as well as cognition, to be a successful DBS candidate."

Colpan, who has completed hundreds of DBS procedures at other institutions, participated with a multidisciplinary team that performed the first DBS implantation at LVHN in November 2016. Approximately a half dozen of the surgical procedures are expected to be performed each month at LVHN.

Functional neurosurgery specialist

In addition to DBS, Colpan provides surgical treatment of intractable epilepsy and performs general neurological procedures, spine surgery and gamma knife treatments. Colpan trained as a neurosurgeon in Ankara, Turkey, and completed further training in the U.S., including a fellowship in stereotactic and functional neurosurgery at the University of Illinois at Chicago and a neurosurgery residency at the University of Minnesota in Minneapolis. He then served as an attending neurosurgeon at the University of Pittsburgh Medical Center (UPMC) Hamot hospital in Erie and as a clinical assistant professor of neurosurgery at the University of Pittsburgh School of Medicine.

To refer a patient for neurological evaluation, call 888-402-LVHN.

1. “Parkinson’s disease: hope through research.” National Institute of Neurological Disorders and Stroke website. ninds.nih.gov/disorders/parkinsons_disease/detail_parkinsons_disease.htm#3159_12.

Pregnancy After Bariatric Surgery

Weight loss can facilitate conception and childbirth

For reproductive-age women seeking bariatric surgery, retaining the ability to conceive and bear children is often a primary concern. The providers of LVPG General and Bariatric Surgery–1240 Cedar Crest have worked to dispel many of the myths surrounding pregnancy after bariatric surgery and have treated women who have gone on to experience normal pregnancies and childbirth.

Richard Boorse, MD
Bariatric surgery
Watch a video to learn more about him.

“We see many patients who have been told that bariatric surgery would prevent them from being able to carry and deliver a child,” says general surgeon Richard Boorse, MD, Chief, Division of General Surgery. “Our first step is to assure them that this isn’t true.”

Addressing infertility

Boorse helps patients understand that obesity itself can raise numerous reproductive issues. “Excess adipose tissue alters the hormonal milieu and can contribute to polycystic ovarian syndrome and metabolic syndrome, which can impact fertility,” he says. “Weight loss resulting from bariatric surgery can help prevent or reverse these conditions. It also can help resolve obesity-related comorbidities, including diabetes and hypertension, which can interfere with a healthy pregnancy.”

“We never present bariatric procedures as a cure for infertility, but we inform patients that losing the weight can make it easier for them to conceive,” Boorse says. “And for obese patients who have had a difficult first pregnancy, weight loss resulting from bariatric surgery can make subsequent pregnancies significantly easier.”

Lehigh Valley Health Network (LVHN) surgeons

Kristin Friel, MD
Obstetrics and gynecology

perform approximately 600 bariatric procedures annually. Both Lehigh Valley Hospital (LVH)–Cedar Crest and LVH–Hazleton are accredited by the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program. Surgeons primarily perform sleeve gastrectomy and Roux-en-Y gastric bypass procedures. Boorse notes that adjustable gastric banding is also offered in limited cases.

Comprehensive follow-up care

Patients are counseled to delay pregnancy for at least one year following surgery while their weight stabilizes. “Ideally, we want patients to reach their goal weight before conception,” Boorse says. Women who become pregnant are connected with LVHN obstetrician/gynecologists, registered dietitians and other specialists who can closely monitor their nutritional needs.

“We work closely with patients to make sure they are getting enough calories and the recommended prenatal vitamins while managing common pregnancy issues, such as nausea,” says LVHN obstetrician/gynecologist Kristin Friel, MD, of LVPG Obstetrics and Gynecology–1245 Cedar Crest. She adds that standard tests, such as monitoring for gestational diabetes, may need to be altered since these patients can’t tolerate a large glucose load. They also may need extra nutritional support if they go on to breastfeed. But she emphasizes that bariatric surgery does not raise a patient’s risk of cesarean section or pregnancy or postpartum complications.

“Patients who have bariatric surgery go on to achieve all sorts of life goals,” Boorse says. “We want to reassure them that having children can certainly be one of them.”

To refer a patient for a bariatric surgery consultation, call 888-402-LVHN.

New Developments in Maternity Care

Evidence-based recommendations for providing exceptional maternity care continue to evolve. Lehigh Valley Health Network (LVHN) aims to educate women about pregnancy and childbirth, provide appropriate prenatal care at the appropriate times and offer a family-focused birthing experience. It is currently enhancing maternity services in three ways – implementing a new maternity care pathway, pursuing the nationally recognized “Baby Friendly” designation and opening a new Family Birth and Newborn Center at Lehigh Valley Hospital (LVH)–Muhlenberg.

A blueprint for better care

Women who choose LVHN for obstetric care and

Amy DePuy, MD
Obstetrics and gynecology

delivery are offered a range of services to fit their needs, from basic childbirth classes to advanced care for high-risk pregnancies. But feedback from patient surveys and focus groups revealed some gaps in women's knowledge and preparedness, says LVHN obstetrician/gynecologist Amy DePuy, MD, of LVPG Obstetrics and Gynecology–1245 Cedar Crest.

"We learned that not all of our patients were consistently getting the information they needed at the right time in their pregnancies, in formats that were most effective for their learning styles," she says.

Also, although providers always followed best practices and customized care for each patient, there was no network-wide standard for what type of care should be offered during the prenatal, labor and delivery, and postpartum processes.

DePuy helped develop a maternity care pathway that addresses these issues on multiple levels.

Nissa Gossom, CNM
Obstetrics and gynecology

Initial Appointments: When patients self-refer or are referred by their primary care providers and call to make an appointment, they are now asked a series of questions to help determine when the patient should be seen.

Education: All patients receive a comprehensive reference book with information on every aspect of pregnancy and delivery. "The book is also available as an app, and some of the same information will be presented in our classes and videos to accommodate women with visual and auditory learning styles," DePuy says.

“Patients receive handouts and inserts for the reference guide at appropriate points in their pregnancy, so they’re not overwhelmed with too much information at once,” says Lori Grischott, MSN, RN-COB, CCE, clinical coordinator for maternal fetal medicine and a childbirth educator at LVPG Maternal Fetal Medicine–3900 Hamilton Blvd. “For example, at 24 weeks, they’ll start receiving information about breastfeeding as well as childbirth education classes so they have plenty of time to enroll.”

Patients can find an overview of LVHN maternity care services at LVHN.org/welcomebaby. Patients and their primary care providers can also view health records and communicate with the maternity health team through the MyLVHN patient portal.

Inpatient care: The maternity care pathway incorporates best practices for ensuring a safe, family-focused birth experience. “During labor and delivery, the goal is to allow the normal physiologic processes of birth to take place and intervene only when necessary,” DePuy says.

Becoming Baby-Friendly

LVH–Cedar Crest is in the final stages of earning the Baby-Friendly designation, a certification granted to health care facilities that adopt 10 measures for promoting breastfeeding and bonding, including developing a breastfeeding policy, helping to initiate breastfeeding within one hour of birth, and encouraging “rooming-in” for mothers and newborns. The Baby-Friendly Hospital Initiative (BFHI) is a global initiative of the World Health Organization and the United Nations Children’s Fund. Currently, 391 U.S. hospitals and birth centers hold the Baby-Friendly designation.

The Baby-Friendly accreditation process started three years ago and has involved buy-in and participation from multiple stakeholders throughout the system. Training on Baby-Friendly policies alone took one year. Some of the Baby-Friendly steps, such as breastfeeding education, reinforce elements of the maternity care pathway. The final step to accreditation, an on-site survey, is planned for early in 2017.

LVHN has long offered lactation specialists, midwifery services and a home-like birthing environment. “Becoming Baby-Friendly is a natural next step and a powerful expression of our commitment to family-centered care,” says Nissa Gossom, CNM, a nurse-midwife at LVPG Obstetrics and Gynecology–Pond Road.

A new birthing experience in Bethlehem

The opening of the Family Birth and Newborn Center at LVH–Muhlenberg is scheduled to occur during the summer of 2017. The 161,000-square-foot facility will include:

- Eight labor, delivery and recovery rooms
- Two operating rooms
- A mother-baby unit with 20 private rooms
- A Level II NICU with 10 private rooms
- Seamless transportation to LVH–Cedar Crest should patients need a Level IV NICU or perinatal care for high-risk pregnancies

Numerous amenities, including hydrotherapy during labor and BabyCam livestream video feeds will help provide a uniquely memorable birth experience.

Patients always prefer to stay close to home, especially when they are building their families. By enhancing care and improving access, LVHN renews its commitment to all mothers in the community.

To refer a patient to obstetrics and gynecology, call 888-402-LVHN

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