Winter 2014

Better Medicine

Lehigh Valley Health Network

The Present and Future of Preventive Care

by LVHN family medicine doctor James Manley, DO, with Lehigh Valley Family Practice Associates

Have you heard the one about the Affordable Care Act putting a greater emphasis on preventive care? I'm sure you have. Preventive care has become one of the buzzwords surrounding health care reform.

James Manley, DO
Family medicine

So here's some good news: Preventive care is something on which all of us in primary care spend a great deal of time. Overall we do a good job of letting our patients know they should get regular screenings. But sometimes we do such a good job, we take it for granted that people are getting the screenings they need.

The classic example is hypertension, something your patient can get checked at the local supermarket or pharmacy. He or she needs to check it regularly because symptoms sometimes don't appear until after a patient has had the condition for six months, 12 months or sometimes a few years. The problem is that even when a patient is asymptomatic, high blood pressure can be causing damage to his or her body. The same is true for a condition like diabetes.

Although the Affordable Care Act does have some downsides, it actually encourages patients to check their high blood pressure or blood sugar by covering well visits, screenings and vaccinations at 100 percent. Even so, people lead busy lives, and sometimes those screenings we think are so simple are easy for patients to overlook.

While we've done an exceptional job with most aspects of preventive care, there is one aspect upon which many of us can improve. That's making sure we keep track of quality indicators, including those

that show how well we are providing preventive care.

As a member of the Lehigh Valley Physician Hospital Organization (LVPHO), I've personally seen the benefit of the Achieving Clinical Excellence® program run by Valley Preferred. This program incentivizes member physicians to meet measured performance goals. In short, you get financial incentives for doing a good job and for improving the care of patients.

The Achieving Clinical Excellence program's goals are grouped in two distinct tracks — participation and quality/efficiency — and are built on best practices aligned with both CMS (Centers for Medicare & Medicaid Services) and NCQA (National Committee for Quality Assurance) standards. I'd highly encourage you to learn more about Achieving Clinical Excellence at ValleyPreferred.com.

After 27 years in private practice, I'm proud of how my primary care colleagues and I have spread the word about preventive care to our patients, and I'm looking forward to what the future will hold.

Watch a video to learn about how the Achieving Clinical Excellence® program run by Valley Preferred incentivizes member physicians to meet measured performance goals.

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Sleep Centers Offer Testing for Adults and Children

More than 25 percent of men between the ages of 30-60 have at least five apneas per hour during sleep.[1] Yet studies indicate that only 15-20 percent of people with clinically relevant apnea are being tested and then treated.[2]

That's why expertise and experience matter when it comes to treating sleep disorders. Physicians at Lehigh Valley Health Network (LVHN) help diagnose and treat patients with sleep disorders. LVHN's Sleep Disorders Center has been in operation since 1981 under the medical directorship of board-certified sleep specialists, who also are pulmonologists.

LVHN's Sleep Disorders Center performs sleep studies both at night and during the day on adults and children as young as 1 year old. In-lab sleep testing facilities are located at Lehigh Valley Hospital–17th Street in Allentown and at the Health Center at Bethlehem Township. During FY'13, the centers performed a total of 3,645 sleep studies, 671 of which were pediatric cases.

In-depth, next-day results

At LVHN, board-certified sleep specialists are available to consult with adult patients immediately following their in-lab test to review results and discuss treatment options. If continuous positive airway pressure (CPAP) is ordered, patients may be set up with it before leaving the lab. Pediatric sleep studies are interpreted exclusively by a board-certified pediatric pulmonologist, also board-certified in sleep medicine. The same pediatric pulmonologist is available to provide poststudy consults to review results and discuss treatment options.

Richard Strobel, MD
Pulmonology

Pulmonology

"There are more than 88 different types of sleep disorders, and we look for all of them in our sleep studies," says LVHN pulmonologist Richard Strobel, MD, who also is a board-

certified sleep specialist. During a polysomnogram, various physiological aspects of sleep are measured continuously in the lab. An electroencephalogram is used to view stages of sleep. Rapid eye movement (REM) sleep is measured. This is usually the stage of sleep associated with the most severe sleep apnea.

Stephanie Betz
Registered sleep technologist

Other parameters measured include airflow and respiratory effort, blood oxygen saturation, double-lead EKG, snoring, and chin and limb electromyography. During a polysomnogram, patients are monitored by a registered sleep technologist.

“We are the only sleep center in the area that offers a service where the adult patient gets the results of his or her sleep study the very next morning,” Strobel says. “And they see a board-certified sleep specialist to get those results.” If a sleep specialist determines that CPAP or Bi-Level Pap treatment is needed, patients can get their equipment immediately because of the presence of on-site durable medical equipment.

Home sleep studies

Home sleep studies are available for people who are otherwise fairly healthy and who appear to have symptoms of sleep apnea alone. “Patients are educated on the equipment in a face-to-face meeting with a health care professional,” says Stephanie Betz, RPSGT, registered sleep technologist and clinical manager at LVHN.

“They wear the monitoring devices for three nights and then return it to the center.” Parameters monitored in a home sleep study include airflow, respiratory effort, blood oxygen saturation, body position and movement. Following the home sleep study, the patient is scheduled to see the sleep physician to receive results. LVHN conducted 130 home studies last year and has 16 home monitoring units.

“There is a huge reservoir of patients who should be evaluated for sleep issues,” Strobel says. “I would encourage any physician to ask patients about their sleep because sleep apnea comes in many varieties. Unless you ask specifically about sleep, you are going to miss patients who need treatment.”

If a physician is not sure whether a patient has a sleeping problem, he or she can be referred to one of LVHN’s sleep specialists for an hour-long sleep consultation.

To refer a patient to LVHN’s Sleep Disorders Center, call 888-402-LVHN.

1. Wisconsin Sleep Cohort, 1993, New England Journal of Medicine.

2. “Prevalence of undiagnosed obstructive sleep apnea among adult surgical patients in an academic medical center.” Finkel et. al. Sleep Med 2009 Aug; 10(7); 753-8.

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Innovative Procedures Available to Help Treat Advanced Abdominal Cancers

Patients with malignant pancreatic and liver cancers or cancers that have spread to the lining of the abdominal cavity (peritoneal carcinomatosis) don't have to travel far to receive state-of-the-art treatment. Lehigh Valley Health Network (LVHN) surgeons offer the expertise, experience and skill to perform the latest surgical procedures, minimizing time in the operating room, reducing hospital stays and improving quality of life. Here are two innovative options at LVHN for patients with advanced abdominal cancers.

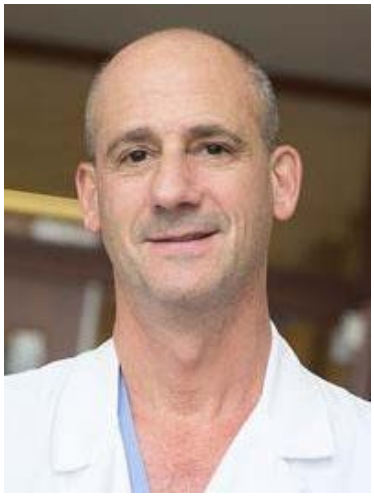
Hepatic and pancreatobiliary (HPB) surgery

Patients with malignant pancreatic tumors or neoplastic cystic lesions confined to the head of the pancreas are candidates for the Whipple procedure, a form of HPB surgery in which the head of the pancreas, duodenum, bile duct, gallbladder and sometimes a portion of the stomach are removed. The intestine is then reconnected to the bile duct, the remaining pancreas and the stomach. The surgery also is an option for patients with malignant duodenal or distal bile duct tumors.

Nationally, the Whipple procedure is often a prolonged operation with a high rate of complications and frequently requires blood transfusions and ICU care. Jeffrey Brodsky, MD, an LVHN surgical oncologist and hepatic and pancreatobiliary specialist, relies on extensive experience and an efficient anatomic approach to significantly reduce operative time and blood loss. This approach has led to "lower complications, shorter hospital stays and less need for blood transfusion," Brodsky says. In

addition, ICU care is infrequently necessary. Brodsky has performed 30 pancreatic resections, 18 Whipples and 12 distal pancreatectomies during his first six months at LVHN. The latter are often done robotically, with hospital stays as short as three days.

Even with successful resection, pancreatic cancer has a high recurrence rate. For this reason, a multidisciplinary treatment approach is critical. This may involve postoperative chemotherapy and/or radiation or preoperative treatment for borderline resealable tumors. The LVHN Cancer Center provides a coordinated team approach to treatment. “The improved surgical outcomes have allowed patients to initiate additional treatment sooner and with better tolerance,” Brodsky says.



Jeffrey Brodsky, MD
Surgical oncology
Watch a video to learn more about him.

Hyperthermic intraperitoneal chemotherapy (HIPEC)

Patients with mesothelioma, colorectal, appendix or another type of GI tumor that has metastasized to the peritoneum may be eligible for HIPEC if the tumor is confined to the peritoneal cavity. “The results of HIPEC have been very promising so far,” says Rohit Sharma, MD, an LVHN surgical oncologist with LVPG Surgical Oncology. Sharma has performed five HIPEC procedures within the last six months.

With HIPEC, a new technique that isn’t widely available, a visible tumor in the peritoneum is surgically removed. To eradicate any remaining cancer cells, heated, concentrated chemotherapy is then directly delivered to the patient’s abdominal cavity for 90 minutes while the patient is still anesthetized. Randomized controlled trials have shown the median survival rate for HIPEC patients in addition to systemic chemotherapy is almost double that of patients who receive traditional IV chemotherapy only.

Rohit Sharma, MD
Surgical oncology
Watch a video to learn more about him.

All of Sharma’s HIPEC patients, who range from ages 42-67, are doing well. “The procedure holds a lot of promise for select patients who were traditionally considered incurable,” Sharma says.

To refer a patient to surgical oncology, call **610-402-CARE**.

Transcatheter Aortic Valve Replacement

More than half of patients with severe aortic stenosis do not survive beyond two years after symptom onset.[1] For these patients, aortic valve replacement (AVR) can be life-saving, says Raymond Singer, MD, chief, Lehigh Valley Health Network (LVHN) division of cardiothoracic surgery. However, he adds, as many as 30 percent of the patients who need AVR are not considered good candidates for surgery with the conventional valve replacement protocol involving sternotomy and the use of cardiopulmonary bypass.

Transcatheter aortic valve replacement (TAVR) is a new minimally invasive procedure that is an alternative to the traditional open-heart valve replacement. It is ideal for candidates who are unable to withstand the stresses of open heart surgery.

For these patients, physicians at LVHN may offer transcatheter aortic valve replacement (TAVR) — a new minimally invasive procedure that is an alternative to the traditional open-heart valve replacement. It is ideal for candidates who are unable to withstand the stresses of open heart surgery. TAVR involves replacing a narrowed aortic valve using catheter-based techniques, thereby avoiding the need to open the chest and stop the heart. The largest U.S.-based clinical study on TAVR, the Placement of Aortic Transcatheter Valves (PARTNER) study, compared 358 high-risk patients who received TAVR with those who received no surgery. TAVR lowered the mortality rate from 50 percent at one year down to 30 percent.

The Food and Drug Administration limits TAVR to those patients with aortic stenosis who are considered inoperable or high-risk surgical candidates, such as older adults and patients with severe coexisting medical conditions or a history of previous cardiac bypass surgery. Our program is quickly approaching our 100th case in the first 18 months since its inception in May 2012. Our patients range

from ages 55-99 at Lehigh Valley Hospital–Cedar Crest.

Extensive prescreening

Because TAVR is currently limited to treating only those high-risk patients with severe aortic stenosis, careful patient selection is critical. Once a patient is referred to the LVHN TAVR program, the team conducts an extensive presurgical evaluation. “When a patient is referred to us, the patient is seen by two surgeons who have to concur that the patient is at high risk or inoperable,” explains Rhonda Moore, CRNP, with LVPG Cardiac and Thoracic Surgery-1250 Cedar Crest. She also is the nurse coordinator for LVHN’s TAVR program.

Patients undergo a cardiac catheterization, an echocardiogram and a specialized CT scan that generates a well-detailed image of the patient’s blood vessels to determine if they are large enough to accommodate the catheter and tools used for the TAVR procedure. The TAVR team meets every Monday afternoon to review patient films, see potential patients and their families, answer questions and explain the surgery.

TAVR protocols are conducted in a specialized hybrid operating room (OR) outfitted with both cardiac catheterization and standard cardiac operating room equipment. “We can use two approaches,” says Singer. “One is through the femoral artery. If the groin vessels are too small, tortuous or calcified, then we have to go with a transapical approach necessitating a mini-incision near the left breast.” A typical transapical procedure requires about two to three hours. Procedure times can be as short as 90 minutes for transfemoral TAVR.

Raymond Singer, MD
Cardiac surgery

Multispecialist team approach

A minimum of four physicians attend every TAVR procedure — including interventional cardiologists, cardiothoracic surgeons and a cardiac anesthesiologist. “The key to the success of TAVR is the team approach involving the interventionalist and cardiac surgeon working together,” says LVHN cardiologist J. Patrick Kleaveland, MD, with LVPG Cardiology-1250 Cedar Crest. He also is medical director of Lehigh Valley Hospital–Cedar Crest’s Cardiac Cath Lab. Currently, three LVHN interventional cardiologists and three heart surgeons are specially trained in TAVR evaluation and implantation protocols.

Patients are admitted the same day as scheduled surgery, typically on a Wednesday. Most patients are discharged the following Sunday or Monday. For follow-up, patients are seen at the two-week mark and again at 30 days postsurgery, then annually afterward.

To date, the mortality rate following TAVR at LVHN is less than 2 percent within 30 days postsurgery.

“TAVR can only really be done in a place where there are a lot of experienced interventionalists in terms of valvuloplasty as

J. Patrick Kleaveland, MD
Cardiology

well as a high-volume, mature heart surgery team," Singer says. "Even though it appears 'easier' than open heart surgery, it takes more pairs of hands who have to work well together to do it well."

LVHN offers the essential criteria to provide safe, effective TAVR protocols: an experienced, specially educated heart team who can completely and correctly evaluate patients, a Hybrid OR and a history of a large volume of previous heart valve surgeries. LVHN ranks third in Pennsylvania in terms of the number of valve surgeries performed annually.[2]

"When it comes to having patients evaluated here for TAVR, there is no upper age limit," Kleaveland says. "And we often find that patients who were previously considered too elderly or frail or sick do qualify for TAVR and sometimes even open heart surgery in our program." Typically, TAVR patients come to LVHN as a direct referral to the TAVR team from area cardiology practices or as a referral from surgery if a patient is deemed inoperable or high-risk inoperable for conventional surgery.

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

1. "Transcatheter aortic-valve implantation for aortic stenosis in patients who cannot undergo surgery." Leon, et. al. N Engl J Med 2010 Oct; 363(17): 1597-1607.
2. Pennsylvania Health Care Cost Containment Council (PHC4).

Inside a Comprehensive Stroke Center

Every minute during a stroke, 2 million brain cells, starved of oxygen, die. The rate of cellular death is faster than during a myocardial infarction. The sooner stroke patients receive treatment, the better their chances for recovery. Lehigh Valley Hospital–Cedar Crest (LVH–CC) offers the most advanced stroke fighting tools and expertise in our region.

American Heart Association
American Stroke Association
CERTIFICATION
Meets standards for
Comprehensive Stroke Center

In 2012, LVH–CC was certified by The Joint Commission, in collaboration with the American Heart Association and the American Stroke Association, as a Comprehensive Stroke Center (CSC), the first of its kind in Pennsylvania. This is the highest level of certification and recognizes the significant investments in resources, infrastructure, staff and education that comprehensive stroke centers must have to provide the highest level of stroke treatment.

Learn about Lehigh Valley Hospital's Comprehensive Stroke Center.

A procedure called mechanical thrombectomy has transformed stroke treatment. This is when a neurointerventional radiologist removes a clot from the brain using special equipment, typically a device delivered through a catheter, in a minimally invasive procedure. In the medical journal *The Lancet*,leading stroke doctors concluded in Feb 2016 numerous trials published in 2015 showed 38 out of 100 pateints treated with thrombectomy “will have a less disabled outcome” than with standard care, and that “20 more will achieve functional independence.” As a Comprehensive Stroke Center, Lehigh Valley Hospital-Cedar Crest is the only hospital in the region with the capability to offer 24-7, 365 day a year access to thrombectomy treatment.

A severe-stroke victim must get a thrombectomy before damage sets in. For every minute with blood flow blocked, by many estimates, two million brain cells die.

When treating stroke, “time is a huge factor,” says Darryn Shaff, MD, Lehigh Valley Health Network’s (LVHN) chief of neurointerventional radiology. To achieve the CSC certification, a hospital must demonstrate metrics that are analogous to what is required for treating myocardial infarction. “It means being able to respond quickly to open the vessel and restore oxygen and blood flow,” Shaff says. “To do that, we have systems in place that work in parallel.”

Advanced endovascular reperfusion (Thrombectomy)

Advanced endovascular reperfusion: This clot-retrieval method involves the newest generation of stentrievers, a cathether-based approach performed under image guidance that uses a stent to capture intracranial thrombus. The stent is delivered through a microcatheter that has been placed across the thrombus. Once deployed, the stent expands into the thrombus, and several minutes later, the device is removed with the thrombus trapped within the stent. Aspiration catheters also can be used to suck the thrombus from a vessel. At LVHN, both technologies are often used in conjunction, where the stent is deployed across the clot and catheter aspiration is applied to the clot as the stent is withdrawn. In this fashion, both retrieval and aspiration technologies are simultaneously applied to the thrombus. All stent-retrieval devices and aspiration catheters are FDA-approved. LVHN is participating in a safety and efficacy trial to test an advanced 3-D stentriever design, to be used in conjunction with catheter aspiration.

As a CSC, LVH–CC meets all the general eligibility requirements for Disease-Specific Care and Primary Stroke Center certification. In addition, the hospital is required to:

- Have dedicated neurointensive care unit beds for complex stroke patients that provide neurocritical care 24/7
- Use advanced imaging, such as CT angiogram, to quickly detect blood vessel abnormalities
- Meet minimum patient volume requirements for providing care to patients with a diagnosis of subarachnoid hemorrhage, performing endovascular coiling or surgical clipping procedures for aneurysm and administering IV tissue plasminogen activator (tPA)
- Coordinate posthospital care for patients

- Use a peer review process to evaluate and monitor the care provided to patients with ischemic stroke and subarachnoid hemorrhage
- Participate in stroke clinical research trials

The CSC certification is only available to high-volume stroke centers that provide care to at least 35 patients with subarachnoid hemorrhages per year and administer IV tPA to an average of 25 or more ischemic stroke patients per year. In the last year, LVH–CC treated 115 stroke cases with emergent revascularization using intravenous thrombolytic and/or endovascular approaches.

A team approach

At LVH–CC, the process of prehospital and hospital triage is maximized by use of the Stroke Alert system. Stroke care begins as soon as the emergency medical services provider notifies the team that it is transporting a potential stroke patient. Upon arrival at LVH–CC's emergency department, patients are rapidly triaged. "It's a lightning response among the staff," Shaff says. It starts with CT angiography to determine the type of stroke a patient may be having and pinpoint a lesion's location. Eligible patients receive IV tPA, the standard of care to dissolve a clot. If emergent endovascular intervention is necessary, a Neuro Code Red is activated. This process allows rapid deployment of the interventional team and anesthesia. The team takes the patient to the hospital's interventional suite, which is adjacent to the CT suite so no time is wasted. LVH–CC offers the latest in lifesaving endovasculartechniques to treat stroke, including:

- **Endovascular coiling for cerebralaneurysm:** With this minimally invasive technique, a neurointerventional radiologist uses fluoroscopy to guide acatheter through the femoral artery to the blood vessels in the brain. Once the catheter is in place, tiny platinum coils are advanced through the catheter into the aneurysm. The coils, visible on X-ray, conform to the shape of the aneurysm. The coiled aneurysm is embolized, preventing rupture. This procedure is typically performed under general anesthesia.

- If the location/size/shape of the aneurysm does not lend itself to endovascular coiling, the dome of the aneurysm must be protected from further blood flow by open surgery. Obliterating the dome of the aneurysm by applying a clip at the aneurysm base prevents blood from circulating within the aneurysm dome. This delicate surgery is performed by LVHN's highly skilled neurosurgeons. The decision to proceed with open surgery rather than endovascular coiling is made by both the neurosurgeon and neurointerventionalist after careful review of all imaging studies.

After stroke intervention, patients are monitored in the hospital's dedicated neuroscience ICU, where specialized nurses with advanced education care for stroke patients. As soon as patients are ready, they begin the rehabilitation process with our neurorehabilitation team.

Care for stroke symptoms

LVH–CC is expertly equipped to treat patients with acute stroke 24/7, "but anyone with cerebral vascular disease can benefit from a visit to a CSC," says LVHN neurologist Yevgeniy Isayev, MD, medical director of LVH–CC's Comprehensive Stroke Center. This includes patients who have had a previous stroke or transient ischemic attack (TIA) and those with symptoms that mimic TIA — for both inpatient and outpatient care. The

vascular stroke neurologists at LVHN can coordinate imaging of blood vessels and perform other tests to develop a preventive treatment plan.

Overall, the CSC certification has had a tremendous impact on patients and families. Shaff recalls a patient who recently came to the hospital with a particularly lethal type of ischemic stroke — an occlusion in the end portion of the internal carotid artery deep within her brain. Within just 28 minutes of her arrival at the ED, however, “we had blood flow,” Shaff says. The patient achieved a full recovery and is back to her normal life. “I had never seen that before in a patient with that type of stroke,” he says.

To refer a patient to neurology, call 888-402-LVHN.

1. American Heart Association and American Stroke Association, December 2013.

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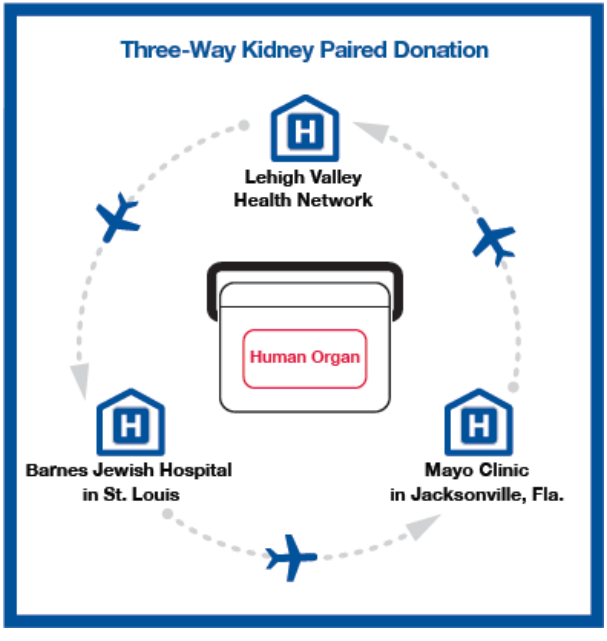
Darryn Shaff, MD
Neurointerventional radiology

Yevgeniy Isayev, MD
Neurology
Watch a video to learn more about him.

LVHN Performs First Three-Way Paired Kidney Exchange

On September 11, 2013, transplant specialists at Lehigh Valley Health Network (LVHN) participated in an unusual three-way paired kidney exchange. This unique and complex donation process was a result of LVHN's participation in the United Network for Organ Sharing (UNOS) Kidney Paired Donation (KPD) Program.



The UNOS KPD Program allows living donors who are not compatible with their intended recipients to enter themselves into a database. Subsequent computer matching allows the UNOS algorithm to create viable matches in cases where the donor in each pair is compatible with the recipient in another pair (or multiple pairs). This matching allows for more living donations, a benefit because kidneys from living donors begin working sooner than those from cadaveric donors.

In this particular instance, LVHN partnered with the Mayo Clinic in Jacksonville, Fla., and the Barnes Jewish Hospital in St. Louis to bring together three matching pairs of donors and recipients. During this successful set of surgeries, the LVHN donor kidney was transplanted into the Barnes Jewish Hospital recipient. Meanwhile, the Barnes Jewish Hospital donor kidney was given to the Mayo Clinic recipient. Finally, the Mayo Clinic donor kidney was transplanted into the LVHN recipient.

The procedures at LVHN were performed separately by two transplant surgeons. The donor surgery was performed by a

Michael Moritz, MD
Transplant surgery
Watch a video to learn more about him.

former LVHN surgeon, while the recipient procedure was performed by Michael Moritz, MD. Moritz is also vice chair, operations and clinical affairs, LVHN department of surgery. All the recipients and donors from this exchange are doing well.

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

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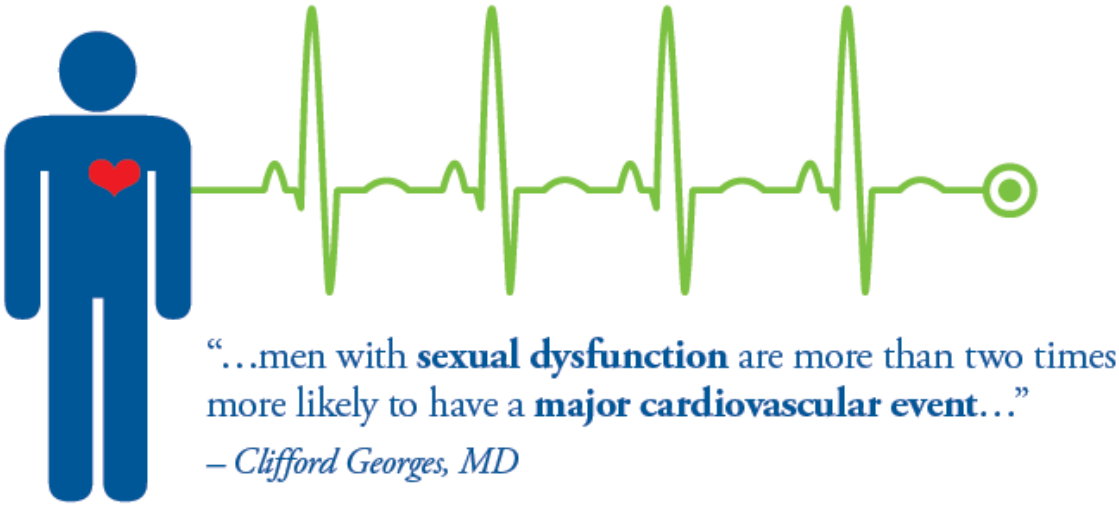
Help for Men With ED, BPH

Conversations about sexual dysfunction and other men's health issues usually begin between a patient and his primary care physician. Yet in many cases, the next step in treatment should be a referral to a dedicated clinical center for men's health, rather than to a general urologist in private practice.

Clifford Georges, MD
Urology
Watch a video to learn more about him.

"We can provide a wider scope of care that encompasses all of the patient's issues, rather than focusing exclusively on treating dysfunction," says Lehigh Valley Health Network (LVHN) urologist Clifford Georges, MD. "With erectile dysfunction (ED), for example, the majority of patients have vascular issues, diabetes or neurological issues contributing to these problems. We work with other physicians within LVHN — a cardiologist, an endocrinologist or other specialists — to address all of the issues the patient might have, rather than just prescribing ED medication or moving them into surgery." By diagnosing problems that are at the root of sexual dysfunction, this broad approach to men's health can be lifesaving.

"Many men with ED have underlying vascular issues, and studies show men with sexual dysfunction are more than two times more likely to have a major cardiovascular event[1]," Georges says. "On average, it takes three years after the onset of ED to experience such an event.[2]"



Comprehensive services

The Center for BPH and Men's Health, which Georges directs, treats patients for benign prostate hyperplasia (BPH), ED, urinary incontinence and infertility. For patients with sexual dysfunction, the clinic provides a urologist dedicated to men's sexual health. Available treatments include intracavernosal injections, alprostadil suppositories and a full range of surgical treatments, including penile prostheses and vacuum devices.

"For men with incontinence or BPH, we have the facilities to do urodynamics to understand the physiology behind the problem, as well as surgical options, biofeedback and ongoing follow-up care," Georges says.

Multilingual care

One of the center's unique benefits is Georges' fluency in Spanish and Haitian Creole as well as English. The ability to speak clearly and directly with patients yields particular advantages in the area of men's sexual health, where patients may be uncomfortable speaking candidly under the best of circumstances.

"Without bilingual communication, physicians rely on an interpreter, and in my experience, the vast majority of translators are female," Georges says. "For some men, it can be very uncomfortable talking about their sexual issues under those circumstances."

If you have a patient who is not responding to first-line treatment for a men's health problem, call **610-402-CARE**.

1. "Erectile dysfunction predicts cardiovascular events in high-risk patients receiving Telmisartan, Ramipril, or Both." Bohm, et. al. Circulation 2010 Mar.

2. “Erectile dysfunction prevalence, time of onset and association with risk factors in 300 consecutive patients with acute chest pain and angiographically documented coronary artery disease.” Montorsi, et. al. Eur Urol 2003 Sept; 44(3): 360-5.

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Reversing Obesity's Risks Through Weight-Loss Surgery

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

Obesity now affects more than one-third of adults in the United States.[1] For many preventable medical conditions treated today — type 2 diabetes, hypertension, obstructive sleep apnea, gastroesophageal reflux and even some malignancies — the root etiology is obesity.

Leading health groups are urging doctors to help obese patients lose weight. While every patient has different needs, weight-loss surgery can be an important part of the plan for some. Lehigh Valley Health Network (LVHN) is home to a comprehensive weight-loss surgery program that approaches the procedure as one component of a plan that includes counseling and support for changes to lifestyle.

Weight-loss surgery as a cure

"By doing weight-loss surgery, we actually are doing metabolic surgery and curing medical problems that are otherwise just being held at bay," says LVHN weight-loss surgeon Richard Boorse, MD, director of LVHN's weight-loss surgery program and chief, LVHN division of general surgery.

"We cure type 2 diabetes about 83 percent of the time, high blood pressure 65 percent of the time, obstructive sleep apnea 85 percent of the time and hypercholesterolemia 90 to 95 percent of the time. These are real cures. Any patient with type 2 diabetes in particular should be made aware that these procedures can cure their disease."

Weight-loss surgery also can prolong life by an average of

T. Daniel Harrison, DO
General surgery
Watch a video to learn more about him.

Randolph Wojcik Jr., MD
Plastic surgery
Watch a video to learn more about him.

seven years.[2] "These are life-changing surgeries," says Boorse's colleague, LVHN weight-loss surgeon T. Daniel Harrison, DO.

A center of excellence

LVHN's weight-loss surgery program performs hundreds of bariatric procedures each year. Typical options include laparoscopic Rouxen-Y gastric bypass, sleeve gastrectomy and gastric Lap-Band. As an accredited Center of Excellence for Bariatric Surgery, the program meets the highest level of standards set by the American College of Surgeons, maintains high case volumes and tracks outcomes. "All procedures are now done laparoscopically, which has increased the safety and quality of the procedure," Boorse says.

Supporting these surgeries is a comprehensive program that includes patient meetings with a behavioral counselor, an exercise physiologist and a dietitian. These professionals prepare patients for the differences in their life postsurgery and help them avoid regressing to bad eating habits. In addition, there are monthly support group meetings.

The program also offers plastic surgery options for patients who have had bariatric surgery. "With massive weight loss, patients sometimes develop excess skin in multiple areas of the body, which may require excision for medical or cosmetic reasons," says Randolph Wojcik Jr., MD, LVHN's associate chief of plastic surgery. "Our plastic surgeons are board-certified and have performed hundreds of procedures following weight loss."

Learn more

If you have patients who could benefit from weight-loss surgery, the program hosts regular free information sessions for patients.

For more information about weight-loss surgery, information sessions or to refer a patient, call 888-402-LVHN.

1. Centers for Disease Control and Prevention.
2. "Long-term mortality after gastric bypass surgery." Adams, et. al. N Engl J Med 2007 Aug; 357: 753-61.

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Specialty Care for Celiac Disease in Children

Pediatric gastroenterologists can help with this growing health concern

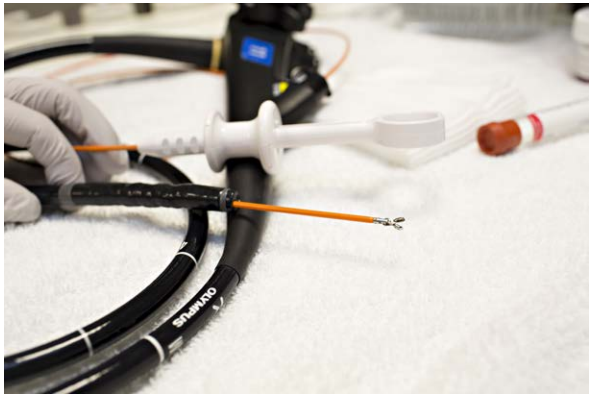
Celiac disease, the condition in which the body's immune system reacts to gluten – the protein found in wheat, rye and barley – is one of the most common genetic disorders, affecting about 1 percent of the total population[1], and that number is growing. "It's unclear whether we're recognizing it more frequently in patients or if it's increasing by virtue of the natural processes of the disease," says Lehigh Valley Health Network (LVHN) pediatric gastroenterologist Adam Paul, DO, with Lehigh Valley Children's Hospital.

Adam Paul, DO
Pediatric gastroenterology
Watch a video to learn more about him.

Children with celiac disease may experience abdominal pain, nausea, diarrhea, constipation and failure to gain weight appropriately, as well as non-GI complaints, such as joint aches, rashes and anemia. If celiac disease is unmanaged, it can result in poor growth, delayed puberty, severe anemia, osteopenia or osteoporosis. In rare cases, "patients can develop small intestinal lymphoma if left untreated," Paul says.

LVHN offers the latest in pediatric gastroenterology to help the youngest patients with GI symptoms get a timely diagnosis. "We can screen for celiac disease with blood testing," Paul says. Pediatric patients who test positive can then undergo endoscopy with biopsy to confirm a celiac disease diagnosis.

Video capsule endoscopy also is available for pediatric patients who are old enough to swallow pills. In this procedure, the patient swallows a capsule that contains a camera with a light; the camera records images in the small bowel, providing more than eight hours of footage.



The treatment for celiac disease is strict adherence to a gluten-free diet. “Patients sometimes come in already on a gluten-free diet because their parents suspect they may have celiac disease,” Paul says. That can skew the diagnostic process. Parents should feed their child a regular diet until the screening test and confirmation by biopsy has been done. “For long-term follow-up, it’s important to make the diagnosis so we can help patients eliminate the risk for long-term complications,” Paul says.

Other screening tests are available for symptomatic pediatric patients with negative blood test results. These options include:

- Colonoscopy to diagnose other inflammatory bowel diseases, such as Crohn’s disease or ulcerative colitis
- Esophageal pH probe monitoring, for older pediatric patients with potential acid reflux
- Liver biopsy
- Lactose breath testing for patients who are possibly lactose intolerant

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Pediatric Urology Care

LVHN offers specialty care for pediatric patients with urological symptoms. “The most common cases I see are babies with urologic problems noted on a prenatal ultrasound or at the time of birth, such as an undescended testicle, hypospadias chordee, or congenital hydronephrosis,” says LVHN pediatric urologist Michele Clement, MD, with Lehigh Valley Children's Hospital. Another typical pediatric urology patient is a child age 6 or older with bed-wetting problems.

Urological conditions in infants often require surgery, which Clement can perform. Bed-wetting in older children often can be treated with behavioral therapies or medication.

To refer a patient to an LVHN pediatric GI or urology specialist, call **610-402-CARE**.

1. “A multi-center study on the prevalence of celiac disease in the United States among both at-risk and non-at-risk groups.” Fasano et. al., Archives of Internal Medicine, February 2003.

Michele Clement, MD
Pediatric urology
Watch a video to learn more about her.

New Cervical Cancer Screening Guidelines and HPV Vaccination

Cervical cancer is typically slow-growing. Most cancers are found in women who have never been screened or those who have not been screened in the past five years. Annual screenings with Pap smears have been very effective in reducing the cervical cancer burden, but they also discover many noncancerous lesions, which will resolve without treatment. The majority of cervical cancers are caused by a prior HPV infection. The occurrence of temporary HPV infections is high, but most will regress or even disappear in one to two years. The lesions that do not regress will require many years (i.e. eight to 10 years) to progress to cancer.[1]

Changing the guidelines

In light of this well-documented evidence, physicians at Lehigh Valley Health Network (LVHN) are embracing updated cervical cancer screening guidelines from the U.S. Preventive Services Task Force. The key change is to automatically include HPV testing with Pap smears for primary screening for low-risk women in the 30-65 age group. Previously, the guidelines recommended an HPV test only if the Pap came back abnormal. Further, this combination screening should be performed every five years in these women, not annually.

Amy DePuy, MD
Obstetrics/gynecology

Other recommendations include that women:

- Younger than age 21 should not have Pap smears and HPV testing
- Between ages 21-29 should be screened with Pap smears alone every three years
- Older than 65 with no history of abnormal Pap smears within the last 10 years, with sufficient screening and no history of moderate or severe cervical dysplasia should not be screened

Richard Boulay, MD
Gynecologic oncology
Watch a video to learn more about him.

"These guidelines are good steps forward because they came out of many years of good research and learning," explains obstetrician/gynecologist Amy DePuy, MD, with LVPG Obstetrics and Gynecology–Valley Center Parkway. "And it also means that the days of every woman having a Pap test every year are gone." These recommendations were affirmed by the American Congress of Obstetricians and Gynecologists in May 2012. There was no change to other recommendations; women should still receive an annual pelvic exam and breast exam.

For women who do develop cervical dysplasia, several treatments are available through LVHN, including the loop electrosurgical excision procedure (LEEP) and cone biopsy, which can eliminate lingering HPV infection. Women with diagnosed cervical cancer receive care from LVHN's gynecological oncologists.

Focus on prevention

HPV preventive vaccines are the next front in the fight against cervical cancer. They are available for girls and boys and young adults ages 9-26 and can provide protection against the four major HPV types known to cause 70 percent of cervical cancers. LVHN is embracing the push for widespread vaccination of boys and girls at the age of 12. "This is a cancer that doesn't have to be in the future," says Richard Boulay, MD, director, division of gynecologic oncology. "Because you don't have the infection, you don't have the precancerous occurrence."

Boulay offers advice for starting the HPV vaccine discussion with parents in a recent article, "She's Just a Little Girl," published in Obstetrics and Gynecology.[3]

HPV also can cause cancer in other sites, including those near the base of the tongue, tonsils and back of the throat.

The biggest hurdle for this vaccine is parental discomfort and worry about influencing their children's future sexual activity. A recent study in Pediatrics[2] showed no difference in sexual activity between those who received the vaccine and those who did not. "We can say with great confidence to parents: This will not change your child's future sexual activity," Boulay says.

To refer a patient to gynecology or gynecologic oncology, call **610-402-CARE**.

1. "American Cancer Society, American Society for Colposcopy and Cervical Pathology, and American Society for Clinical Pathology Screening Guidelines for the Prevention and Early Detection of Cervical

Cancer 2012." American Society for Colposcopy and Cervical Pathology Journal of Lower Genital Tract Disease. 2012; (16)3: 00Y00.

2. *http://pediatrics.aappublications.org/content/early/2012/10/10/peds.2012-1516.abstract*
3. *http://scholarlyworks.lvhn.org/obstetrics-gynecology/34*

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