Summer 2015

Better Medicine

Lehigh Valley Health Network

ExpressCARE Offers Patients Added Access to Treatment for Minor Illnesses and Injuries

By Anthony Friendy, PA-C, with ExpressCARE at LVPG Family Medicine–Whitehall

Anthony F. Friendy, PA-C
Family Medicine

When you have a full schedule, it can be challenging to fit in patients with acute illnesses and injuries who need same-day appointments. To offer these patients greater access to acute care, including treatment after hours and on holidays and weekends, Lehigh Valley Health Network (LVHN) offers ExpressCARE without an appointment 365 days a year.

ExpressCARE offices – there are 12 locations throughout LVHN – are staffed by advanced practice clinicians, CRNPs and PA-Cs. We treat patients with minor conditions, such as:

- Sprains
- Strains
- Lacerations
- Poison ivy
- Rashes
- Seasonal allergies
-

Flu symptoms
- Bronchitis
- Ear infections
- Sore throat
- Fever

We also can give flu vaccinations and perform initial workers' compensation evaluations, STD screenings and low-complexity physicals. In addition, many ExpressCARE facilities can provide X-ray services.

Although we're not a substitute for the emergency department (ED), patients sometimes confuse us with one. Patients who come to ExpressCARE but need emergent care are sent to the ED. We also don't treat patients with chronic diseases or prescribe pain or anxiety medication. In addition, we're not a substitute for a primary care provider.

Because ExpressCARE is part of LVHN, your patients have access to the full continuum of LVHN services for any follow-up care they may need. When your patient's visit with us is complete, we send a copy of the visit to you, the patient's primary care provider, through the EMR so that you can stay up-to-date on your patient's condition and the treatment he or she has received.

ExpressCARE is open 365 days a year, including weekends and holidays. Patients don't need an appointment or a referral, and ExpressCARE is first come, first served. Visit LVHN.org/expresscare for details about hours at each location.

To learn more about ExpressCARE, call 610-402-CARE.

— Summer 2015

Assessments Seek to Reduce Risk for Sudden Cardiac Death

Matthew Martinez, MD
Cardiology
Watch a video to learn more about him.

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

Cardiomyopathy Hypertrophic cardiomyopathy (HCM) affects an estimated one in 500 people, and the genetic

mutation is the most common cause of sudden cardiac death in young athletes and young adults in general. Many patients with HCM can live a normal life, which is why specialists in Lehigh Valley Health Network's (LVHN) Sports Cardiology and Hypertrophic Cardiomyopathy Program promote education and screening to detect HCM and stratify risks.

Seeking to raise awareness

"HCM may be misdiagnosed as a condition such as asthma or anxiety, particularly in young people and young athletes, because it's difficult to think there is anything wrong with their health," says LVHN cardiologist Matthew Martinez, MD, the program's medical director. "That's why we work with physicians to evaluate athletes who have symptoms or a family history of cardiac conditions, or who have undergone imaging that suggests they might be at risk for sudden cardiac arrest."

LVHN's 29 certified athletic trainers (ATCs) provide HCM education and serve as emergency responders for athletes at area middle schools, high schools and colleges. "All our ATCs are prepared to act immediately to save a life," says LVHN's Robbin Shomper, ATC, MEd, LAT.

HCM treatment

More than 130 patients were referred to LVHN for HCM assessment last year, and cardiology and cardiothoracic specialists in LVHN's Heart and Vascular Center currently treat a total of approximately 300 HCM patients. About two-thirds receive medical therapy to treat or improve symptoms. Other treatments include an implantable cardioverter defibrillator or myectomy.

"Surgery is generally reserved for adult patients who are either maxed out on medications or experiencing significant side effects from medications while still having symptoms," says James Wu, MD, LVHN's chief of cardiac surgery.

Wu performs approximately 12 to 15 myectomies annually, and 58 LVHN patients have undergone myectomy. "We've had one of the highest volumes of surgical cases in Pennsylvania in the last four to five years," Wu says, "and experience is needed to achieve the best results."

Symptoms of HCM

Despite its prevalence, HCM is difficult to recognize. Patients of all ages may be asymptomatic or may experience varied symptoms – such as pounding heart or fatigue – that are attributed erroneously to other disorders.

Providers should watch for athletes who have:

- Syncope
- Chest pain or pressure
- Dyspnea during or after activity

Patients with a family history of HCM also should be screened via echocardiogram or other imaging tests.

1. "Hypertrophic cardiomyopathy: A patient perspective." R. Nishamura et al. Circ. 2003; 108: e133-e135. 2. "Assessing the risk of sudden cardiac death in a patient with hypertrophic cardiomyopathy." M. Frenneaux. Heart. 2004; 90(5): 570-75.

To refer a patient to the Heart and Vascular Center, call 610-402-CARE.

— Summer 2015

New Services, Facilities Will Expand Care

To further its mission–to heal, comfort and care for the people of our community–Lehigh Valley Health Network (LVHN) is constructing new facilities and expanding services at some of its current locations in the near future.

Rendering of the Children's Surgery Center.

Among the projects:

Birthing services at LVH–Muhlenberg

Next month groundbreaking will take place on a new four-story pavilion on the campus of Lehigh Valley Hospital (LVH)–Muhlenberg in Bethlehem. The 161,000-square-foot addition will bring births to LVH–Muhlenberg for the first time in the hospital's 54-year history. The obstetrics and newborn services will be housed on floors 2 and 3 of the new pavilion and will include:

- A mother-baby unit with 20 private rooms
- A nursery with 16 bassinets
- A Level II NICU with 10 private rooms
- Eight state-of-the-art labor, delivery and recovery rooms
- Two operating rooms
- Five obstetrics triage beds
- A three-bay postanesthesia care unit area
- A four-bed antepartum unit

When complete, the pavilion will accommodate approximately 2,000 deliveries annually.

The first floor will feature a Center for Inpatient Rehabilitation– Muhlenberg, similar to the Center for Inpatient Rehabilitation–Cedar Crest that opened earlier this summer at LVH–Cedar Crest in Salisbury Township. The center will include 28 beds, one ADL (activities of daily living) bed, a gym and an ADL dining/living area.

The fourth floor will be shell space designed to accommodate future growth. The new pavilion is slated to open in June 2017.

LVHN Cancer Center–Hazleton

Scheduled to open soon, the LVHN Cancer Center–Hazleton will feature three Lehigh Valley Physician Group–Hazleton hematology oncology providers: Michael Evans, MD; Harvey Hotchner, MD; and Tom Lyons, PA-C. The

LVHN Cancer Center–Hazleton will be located at 388 Airport Road, Hazle Township. It will have seven exam rooms and eight infusion rooms. Infusion services will include:

- Chemotherapy and therapeutic infusions
- Transfusion services
- Therapeutic phlebotomies and injections
- On-site draw station
- CLIA-approved tests

Support services will include social workers, dietitians and financial coordinators.

Children's Surgery Center

To be housed at the 1210 building on the campus of LVH–Cedar Crest, the new Children's Surgery Center will provide dedicated space for outpatient pediatric surgeries and will broaden the services available through Children's Hospital at LVH, the only children's hospital in the Lehigh Valley.

Because the center will be located in proximity to other Children's Hospital features such as the Children's ER, pediatrics unit and pediatric intensive care unit (PICU), the Children's Surgery Center will:

- Enhance the patient experience and access to care
- Expand and improve existing services and provider/staff satisfaction
- Increase the quality, safety and access of our pediatric surgical services, both inpatient and outpatient
- Create efficiency while maintaining control of health care costs
- Support the Level IV NICU, the PICU, the Level II pediatric trauma center and the pediatric cancer program

The center is scheduled to open in February 2016.

To learn more about any of these locations, call 888-402-LVHN.

— Summer 2015

Mechanical Thrombectomy Benefits Ischemic Stroke Patients

Neil Patel, MD
Neurointerventional radiology
Watch a video to learn more about him.

Darryn Shaff, MD
Neurointerventional radiology

New trials provide conclusive evidence that acute ischemic stroke patients benefit from mechanical thrombectomy.[1-4] Lehigh Valley Hospital's (LVH) high-volume Comprehensive Stroke Center shows similar results

to those research trials. The center performs 70 thrombectomies annually – the second highest in the mid-Atlantic region[5] – and cares for 2,293 total stroke patients each year.

Devices improve outcomes

The four randomized trials show that rapid thrombectomy plus intravenous (IV) thrombolysis improves patient function more than thrombolysis alone.[1-4] This evidence is expected to make thrombectomy the new standard of care for ischemic stroke over the prior standard, IV tissue plasminogen activator (tPA).

Patients in the trials were treated by neurointerventionalists in stroke centers with organized multidisciplinary stroke teams. This is the same approach LVH employs. “Comprehensive Stroke Centers like ours provide the same structural efficiency and algorithmic care that patients benefited from in the recent trials,” says Darryn Shaff, MD, Lehigh Valley Health Network’s (LVHN) chief of neurointerventional radiology.

Specifically, the LVH stroke team relies on a parallel clinical assessment and decision-making strategy, administering tPA and preparing an operative suite for thrombectomy while the neurologist and neurointerventionalist study imaging to determine if large occlusions and sufficient salvageable brain tissue are present.

“We are very cognizant of the speed of care delivery,” says LVHN neurointerventional radiologist Neil Patel, MD. “Our approach results in a 40-minute median time from initial imaging to groin puncture for large vessel occlusion.” Median time in the trails was 51-93 minutes.[2-4]

LVH also achieved successful reperfusion in 94 percent of patients, while rates in the trials ranged from 58.7 to 88 percent.[1-4] Neither LVH nor the trials found significant differences in mortality or symptomatic intercerebral hemorrhage with thrombectomy.

Stent retriever used for mechanical thrombectomy

Specialized stroke treatment

LVH was the first in Pennsylvania and one of the first in the region to be designated a Comprehensive Stroke Center by The Joint Commission and the American Stroke/Heart Association. It’s an important distinction when referring or transferring emergency stroke cases that require the highest level of care.

EMS providers and LVH communicate about patients exhibiting signs of stroke, but a more sophisticated prehospital evaluation may be needed to identify patients with possible large-vessel occlusions. “When the level of

evidence about the clinical efficacy of an intervention (thrombectomy) is so high, there is an obligation to triage appropriately and take patients to the center best able to provide treatment," Shaff says.

Rapid triage of eligible patients to a center skilled at endovascular treatment is now a cornerstone of effective stroke care. The major trial results indicate that eligible patients who undergo prompt, rapid mechanical intervention have a 50 percent better chance at returning to independent living after stroke: 50-70 percent of patients recovered to a modified Rankin Scale of 0-2, versus 29-40 percent of patients who did not receive endovascular therapy. By working together with EMS providers, the LVH Comprehensive Stroke Center is helping to bring these benefits to the patients we serve.

1. *"A randomized trial of intra-arterial treatment for acute ischemic stroke." O. Berkhemer et al. N Engl J Med. 2015; 372 (1):11-20.*
2. *"Endovascular therapy for ischemic stroke with perfusion-imaging selection." B. Campbell et al. N Engl J Med. 2015 Feb. Epub before print.*
3. *"Randomized assessment of rapid endovascular treatment of ischemic stroke." M. Goyal et al. N Engl J Med. 2015 Feb. Epub before print.*
4. *"SOLITAIRE™ FR with the intention for thrombectomy as primary endovascular treatment for acute ischemic stroke." J. Saver et al. Presented at the International Stroke Conference, Nashville, TN. February 11, 2015.*
5. *Medicare Provider Analysis and Review (MedPAR) database.*

To refer a patient to neurology, call 610-402-CARE.

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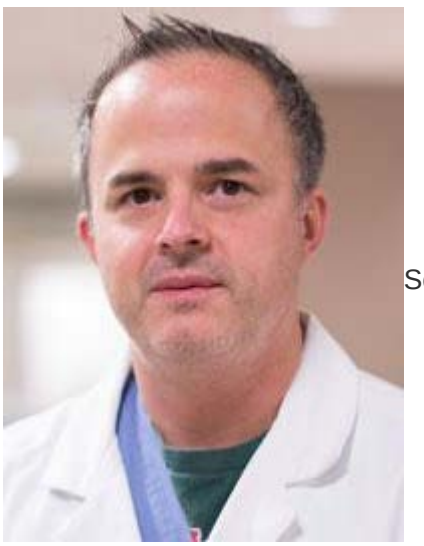
Expanding Emergency Coverage for Orthopedic Trauma



Scott Sexton, MD

Orthopedic surgery
Watch a video to learn more about him.

VSAS Orthopaedics has long provided on-site emergency department (ED) coverage at Lehigh Valley Hospital (LVH)–Cedar Crest. Now the practice also has assumed the entire on-call schedule at LVH-Muhlenberg's ED.

This means patients with acute orthopedic injuries in Lehigh and Northampton counties can see VSAS Orthopaedics specialists in their local ED and have a fast follow-up visit with subspecialists from the same practice. Patients can access the same end-to-end orthopedic expertise and coordination across the care continuum.

"Patients who present to the ED typically have to put in significant work on their own to receive follow-up care," says orthopedic surgeon Scott Sexton, MD, chief, section of orthopedic trauma for Lehigh Valley Health Network (LVHN). "Once they return home, they have to find an orthopedic physician in the area, call their insurance and call their primary care physician. Now, when patients are evaluated at either LVH emergency facility, they can transition to an office visit with an orthopedic specialist immediately, without that hassle."

Same-day follow-up care

When patients are evaluated in either ED facility, VSAS Orthopaedics has committed to providing a timely follow-up office visit with an orthopedic subspecialist who has expertise in their injury. In addition to providing care for injured adults, the VSAS team includes a pediatric orthopedic trauma specialist, Berry Berger, MD, available for children's very special needs.

VSAS has offices adjoining both hospitals and offers early evening hours on most days. If an injury occurs at night, patients can call the office the following morning and in many cases be seen the same day.

“We have a large group of orthopedic surgeons who can deal with anything from simple sprains to the most complex musculoskeletal injuries,” Sexton says. “We maintain close communication with ED staff and can access imaging studies from our offices over our hospital-integrated system. We can direct the patient to the most appropriate next step and get him or her headed on the road to recovery immediately.”

A unique combination

The expanded orthopedic coverage builds on LVHN’s track record of leadership in emergency care. LVH was Pennsylvania’s first Level I Trauma Center. With VSAS Orthopaedics joining Lehigh Valley Physician Group, LVHN can go even further to make end-to-end orthopedic trauma care faster and easier for patients regionwide.

“It’s rare to have this degree of seamless transition, from the ED evaluation to the implementation of orthopedic care and follow-up,” Sexton says. “We understand that these patients are in pain and have limited mobility, and we make getting care as easy for them as possible.”

To refer a patient to the orthopedic trauma program, call 610-402-CARE.

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Pilot Program Targets CHF Patients

Meredith Dempsey, PharmD

Pharmacy

Chronic heart failure (CHF) causes more U.S. hospitalizations than all forms of cancer combined.[1] Moreover, the national hospital readmission rate within the first 30 days of discharge is approximately 24 percent.[2]

To help CHF patients thrive and avoid preventable readmissions, Lehigh Valley Health Network (LVHN) is piloting a Community Care Team program at two practices, LVPG Internal Medicine−Muhlenberg and LVPG Family Medicine−Trexlertown. CHF patients are enrolled in the program upon hospital discharge; providers also can refer CHF patients who would benefit from close follow-up.

The goal is to educate patients about the importance of disease self-management via consistent and repetitive messaging throughout the care continuum.

“CHF patients must adhere to strict dietary, fluid and medication restrictions, so they need to understand their role in managing the disease,” says Kay Rauchfuss, MSN, CCRN, LVHN patient care services administrator for the cardiac service line. “We’re focused on helping them learn what they need to do to stay well.”

Consistent messages

Throughout the service line, patients are consistently told the same information –for example, “Call your doctor if you gain two pounds overnight” – before hospital discharge, on discharge phone calls, in take-home patient education materials and during follow-up visits. “Repetitive messages that focus on the same statement are less confusing and improve retention,” Rauchfuss says.

Patient education is further reinforced during outpatient visits. “At that first critical appointment one to two weeks

postdischarge, we re-evaluate medications and reteach, ensuring patients have a full understanding of their medications and their disease process," says LVHN outpatient nurse practitioner Alma Ohl, CRNP. "Patients are taught to recognize when they're getting into trouble and when to call if they have symptoms." If a patient has an acute problem, such as feeling short of breath, he or she often is seen as an outpatient the same day.

Medication management

The pilot program also includes pharmacist follow-up calls at seven, 14, 21 and 28 days after hospitalization. "We review signs and symptoms of heart failure, how to use medications and the consequences of missing doses or not sticking to their diet," says LVHN Community Care Team pharmacist Meredith Dempsey, PharmD.

Of the 13 patients who have participated in the pilot program to date, preliminary data indicates that hospital utilization decreased 63 percent.

"From a population health perspective, our long-term goal is to keep patients healthier longer," Dempsey says. "Overall, patients are happy with the program because they get a lot of information and support."

1. The Heart Failure Society of America. hfsa.org/hfsa-wp/wp/patient/questions-about-heart-failure/.
2. "Rehospitalization for heart failure: Predict or prevent?" A. Desai et al. Circ. 2012; 126: 501-06.

To refer a patient to the CHF pilot program, call 610-402-CARE.

— Summer 2015

Revised Allocation System Increases Chance for Receiving Donor Kidney

Michael Moritz, MD

Transplant surgery
Watch a video to learn more about him.

The average wait time for a kidney transplant is five years.[1] The day often never comes, however, for highly sensitized patients – those with antibodies against 97 to 100 percent of the population.

Such patients have the highest risk for kidney rejection. Over a 10-year period, only one Lehigh Valley Health Network (LVHN) patient with 100 percent antibody noncompatibility received a donated kidney.

That's why, last December, LVHN joined a new national kidney allocation system that uniformly increases highly sensitized patients' odds of receiving an organ.

The new system already has led to more frequent transplants. "In the six months since it began, we've transplanted 10 patients who were either 99 or 100 percent noncompatible," says LVHN transplant surgeon Michael Moritz, MD, with LVPG Transplant Surgery–1250 Cedar Crest. "All patients are off dialysis and doing fine."

Casting a wider net

The new system brings many changes to the transplant allocation process. They include making donor kidneys available over a broader geography to better serve highly sensitized patients.

Previously, the system limited such patients to local donors. Now, patients with 99 percent noncompatibility –

those who produce antibodies against 99 percent of other humans – receive regional priority for donor kidneys that become available. Patients with 100 percent noncompatibility receive national priority.

Moreover, the new system for the highly sensitized isn't focused on the length of time patients are on the kidney transplant waiting list. "Highly sensitized patients get a donor kidney when the perfect one comes along," Moritz says. If there's a donor kidney available in Kansas, for example, the new system checks all the 100-percent patients nationwide for compatibility.

Quieting the immune response

Patients can acquire antibodies against other people from blood transfusions, previous transplants or pregnancies. Their immune systems are more reactive than usual. To help highly sensitized patients accept their donor kidney, Moritz and his team do everything possible to help the organ function – and continue to function.

- Patients undergo pretransplant plasmapheresis, which replaces plasma with antibody-free protein to deplete the antibody load in the bloodstream.
- Recipients receive a B cell−depleting agent post-transplant.
- Sensitized patients follow a protocol in which they receive intravenous immunoglobulin (IVIG) infusions once a month for four months. "We've shown that IVIG can decrease the risk for antibody-mediated rejection by two-thirds," Moritz says.
- Patients take three immunosuppressant drugs chronically rather than the usual two, increasing their overall immunosuppression.

1. Gift of Life Donor Program.

To refer a patient for the kidney transplant program, call 610-402-CARE.

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Better Tools More Accurately Assess Prostate Cancer Risk

Angelo A. Baccala Jr., MD

Urology
Watch a video to learn more about him.

Determining the appropriate course of treatment for prostate cancer has been an enduring challenge for providers. Given the slow growth of the cancer and the side effects of treatment, active surveillance often is best. Yet sometimes providers and patients have anxiety about forgoing treatment. The biggest barrier: The traditional clinical tools available to make this determination have not been as accurate as providers would like.

“Prostate cancer survival rates are typically very good overall, but we wondered how we can determine the true biologic potential of the cancer when a patient is initially diagnosed,” says Angelo Baccala Jr., MD, chief of urology at Lehigh Valley Health Network (LVHN). “How can we know for certain when we need to treat?”

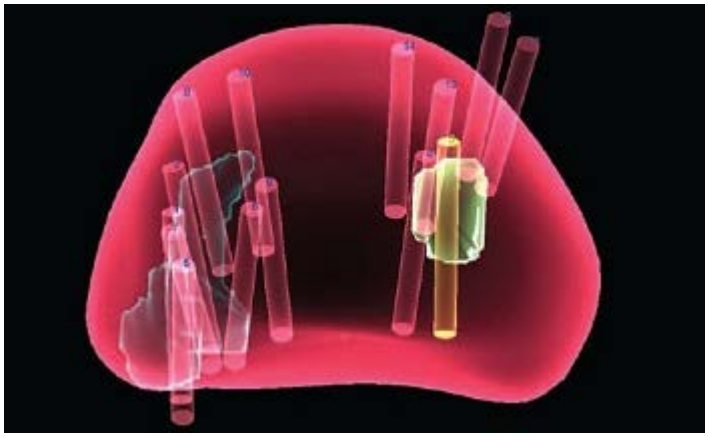
Now, LVHN physicians are using new genetic testing and biopsy strategies to dramatically improve prostate cancer risk assessment and diagnosis.

Assessing risk

Conventional risk stratification models combine prostate-specific antigen (PSA) test results, Gleason score, biopsy results and other pathologic data to assess a patient’s suitability for active surveillance. These parameters can provide a good indication of population-level risk, but individual risk varies widely. Today, LVHN providers can provide a much more accurate evaluation.

When patients are diagnosed with prostate cancer, LVHN providers use multiparametric MRI to identify clinically

significant tumors to target for biopsy. Using new fusion technologies, they can combine that MRI image with ultrasoundguided biopsy to obtain cells from only suspicious lesions, rather than relying on random sampling.



Multiparametric MRI can identify prostate tumors to target for biopsy.

Next, they employ new oncotyping strategies to analyze tumors' cells. Using a 17-gene assay, they can obtain the precise molecular signature of an individual's prostate cancer. This allows providers to predict the biologic progression of the cancer more accurately.

"We gain much more confidence that we're choosing the right patients for active surveillance," Baccala says. "And we do a much better job of identifying patients who may appear to be low-risk but have unfavorable biology that merits treatment."

Improving diagnosis

New genetic markers, identified in the last year, also improve the accuracy of initial cancer diagnoses with a urine test. Using nucleic amplification testing, LVHN providers can measure the concentration of prostate cancer gene 3 (PCA3), which is present in 97 percent of cases.

"It's common for a patient to have a high PSA but a negative biopsy, and the physician may still be suspicious the patient has cancer," Baccala says. "We can use the PCA3 test, perform an MRI and then determine next steps. This is a huge benefit to patients, because historically they may have been subjected to four or five biopsies. Now, it's possible none of them are necessary."

To refer patients to urology, call 610-402-CARE.

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Maternal Fetal Medicine, Cardiology Collaborate on High-Risk Pregnancies

More women with congenital or acquired cardiac disease are reaching reproductive age and achieving pregnancy, requiring complex care that addresses both cardiovascular and maternal fetal health.[1] Lehigh Valley Health Network (LVHN) optimizes such care through the region's first heart and pregnancy program.

Amy Ahnert, MD
Cardiology
Watch a video to learn more about her.

A focused approach

The program, which includes LVHN's large contingent of high-risk pregnancy specialists, is one of the largest in Pennsylvania and the nation. It's part of LVHN's Heart and Vascular Program for Women, which provides specialized care for and prevention of heart disease in women at all stages of life. More than 180 patients with cardiac issues have been treated through the heart and pregnancy program since its inception in 2010.

LVHN's comprehensive, multidisciplinary team approach includes maternal fetal medicine (MFM) specialist Joanne Quiñones, MD, and LVHN cardiologist Amy Ahnert, MD, with LVPG Cardiology.

"Pregnancy has significant impact on the cardiac system for all patients, and women with pre-existing conditions, risk factors or cardiac complaints must be closely monitored and assessed by specialists who work together as a team," says Quiñones, an obstetrician who completed a three-year MFM fellowship. MFM subspecialists have advanced knowledge of the medical, surgical, obstetrical, fetal and genetic complications of pregnancy and their effects on both the mother and the fetus.

Approximately 1 to 3 percent of all pregnant women

Joanne Quinones, MD
Maternal fetal medicine

will experience cardiac complications, which are responsible for 10 to 15 percent of maternal mortality.[2] Hypertension is the most common medical problem during pregnancy, complicating approximately 15 percent of all pregnancies.[3] Other disease categories the team treats include:

- Congenital structural issues (congenital heart disease, valvular disease, coarctation of the aorta)

Acquired structural disease (rheumatic heart disease, prosthetic valves, electrical disorders, Marfan syndrome, coronary artery disease)

- Functional disorders (hypertension, arrhythmias, cardiomyopathy)

Some women also may present with cardiac complaints (palpitations, near syncope, dizziness or chest pain/pressure) without a history of cardiac disease.

Pregnancy counseling

Women with known cardiac disease or risk factors ideally should receive evaluation and counseling prior to conception or early in pregnancy.[4] Although the risk during pregnancy depends on the patient and her specific heart disease, the LVHN team identifies and quantifies risks to mother and fetus through personal and family health history, imaging and other assessments. The program's clinical team provides preconception counseling for women with issues such as congenital heart block, prosthetic heart valves, bicuspid aortic valves and inherited arrhythmias such as catecholaminergic polymorphic ventricular tachycardia (CPVT), long QT syndrome, hypertrophic cardiomyopathy and Marfan syndrome, among others.

Collaborative management of patients

While early diagnosis and counseling are important, the majority of women referred to the program are pregnant and past the midpoint of their pregnancies. The specialists schedule appointments together so that cardiac and obstetric issues such as medication exposure, mode of delivery and postpartum care can be evaluated and assessed concurrently.

“It’s a very dynamic visit, with information gathered and shared among the clinicians and the patient,” Quiñones says. “Patients benefit from that kind of interaction and appreciate the coordination among specialists.”

Cardiac output increases during labor and delivery, making this period of pregnancy potentially dangerous for pregnant women with cardiac disease. In particularly complex cases, the team conducts simulations to prepare for deliveries by women with cardiac disease. These simulations are taught by members of the obstetrics simulation team (obstetric nurses, MFM specialists and cardiology fellows) and include residents, nursing staff from the labor and delivery unit and progressive care unit, and other providers.

Sharing results

LVHN’s division of MFM educates obstetric caregivers on complex pregnancy care in a variety of forums. In 2014, Quiñones and her cardiology and MFM colleagues presented two posters at the third International Congress on Cardiac Problems in Pregnancy in Venice, Italy. The studies focused on the program’s collaborative cardiology and MFM practice and the role of cardiac MRI during pregnancy[5,6]. Ahnert, Quiñones and anesthesiologist Rafael Martinez, MD, with Allentown Anesthesia Associates, also shared their experiences treating a woman with CPVT, presenting at the 2014 annual meeting of the International and North American Societies of Obstetric Medicine.

“CPVT is a very rare disease, occurring in only 1 in 10,000 patients, and many cardiologists will never see a case in their career,” Ahnert says. “Our experience with CPVT was successful in that the patient was able to carry to term and have a successful delivery. The patient is now contemplating a second pregnancy, and our team will be there to help her.”

1. “Management of cardiovascular diseases during pregnancy.” V. Regitz-Zagrosek et al. Curr Probl Cardiol. 2014; 39(4-5), 85-151.
2. “Pregnancy complicated by valvular disease: An update.” M. Nanna et al. J Am Heart Assoc. 2014; 3: e000712.
3. “Management of hypertension before, during, and after pregnancy.” P.R. James et al. *Heart*. 2004; 90:1499-1504.
4. “Pregnancy and delivery in cardiac disease.” T. Ruys et al. *J Cardiol*. 2013; 61(2):107-112.
5. “Experience at the Center for Heart and Pregnancy: a collaborative cardiology and maternal fetal medicine practice.”J. Quiñones et al. Poster presented at The 3rd International Congress of Cardiac Problems in Pregnancy, Venice, Italy, February 21-23, 2014.
6. “Is there a role for cardiac magnetic resonance imaging during pregnancy? Experience at Lehigh Valley Health Network.” J. Quiñones et al. Poster presented at The 3rd International Congress of Cardiac Problems in Pregnancy, Venice, Italy, February 21-23, 2014.

To refer a patient to the heart and pregnancy program, call 610-402-CARE.

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