

INhealth

HEALTH AND WELLNESS MADE PERSONAL

Fall 2018

STICK TO IT
Physical therapy
app helps
patients stay
compliant **12**

beautiful breath

Patient is thriving
20 years after
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Colleen
Adamson was the
first cystic fibrosis
patient to undergo
a double-lung
transplant at
Inova.

HELP IS HERE

for women
with pelvic
floor disorder **6**



New and Exciting

We are happy to share with you the first issue of the newly re-

designed *INhealth!* In addition to important information about Inova Fairfax Medical Campus, this magazine now offers news from across the Inova system.

New and exciting things are happening all the time. We recently opened another state-of-the-art surgical center and became the first (and so far only) hospital in the U.S. to offer a surgical procedure to close holes in the heart and reduce the risk of stroke. (Visit inova.org/noblestitch for more.)

Such events remind me we have extraordinary people doing work that makes a difference in the communities we serve every day.

PATRICK CHRISTIANSEN, PHD
CEO, Inova Fairfax Medical Campus
Executive Vice President, Inova

Breaking

Inova integrates behavioral health and primary care

With the mind-body connection well established, Inova Medical Group's pairing of primary care and behavioral health providers in the same offices has reaped rave reviews.

Since July 2017, most Inova primary care clinics have counselors and other mental health clinicians on staff, under the same roof, creating a seamless transition between physical and emotional wellness. In the past year, the Integrated Behavioral Health program has served more than 1,300 patients, with interest rapidly growing.



An inpatient behavioral health unit recently opened at Inova Fairfax Medical Campus. Above (L to R): Loring Flint, MD, EVP, Chief Medical Officer; Michael Clark, MD, MPH, MBA, Chairman, Psychiatry and Behavioral Health; Michelle Mullany, LCSW, AVP, Behavioral Health; and J. Stephen Jones, MD, CEO, President, Inova.

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MORE ONLINE

Interested in learning more from *INhealth* magazine?

Visit inovanewsroom.org to read additional stories, as well as view videos and podcasts pertaining to hospital news, programs, treatments and cutting-edge research.

Barriers

“We’re breaking down barriers,” explains Program Manager Shana Grady, PsyD. “It just makes good sense. For a long time, the services were separate and we know that doesn’t really benefit patients.”

The new standard of care means Inova primary care providers screen patients for mental health issues such as depression during routine visits. When appropriate, patients are referred to in-house counselors — who either see them the same day or schedule a prompt appointment — so patients can access care in the same office. “If they want to schedule an appointment, that’s done before they leave the clinic,” Grady explains. “And they come back for a full appointment, which includes a full assessment and treatment.”

Besides convenience, this collaborative and comprehensive approach offers patients privacy, Grady notes. “It has been so rewarding to see the responses from patients. Many say they wouldn’t have considered accessing behavioral health if therapists were not in the clinic,” Grady says. 

MAKE AN APPOINTMENT

For a full list of Inova primary care offices that offer Integrated Behavioral Health services, call the Behavioral Health team at **703.289.7560** or visit inova.org/IBH.



Tiny Beats

Program provides comprehensive heart care before, during and after a child’s birth

Lucas Collazo, MD, congenital cardiac surgeon, and Mitchell Cohen, MD, pediatric and adult congenital electrophysiologist, serve on the highly regarded Inova Heart and Vascular Institute (IHVI) team. In October 2017 they partnered to co-direct the Inova Children’s Heart Program, providing specialized care to children from Northern Virginia, Maryland, Washington, DC, and beyond. “It’s an incredible model of care that allows us to cover the full spectrum of congenital heart disease, from birth to adulthood, and stay with a patient right here on the Fairfax Medical Campus (IFMC),” Dr. Collazo says. “This tight alignment creates a unique culture that’s very patient-centric and family-friendly.”

The presence of Inova’s Women’s Hospital in the same building as Inova Children’s Hospital represents the essence of their



Healing Power

Mended Hearts Celebrates 30 Years of Community Support

In September, the local chapter of Mended Hearts celebrated 30 years of supporting the Inova Fairfax Medical Campus (IFMC) community. Mended Hearts, a national organization and the largest peer-to-peer cardiac support network in the world, brings volunteers who have already had heart surgery into the rooms of patients who have just undergone surgery. “Our mission is to bring hope into the hospital room of the recovering patient,” says Kevin Houlihan, Visiting Chairperson for Chapter 200, the Northern Virginia Chapter.

Twenty-six Mended Hearts volunteers visit patients at IFMC seven days a week, 365 days a year. Learn more at inova.org/mendedhearts. 

collaboration. “If we even suspect that a fetus has a congenital heart issue, experienced pediatric cardiac surgeons and pediatric interventional cardiologists are right here in the same tower,”

Dr. Cohen, who joined Inova in October 2017, stresses.

“No one needs to be transferred, mom and baby can stay together in the same location, and no time is lost in getting the immediate cardiac care that is required.”

Dr. Collazo points out the benefits of IHVI being just steps away from the Inova Children’s Heart Program. “We have the opportunity to diagnose congenital heart disease in utero and stay with that patient on this same campus throughout childhood, the teenage years and long into adulthood,” he says. “I think that shows how invested Inova is in every patient’s cardiac health.” 

Top 50: This year, Inova Children’s Hospital was ranked among the top 50 in the nation for neonatology by *U.S. News & World Report* for the sixth consecutive year. Learn more about this and other awards at inova.org/top50neo.

Maternal Biome Study

FDA allows Inova to proceed with trial on C-section babies

Babies born by Caesarean section, or C-section, have an increased risk of childhood obesity, asthma and allergies. Suchitra Hourigan, MD, pediatric gastroenterologist and Director of Microbiome Research, hypothesizes that health risks

associated with C-section may be because the procedure does not allow for the mother-to-newborn transfer of beneficial vaginal microbes. The Food and Drug Administration recently allowed an Inova Translational Medicine Institute (ITMI) team to proceed with a first-of-its-kind, randomized controlled trial on vaginal seeding, a process that may present a way to safely decrease these health risks.

Vaginal microbiome seeding, done to restore the exposure to microbes, is a simple process that involves swabbing the baby's face and body after C-section delivery with the mother's vaginal flora. "If vaginal seeding decreases risk of childhood health problems in babies born by C-section, this would change the practice of obstetrics as we know it," says Dr. Hourigan.

Notes Ruth Sangra, an Inova nurse and study participant: "As a nurse and, more importantly, as a mom, I feel that this is an easy way I can help my child and other children to better their health."

To gather long-term data, ITMI's five-year study will include 800 mothers and babies. Investigators will monitor each baby's health and microbiome development for three years after birth to examine whether vaginal seeding decreases the risk of obesity, asthma and allergies. [@](#)



Clinical Lead Varsha Deopujari swabs the first newborn involved in Inova's vaginal seeding research.

MORE INFORMATION

If you're interested in participating in Inova's vaginal seeding research or would like to learn more, contact Suchi Hourigan, MD, at **703.776.8199**.

Smart Sips

Inova to eliminate most plastic drinking straws

For well over a decade, Inova has been a leading presence enacting sustainability efforts in the healthcare sector. When J. Stephen Jones, MD, took on the role of President and CEO last April, he considered the downstream impact of materials used throughout the system and advocated for Inova's sustainability efforts. Plastic use is one area of concern.

According to Seema Wadhwa, Inova's Assistant Vice President for Sustainability and Wellness, curtailing the use of plastic drinking straws is a new initiative that will be launched in the fall. "We can have a meaningful impact by cutting back on the use of this material," she says. "Inova

recognizes that plastic straws are not readily recyclable and can find their way to waterways, where they can cause harm to wildlife."

As the first health system on the East Coast to institute the change, Inova will eliminate plastic straws in a phased approach, first by pulling them from retail spaces, such as cafeterias and lounges. Patient care areas will then be reviewed to determine if plastic straw reduction or elimination is possible.

Of course, visitors and patients who have clinical or medical needs for straws will get them. "We have investigated plastic straw alternatives, including paper straws and bio-based straws," says Wadhwa, "and the replacements



Inova's initiative to phase out the use of plastic straws is starting this fall.

have been thoroughly vetted and meet our requirements for usability and cleanliness."

The plastic straw initiative is just one of the efforts in Inova's JustOne Campaign, through which the system is asking everyone to take one small action to foster a healthy environment. [@](#)

Nov. 15 is America Recycles Day and will mark the kickoff of Inova's straw reduction initiative. Learn how you and members of your community can participate. Visit inova.org/JustOne2018.

The Greater Good

Giving to Inova Blood Donor Services helps save lives

Medical emergencies happen every day, and one critical need is blood. Inova Blood Donor Services provides blood to approximately 20 hospitals in the Northern Virginia and Washington, DC, metropolitan area, including Inova's five hospitals.

"Our goal is to collect 200 units [of blood] per day to support the hospitals we serve," explains Nicholas Lilly, Compliance and Regulatory Affairs Manager at Inova Blood Donor Services. "Each organization has a different use level and emergencies happen at all times; sometimes those 200 units could be used within minutes."

Because of this need, Inova Blood Donor Services collects blood on a daily basis, seven days a week, 363 days a year (except on Thanksgiving and New Year's Day, unless there is a special blood drive). Giving blood provides a critical resource for the community while also saving lives.

Note: If you're considering giving blood, visit inovablood.org for more information about eligibility. You may be eligible and not even realize it. Here are some common misconceptions people have about giving blood:

They don't need my blood, there must be a substitute.

False. When it is needed, there is no medical substitute for donated blood.

I can't donate because I have diabetes.

While true for people with type 1 diabetes, as long as diabetes is controlled, people with type 2 diabetes can donate blood.

I don't want to risk getting a bloodborne disease.

There is no danger of contracting a disease from donating blood.



There is no medical substitute for blood, which is why new donors are in demand.

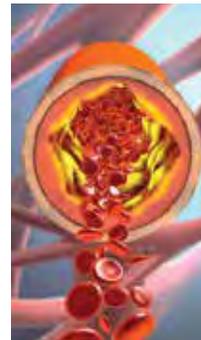
Needles used are sterilized and single-use, meaning a new needle is used for every donation.

Donating blood hurts.

Most donors describe it as nothing more than a pinch.

I've been turned away from donating before, so I shouldn't try again.

Regulations can change and new tests come out that might change your eligibility. Call **1.866.256.6372** to find out if you're eligible. [M](#)



High LDL cholesterol can clog the arteries, raising the risk of heart attack and stroke.

Why do physicians watch cholesterol so closely?

LAMA ALSAMARA, MD, specializes in internal medicine at Inova Medical Group – Falls Church.

I closely watch cholesterol because it's the No. 1 risk factor for heart disease and stroke. That said, monitoring cholesterol is tricky.

To begin with, your body needs some cholesterol. In addition, there are two main types of cholesterol that I need to watch. Each type is different — yet equally important — in determining your risk factor for heart disease or stroke.

First there's low-density lipoprotein (LDL cholesterol). High LDL can lead to plaque buildup in your arteries, which prevents healthy blood flow to the heart and increases risk for heart attack and stroke.

Then there's high-density lipoprotein (HDL cholesterol), which I want to be higher. HDL is like a scavenger, moving bad LDL cholesterol out of the body and lowering risk for heart disease and stroke.

In the past, safe LDL and HDL and total cholesterol levels fell inside strict boundaries and physicians treated to target. Today, I follow the American Heart Association's guidelines, which involve an integrated approach that looks at targets, lifestyle choices and genetics. Then I create an individualized plan that includes healthier lifestyle choices and, if called for, medication. Interestingly enough, my recommendations to lower LDL and raise HDL are often the same: eat healthily, exercise, and be cautious and conscious about what you put in your body. [M](#)



To make an appointment with Dr. Alsamara, call **703.531.2244**.

Inova Blood Donor services is always looking for new donors. For more information, visit inovablood.org or call **1.866.256.6372**.

Pelvic floor disorder is common and treatable.

You're Not *Alone*

Treatment for women suffering from pelvic floor disorder

Ladies, do you leak urine when you cough, sneeze or laugh? Do you frequently have the urge to go to the bathroom? You're not alone. About half of women over age 50 have this condition. And it's got a name: pelvic floor disorder.

Pelvic floor disorder describes a number of conditions that affect the pelvic muscles and organs, causing problems such as urinary or fecal incontinence and pelvic organ prolapse. Because pelvic floor disorders involve sensitive areas and are often caused by childbirth, women are sometimes embarrassed to talk to their doctors about symptoms or they will accept symptoms as "normal." Fortunately, help is available for the unpleasant incontinence, constipation, pain and pressure these disorders can cause. (Learn more on the next page.)

Inova has been leading the charge on treatment of pelvic floor disorder for women in the Northern Virginia and metropolitan DC area since the opening of Inova Women's Hospital in 2016 and even before. This year, the National Association for Continence designated Inova Women's Hospital and its affiliated urogynecology practices a Center of Excellence. Recipients of this designation excel in providing bladder and bowel health-care to patients, and assisting consumers dealing with

the condition of pelvic floor dysfunction and incontinence issues.

"This designation underscores Inova's commitment, as well as the commitment of our urogynecologists, Drs. Jeffrey Welgoss, Nicolette Horbach and Walter von Pechmann, who provide excellent care to the patients we are privileged to serve," notes S. Abbas Shobeiri, MD, MBA, Vice Chairman of Gynecologic Subspecialties at Inova Women's Hospital.

Inova gynecologists provide individualized treatment for every patient, which can include physical therapy and training with exercises, or procedures to correct the issue. Inova Physical Therapy Centers also offer a specialized pelvic floor rehabilitation program that provides a safe space for women to learn and practice exercises that they can then bring home. [@](#)

A COMMON CONDITION

For more information about pelvic floor disorder and how Inova can help, visit inova.org/pelvicfloor.

THE STATS

NEARLY
25% OF
WOMEN IN
THE U.S.
HAVE ONE
OR MORE
PELVIC
FLOOR
DISORDERS.

Just for Women

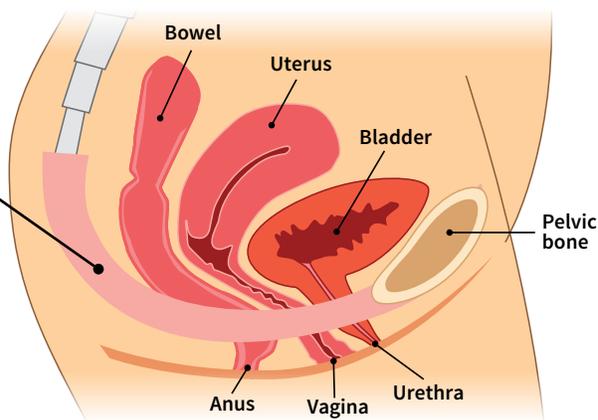
CONDITION:

Women's Pelvic Floor Disorder: A group of conditions affecting the structure and function of the muscles and organs in the pelvis. The disorder relates to an inability to control the muscles of the pelvic floor.

Pelvic Floor Muscles

The most common conditions fall into three categories:

1. Urinary incontinence
2. Fecal incontinence
3. Pelvic organ prolapse



SIGNS OR SYMPTOMS:

Loss of control of urine or stool and protrusion of tissue from the vagina.

Less common symptoms include:

- Constipation or straining pain with bowel movements
- Painful urination, or a frequent or urgent need to urinate
- Lower back pain
- Ongoing pain in pelvic region, genitals or rectum
- Spasms in pelvic muscles

GET ANSWERS

Pelvic floor disorders can be tricky to pinpoint and there may be other causes for some symptoms. Specialists in the pelvic floor can help you determine the problem. To find out if you have this condition and learn what you can do about it, call [571.762.4161](tel:571.762.4161).

Power the Pelvic Floor

This exercise helps you have better control over your pelvic floor muscles. Talk to your doctor before performing it to see whether it could help you.

KEGELS

What: This practice of contracting and relaxing the pelvic floor muscles helps to strengthen them.

How: Contract these muscles and hold them for five seconds. Then release for five seconds. Repeat this 10 times, three times a day.



Enjoying Every *Breath*

THE STATS

INOVA IS THE ONLY LUNG TRANSPLANT PROVIDER IN THE NORTHERN VIRGINIA AND WASHINGTON, DC, METRO REGION.

Patient survives and thrives 20 years after double-lung transplant

On the day Colleen Adamson was listed for a lung transplant by her Inova Fairfax Medical Campus doctors, they asked her if she was ready for the major operation. “Absolutely. I can’t breathe,” she told them. “I can’t wait.”

Little did anyone know on July 3, 1998, that Colleen, then 29, would receive her transplant only 12 hours later. In doing so, she became the first cystic fibrosis (CF) patient to undergo a double-lung transplant at Inova. But two decades later, her vigor and accomplishments have gratified both the Northern Virginia woman and the doctors who brought her back from her near-fatal illness.

“This was a lifesaving procedure for Colleen,” says Steven Nathan, MD, Director of the Advanced Lung Disease and Transplant Program at IFMC. With five-year survival rates after lung transplant currently hovering at approximately 65 percent, “I never would have dreamed she’d be here in 20 years,” Dr. Nathan adds. “When you have a talented team and a motivated patient, those are the two ingredients you need for success.”

Perfect Match

Colleen was a 29-year-old newlywed and in dire straits when Dr. Nathan and Inova took a “leap of faith” and offered her a double-lung transplant. Diagnosed as a toddler with CF — a genetic disease with a current median life expectancy of 38 — her condition had deteriorated so rapidly over the prior year that she needed a tracheostomy and ventilator to breathe. Another hospital in the region had deemed her too sick for a transplant, telling her she had less than six months

Colleen Adamson's transplant team was composed of the following: (top L to R) Meg Fregoso, NP, Jane Harrison, (bottom L to R) Steven Nathan, MD, and Nelson Burton, MD.



to live. However, one of her caregivers suggested she look at Inova’s newly formed Lung Transplant Program.

At Inova, the stars aligned. While Colleen had been eighth on the transplant list, she was the only patient with type B blood, matching that of a donor who was also her age and size. And not only did Colleen survive the procedure, which essentially cured her CF lung disease,





but she thrived. She went on to complete a successful 27-year career in federal government and even toughed through a kidney transplant in 2006 also performed at Inova, which was needed to combat kidney damage from the numerous medications to maintain her donor lungs.

“I think one of the most important things for patients’ short- and long-term survival is that patient’s attitude,” says

Nelson Burton, MD, who was part of Colleen’s Inova transplant team and is now retired. “Colleen was clearly a determined young lady in spite of her situation.”

Colleen marked the 20th anniversary of her lung transplant in July with a reunion with Drs. Nathan and Burton and other Inova team members involved in her care. Traveling with her husband,

Program Evolves, Expands

When Colleen Adamson received her lung transplant at Inova in 1998, the fledgling program had performed less than three dozen such procedures over its first several years. But now 20 to 30 lung transplants are the yearly tally, with the program — the only one in the Washington, DC, area — also encompassing leading-edge treatments for advanced lung diseases that may avoid the need for risky transplant surgery.

“To take on a patient who’s that sick and debilitated was a big step for us at the time, and she kind of set the path for the future of the program,” says Steven Nathan, MD, Director of the Advanced Lung Disease and Transplant Program at Inova Fairfax Medical Campus.

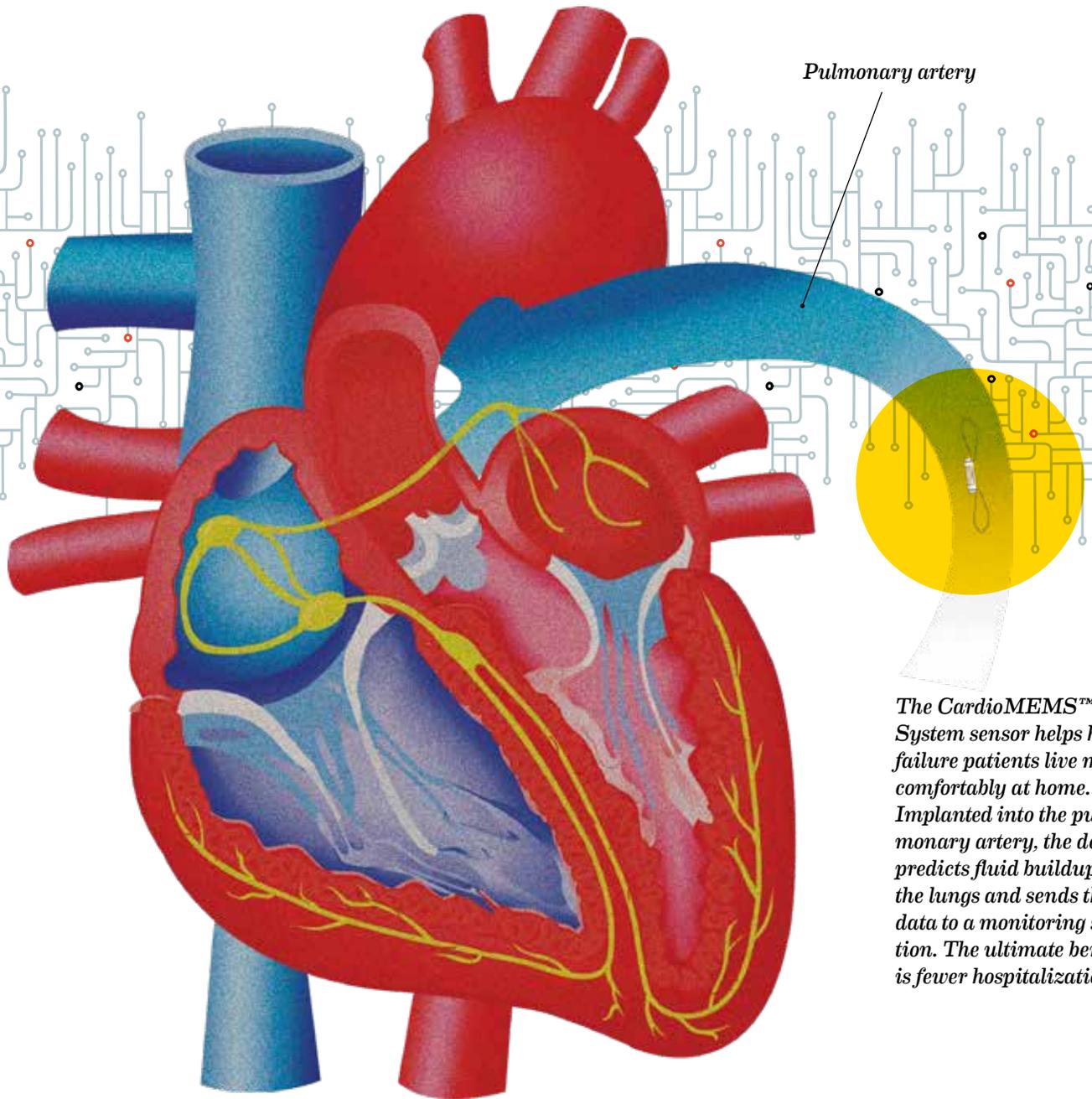
Thankfully, newer targeted therapies for devastating lung conditions have relegated transplant surgery to second place, representing a significant advancement. “Through the development of novel therapies, we like to say that we’re in the business of putting ourselves out of [the lung transplant] business,” Dr. Nathan says.

Scott and hiking with their dog are among her passions, and she’s also considering writing a book about her experiences. Continuing her efforts to promote organ donation to community and school groups is also a high priority.

“I feel blessed and lucky every day,” Colleen says. “If I can get just one person to either say they’ll be an organ donor or change one person’s mind, it’s totally worth it.” 🐾

BREATHE BETTER

Learn more about the Advanced Lung Disease and Transplant Program and watch Colleen Adamson’s reunion with her care team at [inova.org/colleenstory](https://www.inova.org/colleenstory).



The CardioMEMS™ HF System sensor helps heart failure patients live more comfortably at home. Implanted into the pulmonary artery, the device predicts fluid buildup in the lungs and sends this data to a monitoring station. The ultimate benefit is fewer hospitalizations.

Home Is Where the *Heart* Is

Remote monitoring device provides proactive, personalized care for heart failure patients

Walter Williams, now 80, and his wife, Jeannette, rest a little easier these days, thanks to a unique, implantable, remote monitoring device that helps manage Walter's heart failure.

But it was a bumpy road for a while.

Walter was first diagnosed with heart failure in 1991, a condition whereby the heart muscle is damaged and cannot effectively pump blood throughout the body. This can lead to frequent and life-threatening fluid buildup in the lungs and surrounding body tissues as well as kidney failure.

The husband and wife team were vigilant about watching Walter's diet and fluid intake, but by 2016, Walter's condi-

tion had worsened. The Gaithersburg, MD, resident was nearing monthly visits to Inova Fairfax Medical Campus (IFMC) for emergency care, and with each hospitalization, his kidneys grew weaker, which made dialysis a looming possibility. "Every day was so stressful," Jeannette recalls. "We were always adjusting Walter's medication but never sure what, if anything, was working."

regarded implantable, battery-free sensor that essentially predicts fluid buildup in the lungs. Inova is believed to be the first hospital in the Washington, DC, area to implant this tiny, state-of-the-art monitoring sensor into a patient diagnosed with heart failure. One compelling reason to use the device? The chance to reduce hospital readmissions.

"We know that hospitalization is a significant marker for heart failure severity. But more doctors, nurses and drugs weren't bending the curve on hospital readmissions. Neither were daily weigh-ins and strict diets with limited salt intake," notes Dr. Desai. "Then we found the CardioMEMS system. This was highly personalized, precision

healthcare, which is always

Inova's goal. So we were very

early proponents."

Did Inova's hunch pan out?

The evidence points to yes.

Since Walter had the device

implanted, his ER visits have

dropped to only once in the

past 14 months. "My quality

of life is much better now —

more normal," he says.

Adds Jeanette, "The stress

level has been significantly

reduced. We are so thankful

to have Dr. Desai and his team."

Walter isn't the only patient benefiting from the CardioMEMS system. A 2014 clinical trial found that the device:

- Reduced hospital admissions for heart failure by 37 percent
- Reduced hospital re-admissions within 30 days by 78 percent
- Was free of complications for 98.6 percent of patients

Staying Ahead of the Curve

For Walter, the path to better health began with Dr. Desai implanting the monitoring sensor — about the size of a paper clip — into the patient's pulmonary artery (the vessel that carries blood from

the heart to

the lungs).

The minimally

invasive, outpatient

procedure took about

30 minutes. After a brief recovery period, the patient was discharged and at home. Now, every day, Walter lies on a pillow and presses a button on a small home monitoring electronics unit. The system then measures the pressure inside Walter's artery, which forecasts fluid buildup in his lungs, and automatically sends this data to a monitoring station that is closely tracked by Amanda Millheim, RN, Heart Failure Nurse Specialist.

If Walter's pressure is higher than it should be, it's a sign that fluid might be backing up into his lungs. That's when Millheim alerts Dr. Desai, who can immediately adjust Walter's medications.

Because the CardioMEMS system senses increasing pressure up to two weeks before trauma strikes, it's a proactive system rather than a reactive system, giving doctors and nurses time to stay ahead of the curve and hopefully prevent hospitalization, or worse.

What sets Inova's system apart is the tight bond between Millheim and her Inova patients being remotely monitored. "Amanda is like a mother hen watching over our heart failure patients," Dr. Desai says. "They know she's tracking their data, preparing their weekly reports and ready to answer any question at any time."

"The CardioMEMS system is a tool that allows us to create a highly personalized approach to heart failure care," he adds. "It's a system that's brought some amazing results for so many of our patients." 

THE HEART OF IT

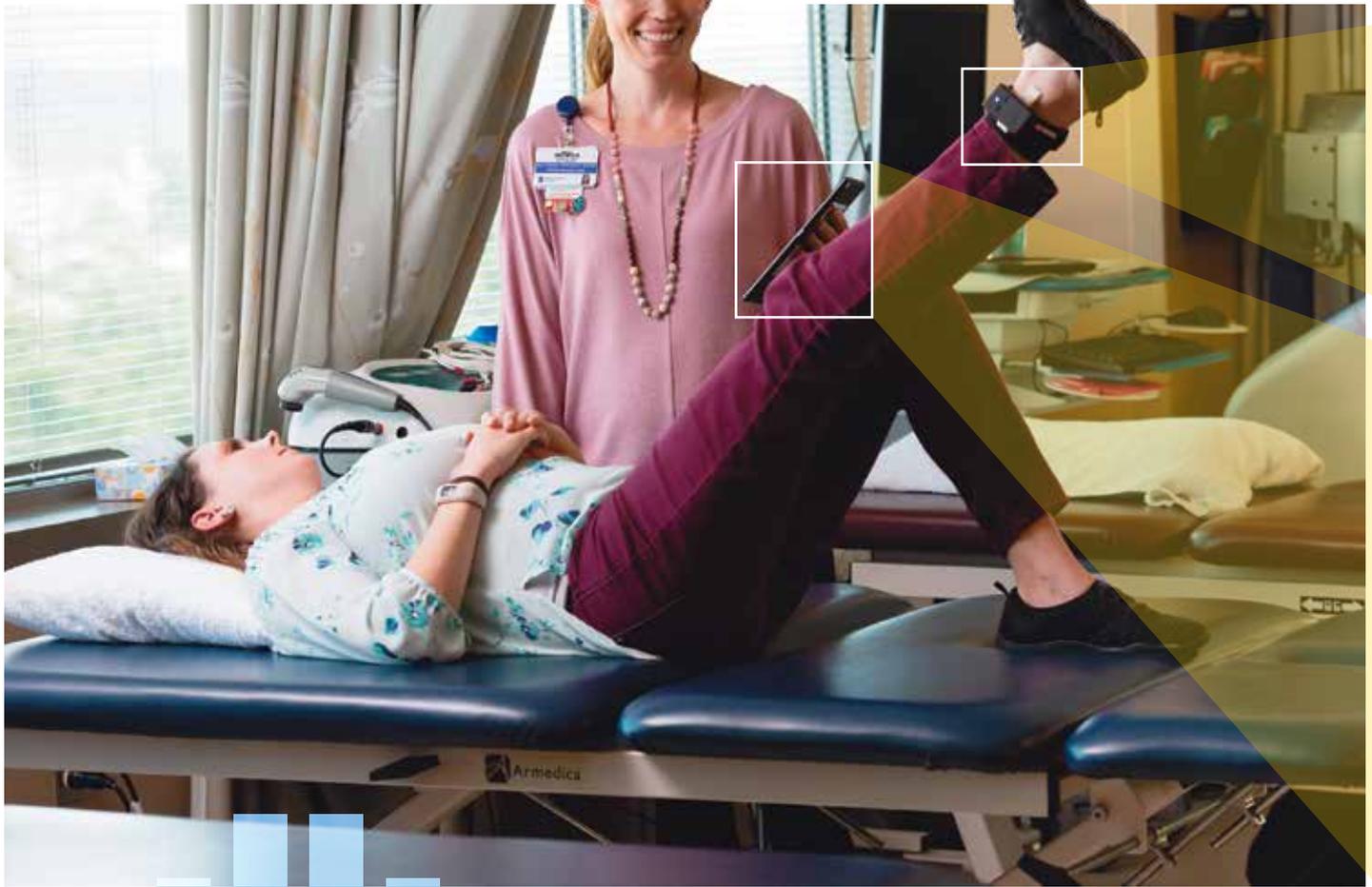
Learn more about the groundbreaking CardioMEMS HF System and other treatments for heart failure at inovaheart.org/heart-failure/treatments.



The CardioMEMS™ HF System sensor is about the size of a large paper clip and transmits data on the pressure within the pulmonary artery to a remote sensing device (above right).

A New Approach

That's when Walter's doctor, Shashank Desai, MD, Medical Director of the Advanced Heart Failure and Transplant Program at IFMC, suggested the CardioMEMS™ HF System, a new and highly



Photos: Robert Rathe

Driven by *Data*

Inova partners with tech company to improve physical therapy results

Imagine you had knee surgery. Everything went well and you're back home. Of course, your physical therapist (PT) recommended a therapy treatment plan — which includes exercises at home as well as with your therapist at a physical therapy clinic. In an ideal world, you follow your PT's directions, and you're headed for a remarkable recovery.

"Following your PT's instructions isn't always easy," emphasizes Mike Thomas, Co-Director of the Inova Personalized Health Accelerator (IPHA), a program looking to invest capital in companies with early-stage technologies that are of strategic interest to Inova.

Enter KinometriX. To work around noncompliance, Thomas and the IPHA team recently partnered with this Maryland-based company and developer of a platform to track patients' physical therapy

Above, Monika Stolze, Program Manager for Adult Therapy Services at Inova Loudoun Hospital's Outpatient Specialty Rehabilitation Center, tests out the KinometriX sensor on athletic trainer Janna Ward.



The KinometriX sensor can be worn on the ankle, wrist or arm, and tracks relevant rehabilitation factors, including range of motion, torque and repetitions. Patient activity is tracked via a mobile app (below) and is reported back to the caregiver team.



progress and hopefully keep them engaged in their rehabilitation process. “Life gets busy, and physical therapy sessions get canceled. Some patients stop exercising because progress is often so gradual they don’t even realize they’re improving,” Thomas says.

Accelerating the Goal

How does KinometriX work? Simply put, the patient finds a convenient time to put a small sensor over their injured joint — similar to positioning a wireless-enabled wearable activity tracker. Next the patient performs their exercise treatment plan,

such as kicking the leg up and down as fast as possible 10 times. The sensors, powered by artificial intelligence algorithms, collect motion data, which are uploaded to KinometriX’s cloud platform. There the data are analyzed for key metrics, including range of motion, speed of motion, fatigue and neuromuscular control.

Tapping into the KinometriX app, patients as well as their physical therapist and healthcare provider can review real-time data and measure improvements. Specific to the patient, this data can help predict treatment progress or point to a need for plan adjustments.

A Promising Test Drive

Currently, Inova Loudoun Hospital is working with KinometriX. “Everything is in the early research and development phase,” Thomas says. “We’re refining the system’s existing algorithms and collecting clinician

feedback, which will help us perfect the platform. We’re already excited about the potential here.”

By offering access to Inova, IPHA plans to attract leading healthcare entrepreneurs, investors and researchers, Mike Thomas, Director of IPHA, says. These unions will ultimately bring unique expertise to Inova’s ever-progressing quest to better evaluate, develop and implement technology solutions that add value to Inova’s operations, improve outcomes and keep Inova at the vanguard of healthcare innovation.

A Strong Union

KinometriX is an ideal example of an Inova Personalized Health Accelerator (IPHA) candidate, with the KinometriX team working with IPHA as well as Inova leaders to further develop and refine this innovative technology. If successful, this new technology

should provide better outcomes to Inova patients.

As Program Manager for Adult Therapy Services at Inova Loudoun Hospital’s Outpatient Specialty Rehabilitation Center, Monika Stolze, DPT, sees positive patient reactions to the KinometriX platform. “Putting user-friendly data at our patient’s fingertips keeps them involved in their rehabilitation. They’re part of the process — instead of being passive recipients of care. We think this will increase compliance.”

With patients able to collect data at home, when it’s convenient, Thomas suspects that this, too, may inspire maximum patient follow-through with a clinician therapy plan. “It’s our hope that having access to objective, real-time data — without needing to schedule quite so many clinic appointments — will encourage patients to stick to their rehabilitation therapy,” he says.

Also, the KinometriX platform, based on artificial intelligence that presents immediate data, represents the next generation in healthcare. “We currently have the means to assess everything KinometriX measures, but it has to be done in the clinic,” Stolze says. “This platform represents the future, and what clinicians as well as patients expect.”

AN EYE ON AI

Learn more about the Inova Personalized Health Accelerator at inovapha.org.

You're Approved

New software system streamlines authorizations to speed patient care

In the hopes of having better medical outcomes, more physicians and patients are asking for genetic and molecular diagnostic tests, creating more personalized treatments for patients.

Unfortunately, it is also time-consuming and expensive. Many times, undergoing genetic testing requires prior authorization by a doctor, which is followed by a complicated matrix of requirements that involve multiple stakeholders. Then, even after a prior authorization has been obtained, a lab will still need to verify the authorization, which can create a back-and-forth dialogue that can delay the process and even negate reimbursement if an insurer refuses to pay.

Which is why the Inova Personalized Health Accelerator (IPHA) is rolling out CoverMyTest, a software system designed to streamline and automate the workflow for prior authorizations. The infrastructure will help expedite patient care and allow labs and physicians to efficiently conduct patient eligibility checks, deliver electronic prior authorizations and collect insurance verification.

In 2019, Lesley Anderson, Director of Business Development, Inova Genomics Laboratory, anticipates that more than 3,000 of about 10,000 patients receiving genetic testing at Inova will need preauthorization.

"Physicians care about this because they want to know when the lab results are in, and the lab cares about where we are in that process of getting everything authorized," says Rick Gordon, Co-Director of IPHA. "This gives everybody visibility, making sure patients can get the tests they need." 

CARE TAILORED TO YOU

Learn more about genomics and the Inova Center for Personalized Health at inova.org/icph.

IN my own words

Inova's experts speak out

The Bar Is Set

Loring Flint, MD, Chief Physician Executive and High Reliability Officer, seeks consistency in healthcare

As the Chief Physician Executive and High Reliability Officer, Loring Flint, MD, is tasked with setting top priorities and ensuring quality, safety and effective results create a positive patient experience. In 2018, his role shifted from Chief Medical Officer to Chief Physician Executive to help coordinate physician partnerships, drive the strategic direction of Inova and maintain operating responsibility for several departments.



Photo: Robert Rathe

“[ZERO HARM] STARTS WITH THE SIMPLEST THING: 100 PERCENT HAND WASHING.”

What are you hoping to accomplish in your new role?

We are trying to create excellence in everything we do and have a zero-harm goal for all of our organizations. The latter is an aspirational goal because we are dealing with humans; the biology is different in each person, and how each handles medications, procedures and fighting disease is different. A key focus is eliminating and preventing any infections obtained in a hospital.

How are you trying to make this goal a reality?

It starts with the simplest thing: 100 percent hand washing — washing hands when going in and out of a room, and after touching a patient or various pieces of equipment in the room. It’s making sure you have sterile barriers when you’re inserting a catheter or IV and cleaning the line every day and removing the catheters as soon as they are no longer needed. We are standardizing our processes to be sure we are doing everything possible to not inadvertently transmit an infection to a patient.

What success have you seen so far?

Over the past two years, using a commonly accepted measure of harm, we have decreased harm by over 57 percent. We have a number of units, such as our pediatric oncology team, that have gone over 12 months without having an infection with a central line. Several units have had three to six months with no harm.

What question should physicians be asking patients more readily?

Ask a patient at the end of the visit, “Is there anything else I can answer or do for you today?” It opens the door for the quiet issue that is lurking in the background. If a patient is coming in for a blood pressure check, you might learn they are really concerned about depression. It’s important to make sure you’re really being open and partnering with your patients. 

Visit inova.org/physicians to find the right doctor for you.



Crucial Help

Philanthropy drives pivotal program at Inova

When a person has been a victim of physical and sexual assault, they are at their most vulnerable. They may struggle with being able to inform others or share details of their story, much less offer forensic evidence of the crime.

Thankfully, the Inova Ewing Forensic Assessment and Consultation Team (FACT) program — the only one of its kind in Northern Virginia — provides compassionate, skilled care that addresses victims’ emotional trauma from abuse, and also supports the collection of DNA evidence and documents injuries to assist the criminal justice process.

As crucial as this program is, it would not exist in its current form without a foundation of philanthropy, says FACT Director Mary Hale. In 2002, Betty and the late Charles Ewing and their family established dedicated funding for FACT services at Inova Fairfax Medical Campus, and in 2012 they supported the expansion of the department. The commitment of the Ewing family has allowed FACT to become one of the most comprehensive forensic programs in Northern Virginia. Growing from a staff of only on-call nurses, FACT now has six full-time and four part-time forensic nurses as well as a dedicated on-call staff. This ensures no victim has to wait for care.

In another generous gesture, the Ewing family also has expanded services to Inova Loudoun Hospital to improve access to care. Accessibility to services means more victims will reach out for help, Hale says. “To reduce the number and extent of these crimes, we need this program, as well as community education and resources,” she says. “This program makes a huge difference in the community, but we can’t do it alone. Through generous philanthropy and the incredible FACT team, we’re making an important impact every day for the most vulnerable among us.” 

EMPOWERING VICTIMS

Learn more about the FACT program at Inova Fairfax Medical Campus and Inova Loudoun Hospital at inova.org/FACT.

Inova is a not-for-profit healthcare system located in Northern Virginia in the Washington, DC, metropolitan area, serving over 2 million people with over 1,700 licensed beds. It consists of five hospitals including the area's only Level 1 Trauma Center and Level 4 Neonatal Intensive Care Unit. Inova encompasses many health services including the internationally recognized Inova Heart and Vascular Institute (IHVI), Inova Translational Medicine Institute (ITMI), Inova Neuroscience Institute, Inova Schar Cancer Institute and Inova Children's Hospital. Inova's mission is to improve the health of the diverse community it serves through excellence in patient care, education and research. More information about Inova is at inova.org.

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ask THE EXPERT



Knees, Hips, Shoulders and Other Joints

Treatment Options for Hip and Knee Arthritis

Michael Anvari, MD
Wednesday, Oct. 24, 6 p.m.
Inova Fairfax Medical Campus
*Physicians Conference Center
3300 Gallows Road
Falls Church, VA
*or join via webinar

Nigel Azer, MD
Wednesday, Nov. 28, 6 p.m.
Inova Alexandria Hospital
Boardroom
4320 Seminary Road
Alexandria, VA

Treatment Options for Shoulder Pain and Arthritis

Adam Lorenzetti, MD
Wednesday, Oct. 24, 6 p.m.
Inova Loudoun Hospital
44055 Riverside Parkway
Suite 110
Leesburg, VA

Osteoarthritis and the Latest Advances in Joint Replacement

Michael Anvari, MD
Wednesday, Nov. 14, 6 p.m.
Inova Fairfax Medical Campus
*Physicians Conference Center
3300 Gallows Road
Falls Church, VA
*or join via webinar

Heart and Vascular

Preventing Heart Disease

Stuart Sheifer, MD, FACC
Monday, Nov. 5, 6 p.m.
Inova Fair Oaks Medical Campus
Building 3580, Auditorium
3580 Joseph Siewick Drive
Fairfax, VA

Minimally Invasive Techniques to Treat Valvular Heart Disease

Matthew Sherwood, MD
Wednesday, Nov. 7, 6 p.m.
Inova Fairfax Medical Campus
*Physicians Conference Center
3300 Gallows Road
Falls Church, VA
*or join via webinar

Atrial Fibrillation

Haroon Rashid, MD
Wednesday, Dec. 12, 6 p.m.
Inova Fairfax Medical Campus
*Physicians Conference Center
3300 Gallows Road
Falls Church, VA
*or join via webinar

Spine

Advanced Treatment for Neck Pain

Corey Wallach, MD
Tuesday, Nov. 27, 6 p.m.
Inova Alexandria Hospital
Boardroom
4320 Seminary Road
Alexandria, VA

Special Events

80th Annual Ladies Board Rummage Sale

Saturday and Sunday, Oct. 20 and 21
Morven Park Equestrian Center
41580 Sunday Morning Lane
Leesburg, VA

Learn more at ladiesboard.org/rummage-sale.

Brain Injury Services: The Journey Conference

Thursday, Nov. 1
Inova Fairfax Medical Campus
Physicians Conference Center
3300 Gallows Road
Falls Church, VA

Register at inova.org/thejourneyconference.

Inova Medical Spa Open House

Presented by Inova Medical Spa & Life With Cancer
Tuesday, Nov. 13, 6 p.m.
Inova Medical Spa
21785 Filigree Court
Ashburn, VA

2nd Annual Holiday Open House

Wednesday, Dec. 5, 6 p.m.
Inova HealthPlex Ashburn
22505 Landmark Court
Ashburn, VA

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Looking for a doctor? Visit inova.org/physicians or call our 24/7, bilingual physician-referral service at **1.855.My.Inova (1.855.694.6682)** to find one close to home or work.

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