

# HV

INNOVATE / INSPIRE / HEAL

## Cardiologists create breakthrough care

Dr. Tiffany Randolph and other leading physicians share their innovations

## Images worth a thousand words

HeartFlow Analysis is revolutionizing cardiac imaging and care in the Triad

## Robotic surgery advancements

Less-invasive chest surgery reduces pain, speeds healing time



**CONE HEALTH**<sup>®</sup>  
Heart & Vascular Center



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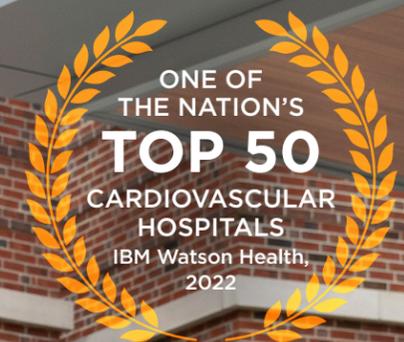
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**We're deeply committed to team-based cardiovascular care at Cone Health, with physicians, advanced practice providers, nurses and an array of care team members working together for our patients at every step of their health care journey.**

— TAMMY CAVINESS, RN, EXECUTIVE DIRECTOR OF HEART AND VASCULAR NURSING, CONE HEALTH

Meet the movers and shakers of Cone Health's Heart & Vascular Center, and get inspired by their life-saving innovations and vision for groundbreaking preventative care. [CLICK OR SCAN QR CODE TO PLAY VIDEO.](#)





**H&V MAGAZINE IS A MULTIMEDIA EXPERIENCE!**

We hope you enjoy *H&V Magazine*. Please scan the QR Codes throughout these pages for **inspiring videos, in-depth stories and other enriching content.**

# Leading Edge Care

Dear friends,

**The 2022 *H&V Magazine* spotlights our recent advancements in heart and vascular care, our approach to innovation and our work to improve cardiovascular wellness across the communities we serve.**

In these pages, you'll see why Cone Health is rated one of the nation's best health systems for heart and vascular care, including the designation of The Moses H. Cone Memorial Hospital as one of 2022's Top 50 Cardiovascular Hospitals by Fortune and IBM Watson Health. **Our quality begins with outstanding physicians and care teams deeply committed to their patients.** These providers are expanding traditions of excellence and innovation that are hallmarks of cardiovascular care at Cone Health. From groundbreaking innovations in heart attack care in the 1980s and '90s to today's AI-driven diagnostic imaging, minimally invasive surgery options and proactive approaches to prevent heart disease, our focus on what's best for patients continues to place us at the forefront of identifying and adopting the most effective approaches to cardiovascular care.

Because of our commitment to constant innovation to achieve the best possible patient outcomes, we attract top talent and have assembled a truly remarkable cardiovascular care team. From prevention to acute care, our world-class physicians, advanced practice providers, nurses and staff are here for you. We encourage you to get to know their work in the stories ahead. 🌟

**RUTH FISHER, MBA**  
Vice President, Heart and Vascular, Imaging and Respiratory Services

**JAKE HOCHREIN, MD**  
Chief, Cone Health, Heart and Vascular Service Line

# NEWS & UPDATES

Stay on top of what's new and what's coming up in heart and vascular care at Cone Health.

## PHILANTHROPY

## Preventing Heart Failure in Cancer Survivors

Developing heart problems after beating cancer has become all too common. Research indicates between 5-15% of cancer patients who survive the disease will develop heart failure. Fortunately, cancer survivors in the Triad have a ray of hope. The new **Chick and Konni Dee Cardio-Oncology Program Development Fund** will help Cone Health advance its cardio-oncology research. Many cancer treatments, such as chemotherapy and radiation therapy, cause heart damage later in life. To better understand the issue, Cone Health launched the fund with a gift from Greensboro residents **Chick and Constance "Konni" Dee**. It will support Cone Health's research into finding better ways to detect, monitor and treat the effects of cardiotoxicity. Donations speed the advancement of cardiovascular care at Cone Health. To make a gift, visit [conehealthphilanthropy.org](https://conehealthphilanthropy.org).

## OPENINGS

## New HeartCare Practice

The 10th Cone Health Medical Group HeartCare practice will open in Spring 2022 at **MedCenter Greensboro**, located at Battleground Avenue and Drawbridge Parkway (artist's rendering below). Led by Bridgette Christopher, MD, and Tiffany Randolph, MD, the practice will offer another convenient cardiovascular care location, adding to HeartCare practices in Asheboro, Burlington, Eden, Greensboro, High Point, Kernersville, Madison and Reidsville. More information is available at [conehealth.com/heartcare](https://conehealth.com/heartcare).



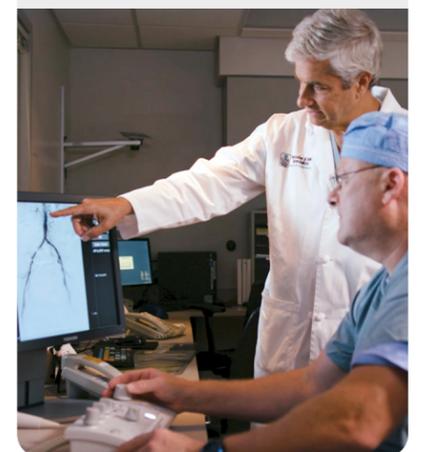
## New Women's Heart Health Clinic

Cone Health will open a new **women's heart health clinic** in 2022 at the **Center for Women's Healthcare**, located at MedCenter for Women, 930 Third Street in Greensboro, NC. Led by **Kardie Tobb, DO**, the clinic will focus on cardiovascular care for pregnant and postpartum women and women planning for pregnancy. In addition to caring for obstetrics patients with high-risk cardiovascular conditions during pregnancy and postpartum-related cardiovascular conditions, the clinic offers proactive, preventive care to reduce cardiovascular risk among women from pre- to post-pregnancy. More information is available at [conehealth.com/medcenterforwomen](https://conehealth.com/medcenterforwomen).

## EXPANSION

## Vascular Care Expands at Annie Penn Hospital

Patients with kidney failure in Rockingham County and southern Virginia now have a more convenient location for surgical procedures providing access for dialysis. Vascular surgeon **Todd Early, MD**, (below, standing) is now providing hemodialysis access at **Annie Penn Hospital**. For Rockingham County and southern Virginia residents, this means access to the same high-quality procedure closer to home. Dr. Early sees patients in need of vascular services in a new Vascular and Vein Specialist branch office located at 621 South Main Street, Suite 205 in Reidsville.



Care teams plan the new space.

## EXPANSION

# Alamance Regional Expands Heart and Vascular Services

THE MULTIMILLION DOLLAR EXPANSION OF ALAMANCE REGIONAL MEDICAL CENTER MEANS NATIONALLY LEADING HEART AND VASCULAR CARE WILL REMAIN CLOSER TO HOME FOR THOUSANDS OF PATIENTS.

**A**lamance Regional Medical Center is expanding its Heart & Vascular Center with a \$34 million project that will add 14,000 square feet and renovate nearly 49,000 square feet while creating a new, separate entrance for cardiovascular patients. Set for completion by the end of 2023, the project will expand treatment capabilities for patients and ensure that the hospital's nationally recognized excellence in heart and vascular care continues for decades.

### Key enhancements include:

- The expansion and modernization of existing cardiac catheter labs and addition of a cardiovascular lab to accommodate more interventional equipment for higher-acuity patients.

- Enlargement and modernization of pre- and post-procedure spaces.
  - A new CT scanner with specialized cardiac imaging capabilities.
  - Larger electrophysiology and interventional radiology departments enabling increased capacity in placing pacemakers, defibrillators and implantable cardioverter defibrillators, as well as new procedures for ablation that will treat certain heart-rhythm abnormalities.
  - Increased opportunities for more cardiovascular patients at Alamance Regional to participate in the latest advancements in care through clinical trials.
- Muhammad Arida, MD**, who specializes in interventional cardiology and endovascular

medicine, noted the expansion is part of ongoing investments in cardiovascular care at Alamance Regional, including a new ability to treat patients in cardiogenic shock who experience a rapid loss in their heart's ability to pump enough blood to meet the body's needs. Using a mechanical heart pump called Impella, patients in critical

condition at Alamance Regional are now able to receive support for their heart function quickly and closer to home instead of being transferred.

"Our heart and vascular care at Alamance Regional is already recognized nationally for medical excellence," says Dr. Arida. "This expansion reflects our commitment to continue

and deepen the quality of cardiovascular care available here locally."

Adds **Blairton Hampton, Chair, Alamance Regional Charitable Foundation Board of Directors**, "Community support accelerates heart care innovation in Alamance County. Learn how your gift can make a difference at [conehealthphilanthropy.org](https://conehealthphilanthropy.org)."

"Physicians, nurses and the entire spectrum of our care teams involved in treating patients are leading the design of this new space, so it reflects our medical and clinical expertise as well as our commitment to achieving excellence for our patients," says **Gregory Schnier, MD** (below center), pictured with **Alexander Paraschos, MD, PhD** (left), and **Brian Agbor-Etang, MD**.

Muhammad Arida, MD



This page and opposite (Arida): Photos by Christopher English

## \$34M

PROJECT

## 14,000

SQUARE FEET ADDED

## 49,000

SQUARE FEET RENOVATED



Left to right:  
Zane Atkins, MD, and  
Daniel Bensimhon, MD

## NEW TECHNOLOGY

# Advanced Life Support Arrives at Cone Health

TEAMWORK, PERSEVERANCE AND COMMUNITY SUPPORT BRING LIFE-SAVING EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO) TECHNOLOGY TO CONE HEALTH.

With cardiogenic shock, a life-threatening heart condition, every second counts. Knowing this well, a multidisciplinary team at the Cone Health Heart & Vascular Center worked together to bring **Extracorporeal Membrane Oxygenation (ECMO)**, an advanced form of life support, closer to home for central North Carolinians.

Thanks to the team's ingenuity and fortitude as well as significant

donations from the community, the ECMO program came to fruition in November 2020, helping patients suffering from a variety of severe cardiac and pulmonary conditions. **Daniel Bensimhon, MD**, a cardiologist specializing in heart failure, says candidates for the procedure are in such severe condition that nearly all of them would die without it.

Today, the advanced life-support unit is also providing an extra

avenue of care for severe cases of COVID-19. Over the first year of the program, the ECMO team has saved the lives of six patients, three of whom had severe cases of COVID-19.

ECMO offers a fighting chance to patients experiencing cardiogenic shock as well as those recovering from invasive cardio or thoracic surgery or a serious trauma.

The procedure involves a miniature heart-lung machine called **Cardiohelp** that pumps and oxygenates the blood of patients whose organs are failing due to inadequate blood flow. This allows the heart and lungs to rest and recover while the machine performs their vital functions.

"From my perspective, the real advantage of having ECMO in our building as it relates to cardiovascular disorders is that it augments our current capabilities in treating cardiogenic shock," says **Zane Atkins, MD**, a cardiothoracic and thoracic surgeon at Cone Health. "ECMO is an additional tool to apply in conditions of cardiogenic shock and to allow stabilization of a really sick person such that the underlying problem can be diagnosed and fixed. Without that support, you just continue to go down the spiral, and it's hard to pull them out of that tailspin."

Dr. Bensimhon says it's not just the physicians who made ECMO at Cone Health possible, noting the integral roles of administrators like **Dee Talley, RN, BSN, MHA**, who created the program, and the willingness of surgeons to perform the procedure.

The team consists of top-notch experts, including cardiac and

**OVER THE FIRST YEAR OF THE PROGRAM, THE ECMO TEAM HAS SAVED THE LIVES OF SIX PATIENTS, THREE OF WHOM HAD SEVERE CASES OF COVID-19.**

thoracic surgeons, critical-care pulmonologists, and advanced heart failure cardiologists. There are 12 ECMO specialists — RNs and RTs who received training to monitor and maintain the pump in the cardio and cardiothoracic ICU — as well as five perfusionists who monitor and maintain the pump in the operating room and cath lab.

Their goal is to make Cone Health a shock resource center for central North Carolina — a local lifeline for patients in cardiogenic shock during which their lives hang in the balance.

"We want people to be able to pick up the phone, whether it's cardiogenic shock or respiratory failure," says Dr. Bensimhon. "We want people to say, 'Hey, Cone's an option here. Maybe they can help us.' That's really the goal here. It's to provide a support team to the patients of this region that they didn't have before and who would risk dying in transport waiting to receive advanced life support at a hospital that's further away." 🌟

 **ECMO to the Rescue**  
CLICK OR SCAN QR  
CODE TO READ MORE

Read the harrowing story of **D'Andrea Penn**, a young mother who suffered multiple life-threatening injuries in a severe car accident and lived. Find out how the general surgery and ECMO teams rallied to save, rehabilitate and celebrate Penn — and her remarkable resolve and recovery.



D'Andrea Penn celebrates with her care team.

Photo courtesy of D'Andrea Penn



# Breakthrough Leadership

CHARTING THE FUTURE OF CARDIOVASCULAR CARE THROUGH CLINICAL TRIALS AND PRACTICAL INNOVATION.

Illustrations by Gluekit

A legacy of ingenuity, passion and concern for the community has created a culture of “practical innovation” in heart and vascular care at Cone Health. Groundbreaking clinical trials at the LeBauer-Brodie Center for Cardiovascular Research and Education allow for quick implementation of major advances in care, saving countless lives and improving health for thousands of patients. Today’s pioneers are bringing some of the most-advanced capabilities available to the Triad and building on decades of leadership in heart and vascular care innovation. >>

From left: Dalton McLean, MD; Tiffany Randolph, MD; Thomas Stuckey, MD; Bridgette Christopher, MD, PhD; Wells Brabham, MD; James D. Allred, MD; Jennifer Knapp, RN, lead clinical research coordinator

In the mid-1980s, a group of Cone Health physicians sought to improve survival rates of patients suffering from acute myocardial infarction — commonly known as a heart attack. Their tactic? Replacing the use of risky clot-busting drugs with a new approach called balloon angioplasty, involving the insertion and inflation of a balloon to quickly open the blocked artery and restore blood flow to the heart. Deemed renegades at the time, Cone Health cardiologists **Bruce Brodie, MD**, and **Richard Weintraub, MD**, pioneered this life-saving procedure.

“A small number of cardiologists nationally were really setting the stage for a big international breakthrough, including us in Greensboro, and it was controversial at the time,” says **Thomas Stuckey, MD**, another member of the group advocating this trendsetting procedure.

Ultimately, the physicians were successful. After multiple trials were published in the *New England Journal of Medicine* and other publications, balloon angioplasty became the nationwide standard of care, helping reduce the rate of deaths following a heart attack in the U.S. from 25% to 2%. The LeBauer Cardiovascular Research Foundation, founded in 1991 by Drs. Brodie and Stuckey and Denise Muncy, RN, was at the forefront of this movement.

In the years to follow, Cone Health cardiologists played prominent roles in subsequent innovations that further improved patient outcomes, including stents



“  
We constantly come back to practical innovation, a willingness to test new approaches, to do things better in ways that improve patient outcomes, as the basis of everything we do.”

— THOMAS STUCKEY, MD

that keep the arteries open after the balloon angioplasty and an emphasis on a rapid response process that dramatically reduced the average wait time for heart attack patients to receive treatment. This focus on practical innovation has led to benefits locally, with The Moses H. Cone Memorial Hospital noted for one of the lowest heart attack readmission rates in the U.S.

“It’s truly been the privilege of a lifetime,” Dr. Stuckey says

fondly. “We’re able to provide world-class care because we constantly come back to practical innovation, a willingness to test new approaches, to do things better in ways that improve patient outcomes, as the basis of everything we do.”

Dr. Stuckey has led continued breakthroughs as a cofounder and current medical director of the LeBauer-Brodie Center for Cardiovascular Research and Education. The center has been home to more than 500 clinical trials.

“Clinicians are often cautious in changing their approach to care,” Dr. Stuckey says. “When they’re part of a safe clinical trial where new approaches are being tested, then care changes and improves faster because your staff and your physicians are learning in real time how they can do things differently and better — sooner.”

The LeBauer-Brodie Center’s ongoing national leadership continues to draw top medical talent to Cone Health. An array of 31 clinical trials with nine more on deck are now underway there. In the stories that follow, take a glimpse into the future of heart and vascular care at Cone Health.

# Alleviating Hypertension

## PHYSICIAN LEAD

**Tiffany Randolph, MD**  
Cardiologist

116  
million

PEOPLE IN THE U.S.  
HAVE HYPERTENSION,  
ALSO KNOWN AS HIGH  
BLOOD PRESSURE



**THE TRIAL:** Remote Blood Pressure Monitoring for Resistant Hypertension

**THE PROBLEM:** Nearly half of all adults in the U.S. — about 116 million people — have hypertension, also known as high blood pressure, a condition that increases the force of blood against artery walls and can lead to health problems, including heart disease. Black adults meet criteria for a hypertension diagnosis at a rate about 7.5% higher than white adults.

**HOW THE TRIAL WILL HELP:** In 2021, Dr. Randolph created the Advanced Hypertension Clinic at Cone Health, designed to provide accessible, comprehensive and coordinated care for patients with high blood pressure and, in particular, to help those with continuing high blood pressure even after using medications to treat it. Now, using a grant for cardiovascular innovation from the North and South Carolina chapter of the American College of Cardiology, Dr. Randolph is launching a 2022 study that employs Bluetooth technology, telemedicine and community partnerships. The trial aims to lower blood pressure faster, allowing for fewer office visits, especially for those who have trouble making in-person

appointments. The LeBauer-Brodie Center is coordinating the research, and the team hopes to enroll 200 to 300 patients.

“We assess each patient’s social determinants of health. We have health coaches and we have a partnership with the YMCA where patients can get diet and exercise training,” Dr. Randolph explains, noting the indispensable roles of the entire team in improving outcomes for patients, including pharmacists with specialized cardiovascular medicine training.

**THE IMPACT:** “With COVID-19, there’s been so much done with telehealth, so we want to see if using a strategy that employed more of that would help people get better quicker.”

For the trial, patients will have remote blood pressure monitoring. “That means they’ll have blood-pressure cuffs that have Bluetooth capability, and when they check their blood pressure twice a day, we’re able to see it through the portal,” Dr. Randolph says. “That allows us to manage their blood pressure in real time. Instead of having to wait even a month, we will be able to make interventions more quickly.”

Dr. Randolph adds, “I want to prevent cardiovascular disease before it happens. Hypertension is one of the biggest factors we can control.”

To refer patients to the **Advanced Hypertension Clinic**, call **336-938-0800**.

# Chipping Away at AFib Detection in Stroke Patients

## PHYSICIAN LEADS

### Pramod P. Sethi, MD

Medical Director,  
Cone Health Stroke Center

### James Allred, MD

Medical Director,  
Atrial Fibrillation Clinic,  
Cone Health Heart &  
Vascular Center

# 35%

OF STROKE PATIENTS  
WHO HAVE NO KNOWN  
CAUSE HAVE SHOWN  
AFIB ACTIVITY

**THE TRIAL:** Stroke of Known Cause and Underlying Atrial Fibrillation (STROKE AF)

**THE PROBLEM:** Many stroke patients don't benefit from long-term monitoring for Atrial Fibrillation (AFib), a fast and irregular heart rhythm that often leads to initial and subsequent strokes. When a link between strokes and AFib is detected, doctors can prescribe stronger blood thinners to help prevent subsequent strokes, but unless the presence of AFib is confirmed, those stronger medications aren't advised due to their increased bleeding risk and cost. Current practice is to long-term monitor for AFib only in stroke patients who have no known cause of their initial stroke. In these longer-term monitored cases, about 35% of patients have shown AFib activity.

#### HOW THE STROKE AF TRIAL HELPED:

The team wanted to see if AFib might be affecting stroke patients beyond those with no known cause for their first stroke. Dr. Sethi notes, "We asked ourselves, 'What if patients with

a known cause of stroke could also have AFib as a contributing factor for current or future strokes?" The trial sent 492 people who had strokes — even those with another known cause of stroke — home with a small heart-monitor chip placed under the skin. They found a much higher rate of AFib — about 10 times higher — in patients with strokes from known causes than in the same kind of patients where traditional short-term monitoring was done in an office or hospital.

**THE IMPACT:** The team's findings mean thousands of additional stroke patients each year will receive life-saving AFib-prevention medication. The *Journal of the American Medical Association* and *Science* magazine are among several publications to report on the study, coauthored with other leading neurologists and cardiologists from health systems including Massachusetts General Hospital and Northwestern University Feinberg School of Medicine.

"We're really pleased to be advancing knowledge of the relationship between AFib and stroke," Dr. Allred says. "More than anything, we want adults in our community over 40 to get annual checkups with their primary care provider, where irregular heart rhythms or other indicators of heart and vascular concerns can be identified early enough to prevent strokes and manage AFib."

# Cardiometabolic Solutions

## PHYSICIAN LEADS

### Bridgette Christopher, MD, PhD

Cardiologist

### Cristina Gherghe, MD

Endocrinologist

# 32 million

PEOPLE IN THE U.S.  
HAVE TYPE 2 DIABETES

**THE TRIAL:** Coordinate Diabetes

**THE PROBLEM:** More than 32 million people in the U.S. have type 2 diabetes, and patients with diabetes are twice as likely to have heart disease as those without diabetes. Although the No. 1 cause of death in diabetic patients is cardiovascular disease, the link between the metabolic disorders present in diabetic patients and cardiac issues has been tough to manage across medical disciplines. Many diabetic patients have never seen a cardiologist. Wrangling a complex set of cardiometabolic conditions can be overwhelming for patients and a challenge for their primary and specialty care providers.

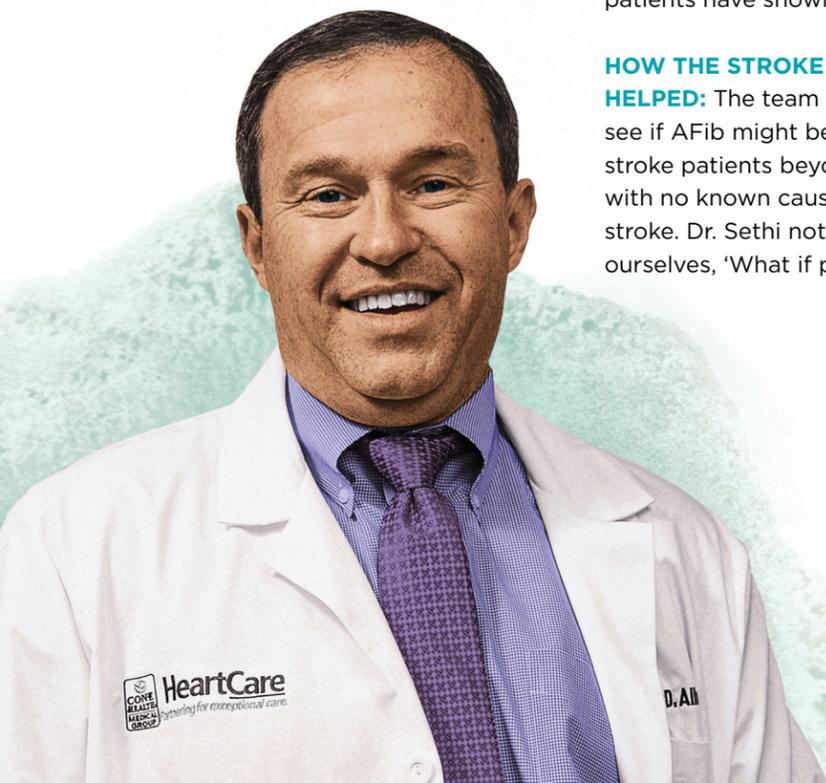
#### HOW THE COORDINATE DIABETES TRIAL HELPS:

Overseen by the LeBauer-Brodie Center in partnership with Duke Clinical Research Institute (DCRI), the Coordinate Diabetes trial is a bit different

than most in that it's not studying medicine against a placebo and comparing patient outcomes. Instead, the team is using unique teaching tools to help more than 30 patients in the study to understand the importance of guideline-directed medical therapy. "It's designed more for caregivers and focused around intensive education," Dr. Christopher says. "We touch base with the patients and see what the barriers are. Our goal is to measure over the course of a year our success rate, not just in getting patients on important medications but keeping them on."

In addition to studying techniques to help keep patients on medications, the trial is monitoring patient outcomes, including whether they stay out of the hospital. The multidisciplinary approach and focus on communication have revealed the benefits of working together across disciplines instead of isolating the treatment of sugar-related issues and cardiovascular disease.

**LOOKING AHEAD:** "My long-term goal is to start a cardiometabolic clinic," Dr. Christopher says. "People who have diabetes frequently have metabolic syndrome, which is a very specific pattern of blood pressure, lipids, obesity. We know that these syndromes run together, and we've been very focused on traditional cardiovascular risk factors, and the cardiometabolic piece needs a similar focus."



# Barostim Beats Heart Failure

## PHYSICIAN LEADS

**James Allred, MD**

Electrophysiologist

**Wells Brabham, MD**

Vascular Surgeon

**Dalton McLean, MD**

Cardiologist

**THE TRIAL:** Baroreflex Activation Therapy (Barostim)

**THE PROBLEM:** About 6.2 million adults in the U.S. have heart failure, a condition in which the heart does not pump enough blood to meet the body's needs for blood and oxygen. Common symptoms include shortness of breath, fatigue, weakness, swelling, chest pain and persistent coughing. Current treatments have limited success in reducing symptoms and strengthening the heart.

**HOW THE BAROSTIM TRIAL HELPED:** The Barostim device sends electrical impulses to "baroreceptors," which are cells in the neck that sense how blood is traveling through the carotid arteries. The baroreceptors deliver that information to the brain, which sends out signals that inhibit the production of stress hormones

that impact heart function. The clinical trial showed this treatment reduces symptoms of heart failure substantially, enabling patients to increase physical activity that in turn strengthens their heart.

**THE IMPACT:** Cone Health was one of the highest enrollers of patients in the country for the Barostim clinical trials, with heart failure specialist Dalton McLean, MD, identifying most of the patients for the trial with Kimberly Lutterloh, RN, and providing cardiology care for many of them. Drs. Brabham and Allred (Cone Health Principal Investigator) are among the first physicians in the U.S. to install a Barostim, and in June as part of a clinical trial, they became the first in the world to use a new, minimally invasive technique called BATwire to implant the device. Clinical trials on patients who received Barostim implants show that 83% improved their capacity for exercise in six months, 78% reported a significantly lower impact of symptoms in their daily lives and 80% had a reduction in their hospitalization.

"The people in whom we've implanted Barostim have done great," says Dr. Brabham. "Their quality of life is better, their energy's better, their activity's better."



# 6.2 million

ADULTS IN THE U.S. HAVE HEART FAILURE, A CONDITION IN WHICH THE HEART DOES NOT PUMP ENOUGH BLOOD TO MEET THE BODY'S NEEDS

Meet the Innovators  
[CLICK OR SCAN QR CODE TO PLAY VIDEO](#)

Watch Bridgette Christopher, MD, Daniel Bensimhon, MD, Tiffany Randolph, MD, and Thomas Stuckey, MD, talk about the patient benefits of clinical trials at Cone Health's LeBauer-Brodie Center.

## PATIENT STORY

### Better With Barostim

Congestive heart failure once relegated **Angelo Galloway** to a sedentary lifestyle. Barely able to get up from the couch, the father of four and grandfather of 17 had to leave his job as a truck driver because of his condition.

When Galloway learned of the Barostim trial at Cone Health's LeBauer-Brodie Center in 2019, he signed up figuring he had nothing to lose. An avid outdoorsman, he wanted to return to work, if possible, and get back out and enjoy life.

"Three or four months after the Barostim device went in, everything went back almost to normal," Galloway says. "It did a great job. It turned me all the way around."

He was once again able to drive; ride his motorcycle; and go hunting, fishing and camping with his family. "We do everything now," he says.

Galloway added that he'd do it all again in a heartbeat. His care team includes James Allred, MD, Wells Brabham, MD, and Daniel Bensimhon, MD.

"Receiving Barostim is one of the best things I could have ever done. If I hadn't, I feel like I would have been gone by now," Galloway says. "I was scared, but I got care from the heart and vascular department staff, the whole crew. I don't do much without talking to them first. I always feel like I can call — the whole Cone Health team is special to me."

Photos by Christopher English

# COURAGE IN CRISIS

Donna Brannock's cancer diagnosis was no match for doctor-patient trust and advancements in robotic thoracic surgery.



Left: Donna Brannock and Harrell Lightfoot, MD

Below: Dr. Lightfoot with the thoracic surgery robot

Last year, **Donna Brannock** had the kind of moment we all fear. She found a growth on her chest.

"At first, I kind of shook it off as nothing to be too concerned about," she says, "but it was growing bigger, so I decided to have somebody check it out."

That someone was **Harrell Lightfoot, MD**, a thoracic and cardiovascular surgeon at **The Moses H. Cone Memorial Hospital**. When Donna went in for her appointment, they discovered it was cancer that had spread to her lungs. Dr. Lightfoot walked Donna through her initial shock and assured her he had a plan.

His solution was to remove her cancer with robotic thoracic surgery — a revolutionary advancement in minimally invasive surgery.

"We have our patients at the center of our thinking when we recommend robotic-assisted surgery, because the outcomes are better, the surgery is more precise and less invasive, and the recovery is quicker with a substantially reduced amount and duration of pain after the procedure," Dr. Lightfoot says.

"Rather than making a large incision to create access and room to manipulate instruments, we're able to do it through incisions about a half an inch in length," explains

cardiothoracic surgeon **Steven Hendrickson, MD**, one of Dr. Lightfoot's colleagues and surgical coleader of **Cone Health's Multidisciplinary Thoracic Oncology Clinic (MTOC)**. "The robot gives us the reach and dexterity inside where the procedure is done."

In these procedures, the surgeon controls all the movements of the robot, which is why they're called robotic-assisted surgeries. While the patient is asleep under general anesthesia, the surgeon makes the incisions and places ports for the robotic instruments. Then the surgeon moves 10 feet to the console to conduct the surgery with robotic arms. These arms move with the surgeon's hands while a specialized camera bends and rotates within the surgical field, giving the surgeon a full view inside the rib cage.

"You have better vision and dexterity and can see and reach around corners that you were not able to do with older technology," says Dr. Hendrickson.

Dr. Lightfoot adds, "When you're operating in an area that's surrounded by a boney cage, it really makes the operations a lot easier and a lot safer."

Doctors are now able to do highly complex operations in more patients.

**THE PATIENT PERSPECTIVE**

While Brannock was still processing her diagnosis, she liked the idea of Dr. Lightfoot using the robotic technology. “I thought, ‘Well, this sounds really good,’” she says. “‘How could it be any better?’”

To her surprise and delight, Brannock soon discovered things could in fact be better. Today, she is cancer free. She has some small scars around her chest but recovered quickly. That, according to doctors who use this technology, is one of the major benefits to this type of procedure.

Dr. Lightfoot says he has had some patients go home one or two days after surgery compared to four or five days after more-invasive surgery.

“We’ve had several people go back to work two or three weeks after major lung surgery, which is really unheard of,” says Dr. Hendrickson.

Brannock credits her quick recovery to her positive attitude and the minimally invasive robotic surgery. She knew other people in her church group who had more-invasive procedures done and were not recovering as quickly. Brannock is certain she made the right decision.

“I just felt like I could breathe again,” she says. “It was like a new me. I was back to me.”

Life today has gone back to normal for Brannock. After major lung surgery, she walks an hour a day, rides her bicycle and spends time at the beach with her husband.

“We have a good life. We go, go, go,” she says.

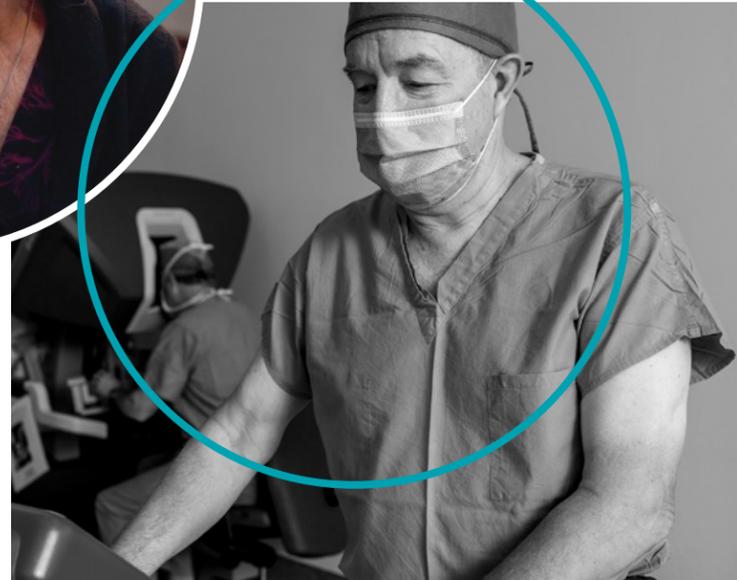
Doctors are also seeing less pain in recovering patients. “People are requiring much less in the way of narcotics and getting off narcotics quicker,” says Dr. Hendrickson. He says there are exceptions to every rule, but by and large, people are doing better with less pain.

They’re also sending fewer patients to the ICU after surgery. According to Dr. Lightfoot, patients have all been sent to the step-down unit with less bleeding and more tolerable pain. “That’s really a big change, a big improvement that’s important to us and our patients.”



**PHYSICIANS WITH PRECISION**

Robotic technology is helping surgeons in the operating room. “The 3D imaging and stability is far better than previous minimally invasive equipment,” says thoracic and cardiovascular surgeon **Edward Gerhardt, MD**, former Chief of Surgery at Cone Health. He adds that the instruments needed for each case may seem more complicated, but in reality, less instrumentation than conventional procedures is needed.



Surgeons at Moses Cone Hospital began doing this robotic surgery in January 2021, and they’re on track to complete about 150 procedures before the end of the year. “Most programs may do 75 to 100 cases a year,” Dr. Lightfoot says. “Our volume of cases is going to continue to deepen our experience in providing this care.”

Dr. Hendrickson says they’re turning to robotic technology in about 90% of their thoracic operations.

 **Doctor and Patient Reunite**  
[CLICK OR SCAN QR CODE TO PLAY VIDEO](#)  
 Watch the reunion of Donna Brannock and Dr. Lightfoot and hear more about her story as well as the possibilities robotic thoracic surgery brings to Cone Health.



“Our experience has been nothing but positive,” he says. “I was a little bit skeptical that it would make a huge difference, but it does. It’s very straightforward to use, very intuitive, and it really does allow you to do a better job than without the robot.”

The doctors agree that one benefit outweighs them all. “It’s all about the patient outcomes,” says Dr. Hendrickson. “The latest technology gives patients the best chance of doing well. It makes it easier for me to do a good job for the patient and that patient’s outcome is likely to be better.”

Their patient focus made a big difference to Brannock. “They kept my mind at ease from the beginning,” she says. “They were right there to talk to me and explain everything that was going on. That meant a lot to me.”

She continues, “Dr. Lightfoot’s whole staff was so kind and knowledgeable. When you go through something like this, you have so many questions — sometimes you don’t even know the questions to ask, and the answers are hard to hear. I know he saved my life. I know it without a doubt.”

“**It’s all about the patient outcomes. The latest technology gives patients the best chance of doing well.** — STEVEN HENDRICKSON, MD

This photo: Edward Gerhardt, MD; Harrell Lightfoot, MD; and Steven Hendrickson, MD

Opposite, clockwise: Donna Brannock; Dr. Hendrickson (at console) and Dr. Gerhardt (at controls)

This photo: Katarina Nelson, MD,  
and Henry Smith, MD

Opposite: Dr. Nelson with  
HeartFlow Analysis technology



# GOING WITH THE HeartFlow

A NEW DIAGNOSTIC TOOL IS REVOLUTIONIZING HEART CARE.



## Top 5

IN-THE-NATION USER  
OF HEARTFLOW  
IMAGING TO IDENTIFY  
CARDIOVASCULAR DISEASE

cardiac MRI,  
cardiovascular  
CT and SPECT/

**K**nowing heart disease is the No. 1 killer for both men and women, Katarina Nelson, MD, chose to become a cardiologist because of the incredible impact she could make. As the director of Cone Health's non-invasive cardiovascular imaging, she has made great strides in patient care using a variety of technology, including **HeartFlow Analysis** — a diagnostic test that helps physicians identify the impact that blockages have on blood flow to the heart.

"With these new technologies, we are getting better about the pathophysiology of atherosclerosis disease," says Dr. Nelson, who specializes in a wide range of cardiovascular imaging, including

PET nuclear imaging. "Hopefully, by researching the area, we can change the natural history of this disease and help people to change their mortality and morbidity in the future. Imaging plays a big role in cardiac diagnostics and therapies."

### LIFE-SAVING IMAGES

As an early adopter of HeartFlow Analysis at Cone Health, Dr. Nelson is poised to realize the positive impact she set out to make when she entered the field.

"We were one of the few centers in the United States and in the world where they were testing their applications that were not commercially available yet, and they rely on feedback from centers like us

to improve the technology," she says. "We work very closely."

How does HeartFlow work?

It involves standard CT scans, the latest advancements in artificial intelligence (AI), cloud computing and the computational study of blood flow (hemodynamics). HeartFlow uses a CT scan dataset to develop a 3D model of the patient's heart labeled with a color-coded vessel-by-vessel assessment of flow physiology. The physician reviews the data, correlates it with coronary CT angiography findings and, based on patient's presentation and risk factors, decides about appropriate therapy.

This powerful combination of information allows doctors to clearly identify problem areas before recommending more invasive (and expensive) cath-lab procedures. This type of imaging is also an improvement on less-reliable nuclear stress tests to

diagnose heart blockages. About five years ago, Cone Health was one of the very first adopters of using CT scans first in the evaluation of stable chest pain, a recommendation that was just recently published in new chest-pain guidelines.

# 20–30%

OF CORONARY CT  
SCANS PERFORMED  
AT CONE HEALTH  
BENEFIT FROM  
HEARTFLOW ANALYSIS

“It’s becoming a big thing right now, but we started to do it years ago, and our numbers have been growing exponentially since then,” Dr. Nelson says. “We perform a lot of cardiac CTs instead of stress testing.”

“Once we acquire those images,” Dr. Nelson continues, “HeartFlow, which we adopted in 2017, is the next step that gives us functional information about lesions, in addition to the anatomical information we got from the CT scan itself. It’s acquired from the same data set from the same imaging.”

Dr. Nelson says that not every patient needs HeartFlow Analysis because some are clearly normal, and others are clearly abnormal. For those in between, which amount to about 20% to 30% of coronary CT scans performed at Cone Health, the physicians can get results right away

without additional testing, saving lives as well as time and money.

“In just over five years, we have become a top-five-in-the-nation user of HeartFlow imaging to identify cardiovascular disease. It gives us better visualization of coronary arteries, improves our diagnoses, improves patient outcomes, prevents patients from undergoing unnecessary diagnostic catheterizations, and for those who need intervention, it allows us to plan more precisely where and what type of intervention is needed prior to minimally invasive surgery,” Dr. Nelson explains.

#### THE FUTURE OF IMAGING

Continued advancements in HeartFlow Analysis are on the horizon, and the level of detail accomplished in these new applications is promising. One such development is plaque analysis, which will help physicians determine how aggressively to treat a patient’s condition. Dr. Nelson and her team are currently conducting a clinical trial called **Reveal Plaque** around this technology.

“If somebody has 30% narrowing or 60% narrowing, we don’t know which one of those is more prone to rupture,” Dr. Nelson says. “It doesn’t seem like that number plays a role,

but it’s the characteristics of that plaque that plays a role in adverse outcomes that affect patients’ morbidity and mortality.”

Another application is **HeartFlow Planner**, which helps the invasive cardiologist team determine key elements of their decision-making.

“We pull data from HeartFlow to see images of the coronary artery system,” says interventional cardiologist **Henry Smith, MD**. “Based on those images we can develop a potential intervention strategy and realistic risk assessment prior to the procedure. This improves patient understanding and acceptance. It’s exciting to be able to bridge the non-invasive world with the invasive world and tailor therapies for individual patients.”



“

HeartFlow gives us better visualization of coronary arteries, improves our diagnoses and patient outcomes, prevents patients from undergoing unnecessary diagnostic catheterizations, and for those who need intervention, it allows us to plan more precisely what type of intervention is needed.

— KATARINA NELSON, MD



**Top:** Acquisition and processing of cardiac CT images

**Bottom:** From left: Sheryl Booth, MHA; Henry Smith, MD; Westley Espinosa, RT(R); Katarina Nelson, MD; and Sara Wallace, RN

# WELLNESS ≠ PREVENTION

Make The  
Smart  
Choice

Eat  
Well

Seek  
Support

You're  
Worth  
It

SEARCH FOR  
ANSWERS

Stay Active

Care For  
Yourself

Gayatri  
Acharya, MD

Kardie  
Tobb, DO



A FEW OUNCES OF PREVENTION  
MAKE A WORLD OF DIFFERENCE  
WHEN COMBATING HEART DISEASE  
IN WOMEN. **KARDIE TOBB, DO, AND  
GAYATRI ACHARYA, MD, SHARE THEIR  
TOP TIPS TO STAVE OFF THE NUMBER  
ONE KILLER OF WOMEN IN THE U.S.**

## 1 Know Your Risk

**Dr. Tobb:** I want women to be empowered by first understanding their risk for heart disease. There are sex-specific factors that can increase the risk of heart disease in women. For instance, adverse pregnancy outcomes, including but not limited to preeclampsia, gestational diabetes and preterm labor, are predictors of risk for future cardiovascular disease. Other diseases like lupus, rheumatoid arthritis and breast cancer, which are predominant in women, can increase your cardiovascular risk as well. So, please get screened, educate yourself, be your own hero and ask questions. Every question is important; therefore, please ask.

## 2 Adopt a Healthier Lifestyle

**Dr. Tobb:** Once you have your risk information, adopt a healthy lifestyle. Please limit the use of alcohol. Please stop smoking. Cone Health offers a free, eight-session smoking cessation course that has really helped my patients. And of course, exercise and eat healthier meals.

**Dr. Acharya:** I agree. Really pay attention to your diet. Just remember at least 80% of the time to make that smart choice. I recommend the Mediterranean diet to my patients.

## 3 Exercise Regularly

**Dr. Acharya:** I think we underestimate the value of exercise. When we have patients in their 90s, both men and women, the number one thing they tell me is that they stay active. Regular exercise is the first thing I recommend to my patients. In addition to eating healthy, I recommend at least 30 minutes of exercise each day. This can be cumulative. If you take five minutes to climb the stairs or 10 minutes to walk around

the block, add this to your 30-minute total. We also know that getting your heart rate up for 60 to 90 seconds at a time has a significant positive impact on heart health.

## 4 Make Time for Yourself

**Dr. Acharya:** So many women put everybody else before themselves. It's so easy to come in last place. I remember something my parents told me all the time, which is, "You can't take care of anybody else unless you take care of yourself." You can't be around for them if you're not around. That's what I tell my patients. Even five minutes a day to put yourself first is a good place to start. You are an important part of this bigger picture that you're trying to sustain.

## 5 Take Advantage of Community Resources

**Dr. Acharya:** One resource my patients have had a lot of success with recently is Cone Health's Healthy Weight and Wellness center. It's a structured approach to weight loss and health management. It's frequent check-ins but with a medical spin. Seeking out that extra support can really make a difference.

**Dr. Tobb:** Another option is Heart Sisters - WomenHeart of Cone Health, a support group that meets at the Cone Health Heart & Vascular Center and consists of women in a variety of age groups. It's geared toward women who have or who are at risk for heart disease. Often, women who have mothers who had heart disease are wary of their futures. They ask, "What am I supposed to do? Who can I talk to?" First, discuss this with your primary care provider. For a less-intimidating option, you can meet with the Heart Sisters. **You can contact them at [womenheart@conehealth.com](mailto:womenheart@conehealth.com).**

Dr. Tobb is board-certified in general cardiology, nuclear cardiology and internal medicine. She practices at Cone Health Medical Group HeartCare at Asheboro and High Point. She says that the premature death of her aunt, who suffered from undiagnosed heart disease, is part of what inspired her to become a cardiologist. Dr. Acharya is board-certified in internal medicine, cardiology, cardiovascular CT and echocardiography. Seeing the difference her physician parents made in the lives of their patients inspired her to pursue a career in the same field. She is the medical director of echocardiography for the Heart & Vascular Center.



# Eight Is Great

A NEW MULTIPRONGED MODEL OF CARE TAKES  
A HOLISTIC VIEW OF PATIENT HEALTH.

**C**one Health's eight-part OctoCARE model embraces the whole person. Through this program, an interdisciplinary team navigates a wide range of factors influencing patient outcomes and wellness. The group consists of care guides, certified medical assistants, exercise physiologists, nurses, pharmacists and social workers. Together, they find the root causes of patients' health issues, providing a seamless continuum of care through disease management and prevention. By addressing **social determinants of health (SDoH)**, they break down barriers, improve access to health care, and provide prevention and wellness programming.

**Dee Talley, RN, MHA, executive director of Cone Health's Heart & Vascular Center**, created the OctoCARE concept. She credits the multidisciplinary team for making the program possible.

"Caring for the heart is not just about fixing the mechanics and rhythms of the heart," says Talley. "Sometimes it's about healing the soul of the heart. That's where OctoCARE plays an essential role in providing patient care to the whole person. We help patients not only heal physically but also emotionally, socially and spiritually."

Program coordinator **Jackie Brennan, LCSW, CCSW-MCS**, adds, "OctoCARE is a unique model that engages every staff member and empowers them to make a difference in the lives of our patients."

By coordinating with other programs, OctoCARE is poised to improve the overall health of Cone Health's patients and that of the community.



## HEALING A MOTHER'S HEART

**Chandra Taylor Bell** was heartbroken when she learned of her postpartum

cardiomyopathy diagnosis, a form of heart failure that results from pregnancy. Watch how the **OctoCARE team** helped erase the stigma she felt with the diagnosis and improve her condition.



CLICK OR SCAN QR CODE  
TO PLAY VIDEO

The OctoCARE model's comprehensive services include:



**PHARMACY/MEDICATION NEEDS**  
Connect to patient assistance programs; access resources from heart failure fund; offer medication counseling and education



**HOME HEALTH NEEDS**  
Refer to community paramedicine program; order home health equipment; partner with Cone Health congregational nursing; provide referrals to community home health agencies



**HEALTHY FOOD AND NUTRITION**  
Provide nutritional assessments and education; make food pantry referrals; offer cooking classes



**HEALTH AND WELLNESS**  
Provide personalized physical activity programming; organize walking clubs; offer Providers Referral Exercise Program (PREP); refer to cardiac rehab



**DISABILITY/FINANCIAL/INSURANCE**  
Provide referrals to the Medicare and Seniors' Health Insurance Information Program (SHIIP); assist with Medicare/Medicaid concerns; help with disability-related aid



**HOUSING**  
Help find temporary and permanent housing solutions; provide rental assistance; assist with home repairs



**TRANSPORTATION**  
Support Access GSO (formerly SCAT) paratransit applications; connect patients to Cone Health transport program and community transit resources



**MENTAL HEALTH/SUBSTANCE ABUSE**  
Offer depression screening; provide therapy referrals; create stress reduction programming; host support groups; conduct alcohol/SA assessments and referrals to rehab

Help patients overcome barriers in their health care journey. **Make a donation to the CV Patient Care Fund at [conehealthphilanthropy.org](http://conehealthphilanthropy.org).**



From left: James D. Allred, MD;  
Kenneth C. Hilty, MD

Two examples are **Kenneth C. Hilty, MD**, who serves as medical director and clinical lipidologist of the **Advanced Lipid Disorders and Cardiovascular Risk Reduction Clinic**, and **James D. Allred, MD**, a cardiologist, electrophysiologist and the director of the **Atrial Fibrillation Center**.

#### THE FIGHT AGAINST HIGH CHOLESTEROL

Lipid management can be tricky. That's where Dr. Hilty can help. Actively involved in clinical research, he and his team offer a variety of advanced treatments to combat high cholesterol.

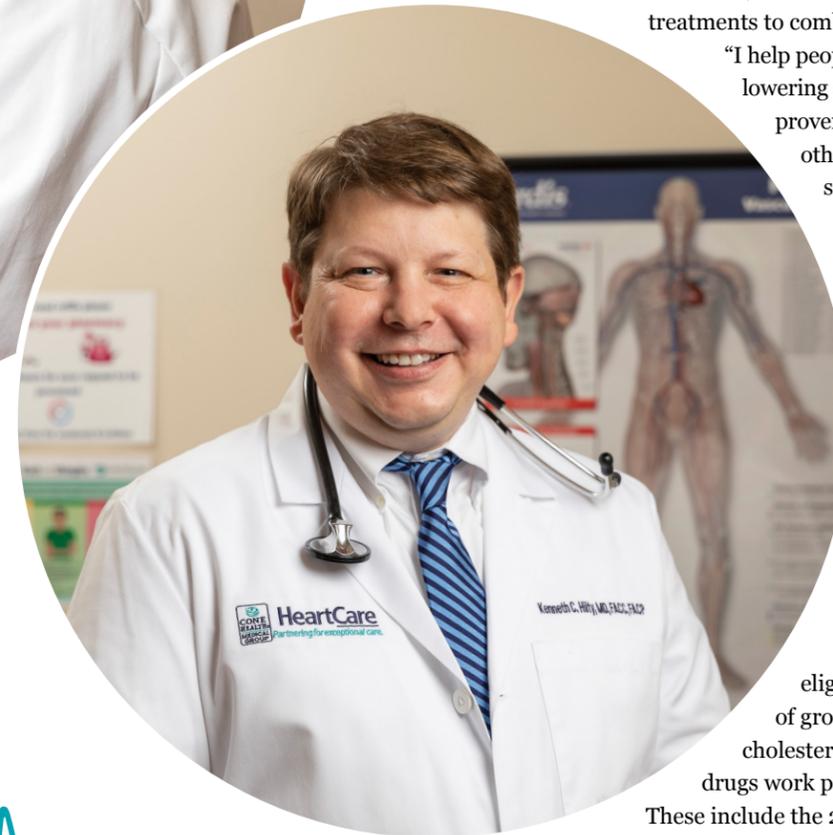
"I help people unable to tolerate cholesterol-lowering drugs such as statins by trying other proven approaches or sometimes by using other medications entirely," Dr. Hilty says. "Up until five years ago, we had limited options beyond statins. With new molecular technologies and antibody therapies, we are able to treat more patients than ever and extend their lives."

Recently, a groundbreaking trial in 2019 called **REDUCE-IT** proved that up to four grams daily of the purified Omega-3 EPA could cut cardiovascular events by 20–30% when paired with statins. This effect was not seen with over-the-counter fish oils. Cone Health patients may be eligible for one of four clinical trials of groundbreaking treatments that lower cholesterol in those for whom standard drugs work poorly or aren't strong enough.

These include the 2019 **ORION** trial that uses molecular technology to halve LDL (low-density lipoprotein, or "bad" cholesterol) through twice-yearly injections.

Another trial called **VESALIUS-CV** blocks a major cholesterol-controlling protein called PCSK9 using an antibody therapy. The **AEGIS-II** study relies on purified plasma protein from donors that can help stabilize and possibly oust existing arterial plaque. An additional trial thwarts cholesterol metabolism in the liver through novel RNA therapies, aiming to reduce high blood triglycerides.

"Genetic therapies aren't far down the road," Dr. Hilty says. "Already, we can look more deeply into a patient's lipid profile with lipoprotein particle testing, which examines not only cholesterol levels but also the size, type and distribution of lipid particles that directly impact the chance of developing cardiovascular disease. And genetic screening allows us to identify persons at risk for familial hyperlipidemia (FH) and hopefully improve a family's cardiac disease risk for generations."



# CLINICS THAT CARE

**Cone Health's specialty clinics offer advanced care tailored to each patient's unique needs. Learn more about the AFib and Lipid clinics.**

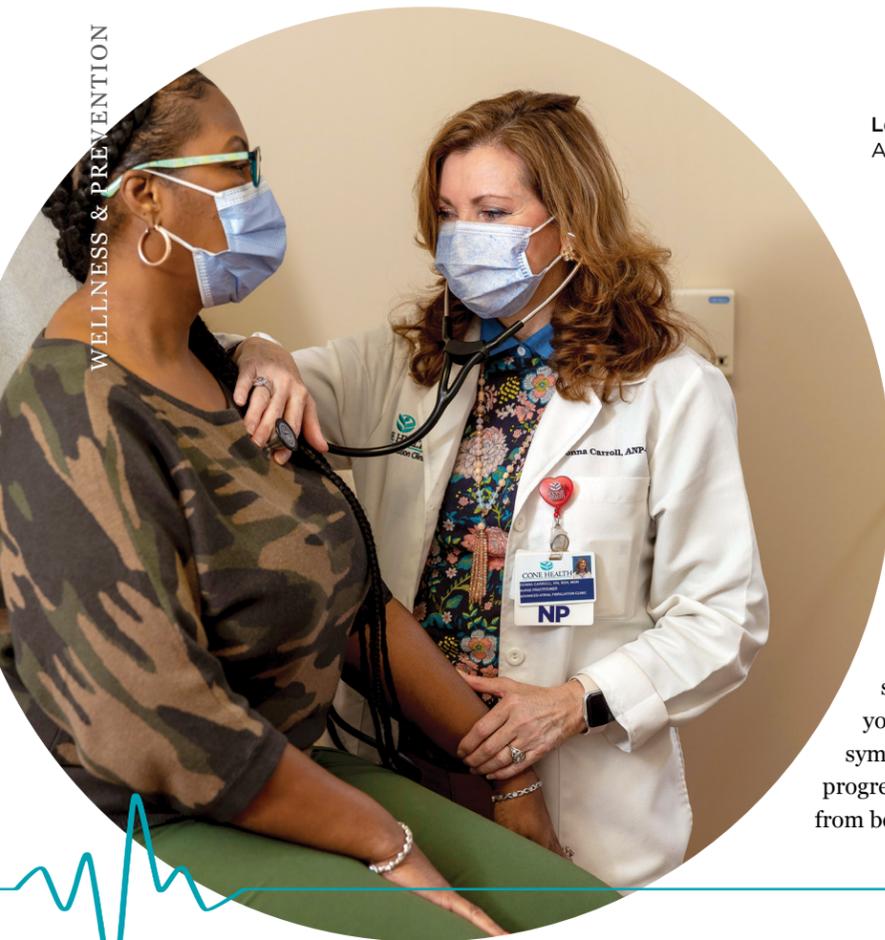
**A**s the nation's top killer, cardiovascular disease is linked to risk factors like high cholesterol and abnormal heart rhythms that can go undetected until the conditions are advanced and harder to resolve.

That's why it pays to seek specialists in targeted cardiology fields, such as those at Cone Health. Its clinics tout teams of doctors, surgeons, nurse practitioners, nurses, dietitians, pharmacists, genetic counselors and other specialists.

Areas of focus include heart failure, electrophysiology and atrial fibrillation, hypertension, high cholesterol, and women's heart health. The clinics provide high-level care catering to each patient's unique needs and are led by top specialists in the field of cardiology.

“  
With new molecular technologies and antibody therapies, we are able to treat more patients than ever and extend their lives.”

— KENNETH C. HILTY, MD



**Left:** Donna Carroll, RN, Nurse Practitioner, Atrial Fibrillation Clinic, examines a patient.

He and his team are lifesavers. AFib is the most common of erratic heartbeats, raising stroke risk five-fold and doubling the risk of heart-related deaths.

“Strokes linked to AFib carry a higher mortality and morbidity rate than strokes from other causes,” Dr. Allred says.

Although many sense fluttering or skipped beats, others don’t. “They may just feel tired for a couple of days,” Dr. Allred says.

Some learn they have AFib from an Apple Watch or while being prescreened for surgery or a colonoscopy via electrocardiograms.

“For others, the first sign of AFib may be a stroke,” adds Dr. Allred. “You should always consult your doctor immediately if you have any concerns or symptoms that may be related to your heart. AFib is a progressive disease. Intervention can prevent it from becoming permanent.”

If your family tree includes relatives who’ve had clogged arteries or heart attacks as early as their 40s, you need to be screened early. Most people should have their total cholesterol checked using a fasting blood test starting at age 20, according to current guidelines of the **American College of Cardiology** and **American Heart Association**. Those who are obese, have Type 2 diabetes or a strong family history of early-onset high cholesterol should consider earlier lipid testing.

Finding treatment for complex heart conditions can be overwhelming, but Cone Health makes the process simpler. “Those referred for high cholesterol often have other cardiovascular disease risks,” says Dr. Hilty. “We have a one-stop shop of heart specialists.”

#### **ATRIAL FIBRILLATION: WHAT YOU NEED TO KNOW**

More than muscle, blood and valves are vital to heart function. The heart’s electrical cells send steady signals to the heart’s atria, or upper chambers, causing them to contract and push out blood. When the beat goes badly, you may have atrial fibrillation, or AFib. It’s like a short in the heart’s wiring that sparks an irregular heartbeat.

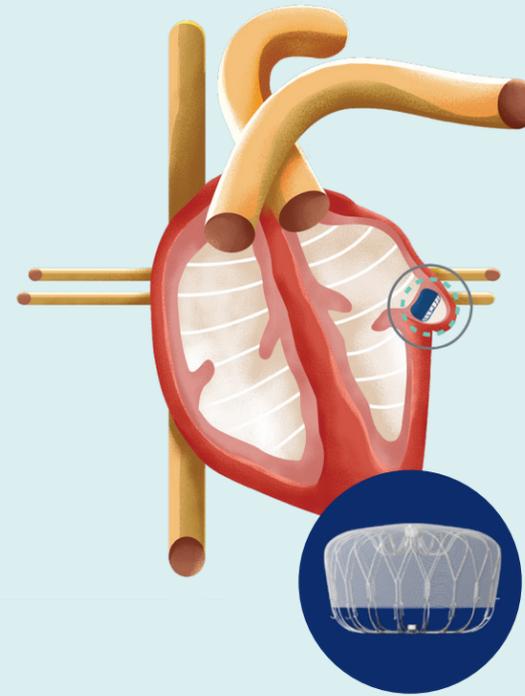
“That may cause blood to pool in the atria and clots to form,” says Dr. Allred.

“**Our job is to follow patients’ heart rates closely so they can lead long, active, productive lives. We want to take away the fear and power this chronic disease can hold over patients.**”

— JAMES D. ALLRED, MD

Cone Health’s AFib Center has a multifaceted approach and a team of heart-rhythm specialists, including doctors, nurses, dietitians and pharmacists. “We’re your VIP service, with a direct line to experts from 8 a.m. to 5 p.m. weekdays,” Dr. Allred says.

High blood pressure, type 2 diabetes and sleep apnea often accompany AFib. “AFib patients often are afraid to exercise, but the best treatment is weight loss and



#### **WATCHMAN FLX: AN ALTERNATIVE TO BLOOD THINNERS**

Three million Americans have AFib (atrial fibrillation) — irregular heartbeats that raise their stroke risk. But not everyone can take the common treatment of blood thinners, which can lead to excess bleeding.

Now there’s an alternative: **WATCHMAN FLX**. Cone Health is among the state’s few medical centers to offer this small mechanical apparatus, which is inserted through a small tube in the femoral vein into the left atrial appendage of the heart. That’s where 90% of blood clots form — clots that can cause strokes. The one-time implant of a WATCHMAN FLX device seals off the portion of the heart where most blood clots form in patients with underlying atrial fibrillation.

“With a successful WATCHMAN implant, patients can discontinue blood-thinning medication within approximately six weeks of the procedure,” says **Michael D. Cooper, MD**, an interventional cardiologist at Cone Health.

cardio and strength exercise,” Dr. Allred says.

The clinic has partnered with the YMCA to offer classes specifically for its patients, with a nurse on site. Patients work to trim fat while developing a heart-healthy diet with the advice of dietitians.

“Our job is to follow patients’ heart rates closely so they can lead long, active, productive lives,” says Dr. Allred. “We want to take away the fear and power this chronic disease can hold over patients.”

The Moses H. Cone Memorial Hospital, where the AFib clinic is based, is the only hospital in North Carolina to hold full certification in AFib from the Society of Cardiovascular Patient Care. At Cone Health, anyone deemed high risk can be closely observed via cardiac monitors. These mini-recorders — one-third the size of an AAA battery — are inserted beneath the surface of the chest, allowing your doctor to detect any arrhythmias remotely and unobtrusively 24/7 for up to four years.

Another high-tech device is the KardiaMobile, a portable personal EKG that pairs with an app on smart devices to alert patient and doctor to arrhythmias.

“Recently, I had a patient who’d been hospitalized with very symptomatic AFib,” Dr. Allred says. “He had a family trip to Disney World scheduled and, thanks to his Apple Watch, I was able to know he was AFib-free. We did a virtual visit from Epcot.”

A few weeks later, the patient had catheter ablation, a minimally invasive outpatient surgery that uses heat to modify electrical tissue that triggers AFib. Dr. Allred’s studies showed the procedure’s success and that same-day discharge is safe for most patients. He also can implant a WATCHMAN FLX device (see sidebar) in those unable to take blood thinners.

“Early detection is vital,” Dr. Allred says. “By intervening early with lifestyle changes and catheter ablation, patients can avoid repeat AFib and live longer and more fully. Our goal is to keep you active and at home, not in the hospital.”

To refer a patient, please call us:

- **Atrial Fibrillation Center and Watchman: 336-832-7033**
- **Advanced Lipid Disorders and Cardiovascular Risk Reduction Clinic: 336-938-0800**



# LEAP to a Healthier Community

PARTNERSHIP SOWS THE SEEDS OF A BRIGHTER FUTURE.

What are the keys to success for a community garden? Why would a food co-op fail even in the middle of a food desert? Why are some greenways full of people running and walking while others are empty?

LEAP (Lifetime Eating and Physical Activity Practices), a collaboration between multiple groups throughout Guilford County, aims to answer those questions and more, and in turn build stronger, more successful programs to improve the health of the entire community.

“We are lucky to have a lot of programs in our area, but we have very little data on what is successful and why,” says **Jake Hochrein, MD, Chief, Cone Health Heart and Vascular Service Line** and Cone Health representative for LEAP. “I’m excited to be part of this program, working to provide data and resources and building an infrastructure to improve communications between the organizations to make a difference in the health of our community.”

## TAKING ACTION

LEAP serves as a resource for the community through both research and outreach.

### • Community Board

LEAP’s board consists of people from various organizations who live and work in the communities that LEAP is representing. Through the board, they’re providing a way to connect and learn. “This community board is now a resource for anybody who needs information or support within the scope of healthy eating and active living, for building community programs, applying for grants, or providing education,” Dr. Hochrein says.



## LEAP PARTNERS

Cone Health is proud to join with this group of partners to form the leadership and core research members of LEAP:



### • Research Series

Quarterly programs on topics such as redefining food-system equity and modeling and messaging to improve child health provide a way for LEAP to reach out to the community with its broad base of research, connections and information.

### • Data-Driven Solutions

LEAP plans to gather data on healthy eating and physical activity to provide a wealth of specific, detailed information to area organizations.



**We need to move toward prevention when it comes to chronic disease management, and LEAP provides a great foundation for improving the health of our community.**

— JAKE HOCHREIN, MD

“Looking at the data, potentially 80% of heart attacks are preventable due to lifestyle choices,” Dr. Hochrein says. “Rather than addressing one critically ill patient at a time, we need to move toward prevention when it comes to chronic disease management, and LEAP provides a great foundation for improving the health of our community.”

# H&V PHYSICIANS

## CARDIOLOGY



**Gayatri  
ACHARYA, MD\***  
CHMG HeartCare  
at Northline



**Jonathan F.  
BRANCH, MD**  
CHMG HeartCare  
at Annie Penn;  
CHMG HeartCare  
at Eden



**Brian S.  
CRENSHAW, MD**  
CHMG HeartCare  
at MedCenter High  
Point; MedCenter  
Kernersville; CHMG  
HeartCare at Northline



**David W.  
HARDING, MD**  
CHMG HeartCare  
at Northline; CHMG  
HeartCare at  
Burlington



**Thomas A.  
KELLY, MD**  
CHMG HeartCare  
at Northline



**Javed  
MASOUD, MD**  
Glen Raven Medical  
Care Center



**Brian  
AGBOR-ETANG, MD\***  
CHMG HeartCare  
at Burlington



**Dwayne  
CALLWOOD, MD**  
Kernodle Clinic



**Mihai  
CROITORU, MD**  
CHMG HeartCare  
at Northline



**Mohan N.  
HARWANI, MD**  
Advanced  
Cardiovascular  
Services, PA



**Shaukat A.  
KHAN, MD**  
Alliance Medical  
Associates



**Christopher D.  
McALHANY, MD**  
CHMG HeartCare  
at Church Street



**James D.  
ALLRED, MD**  
CHMG HeartCare  
at Church Street;  
CHMG HeartCare  
at Eden



**William M.  
CAMNITZ, MD**  
CHMG HeartCare at  
Asheboro; CHMG  
HeartCare at Church  
Street; CHMG HeartCare  
at MedCenter High Point



**Christopher A.  
END, MD**  
CHMG HeartCare  
at Burlington



**Kenneth C.  
HILTY, MD**  
CHMG HeartCare  
at Northline



**Steven C.  
KLEIN, MD**  
CHMG HeartCare  
at Church Street;  
CHMG HeartCare  
at Burlington



**Samuel G.  
McDOWELL, MD**  
CHMG HeartCare  
at Annie Penn;  
CHMG HeartCare  
at Eden



**Muhammad A.  
ARIDA, MD**  
CHMG HeartCare  
at Burlington;  
CHMG HeartCare  
at Northline



**Mahesh  
CHANDRASEKHAR,  
MD**  
CHMG HeartCare  
at Church Street



**Kenneth  
FATH, MD**  
Kernodle Clinic



**James  
HOCHREIN, MD**  
CHMG HeartCare  
at Northline;  
CHMG HeartCare  
at Madison



**Bruce  
KOWALSKI, MD**  
Kernodle Clinic



**Dalton S.  
McLEAN, MD**  
Advanced Heart  
Failure Clinic at  
Moses Cone Hospital



**Daniel R.  
BENSIMHON, MD**  
Advanced Heart  
Failure Clinic at  
Moses Cone Hospital



**Bridgette  
CHRISTOPHER,  
MD, PhD\***  
CHMG HeartCare  
at Northline



**Jagadeesh R.  
GANGI, MD**  
Piedmont  
Cardiovascular, PA



**Peter M.  
JORDAN, MD**  
CHMG HeartCare  
at Northline



**Robert  
KRASOWSKI, MD\***  
CHMG HeartCare at  
MedCenter High Point;  
CHMG HeartCare  
at Asheboro



**Brian  
MUNLEY, MD\***  
CHMG HeartCare at  
MedCenter High Point;  
CHMG HeartCare  
at Asheboro



**Jonathan J.  
BERRY, MD**  
CHMG HeartCare  
at Northline



**Michael D.  
COOPER, MD**  
CHMG HeartCare  
at Church Street



**Timothy J.  
GOLLAN, MD**  
CHMG HeartCare  
at Burlington



**Ajay S.  
KADAKIA, MD**  
Individual Practice



**Cameron  
LAMBERT, MD\***  
CHMG HeartCare  
at Church Street;  
CHMG HeartCare  
at Burlington



**Philip J.  
NAHSER Jr., MD**  
CHMG HeartCare  
at Church Street;  
CHMG HeartCare  
at Burlington

# H&V PHYSICIANS

## CARDIOLOGY (cont'd)



**Katarina H. NELSON, MD**  
CHMG HeartCare at Church Street



**Tiffany C. RANDOLPH, MD**  
CHMG HeartCare at Northline



**Thomas David STUCKEY, MD**  
LeBauer-Brodie Center for Cardiovascular Research and Education



**Peter C. NISHAN, MD**  
CHMG HeartCare at Church Street



**Rajan REVANKAR, MD\***  
CHMG HeartCare at MedCenter High Point; CHMG HeartCare at Asheboro



**Gregg W. TAYLOR, MD**  
CHMG HeartCare at Church Street; CHMG HeartCare at Annie Penn



**Wesley O'NEAL, MD\***  
CHMG HeartCare at Northline



**Paula V. ROSS, MD**  
CHMG HeartCare at Church Street; CHMG HeartCare at Annie Penn



**Kardie TOBB, DO\***  
CHMG HeartCare at Asheboro; CHMG HeartCare at MedCenter High Point



**Alexander PARASCHOS, MD, PhD**  
Kernodle Clinic



**Christopher SCHUMANN, MD\***  
CHMG HeartCare at Northline



**Traci M. TURNER, MD**  
CHMG HeartCare at Church Street



**Manish PATWARDHAN, MD\***  
Piedmont Cardiovascular, PA



**Mark C. SKAINS, MD**  
CHMG HeartCare at Church Street



**Jayadeep S. VARANASI, MD**  
CHMG HeartCare at Church Street



**Heather PEMBERTON, MD\***  
CHMG HeartCare at Church Street



**Henry W. B. SMITH III, MD**  
CHMG HeartCare at Church Street

## CARDIOTHORACIC SURGERY



**Zane ATKINS, MD\***  
Triad Cardiac and Thoracic Surgery



**Steven C. HENDRICKSON, MD**  
Triad Cardiac and Thoracic Surgery



**Clarence H. OWEN, MD**  
Triad Cardiac and Thoracic Surgery



**Bryan K. BARTLE, MD**  
Triad Cardiac and Thoracic Surgery



**Harrell LIGHTFOOT, MD\***  
Triad Cardiac and Thoracic Surgery



**Peter VAN TRIGT III, MD**  
Triad Cardiac and Thoracic Surgery



**Edward B. GERHARDT, MD**  
Triad Cardiac and Thoracic Surgery



**Timothy E. OAKS, MD\***  
Alamance Surgical Associates at Burlington

## VASCULAR SURGERY



**Wells BRABHAM IV, MD**  
Vascular and Vein Specialists of Greensboro



**Jason DEW, MD**  
Alamance Vein and Vascular Surgery, PA



**Charles E. FIELDS, MD**  
Vascular and Vein Specialists of Greensboro



**Brandon CAIN, MD\***  
Vascular and Vein Specialists of Greensboro



**Christopher S. DICKSON, MD**  
Vascular and Vein Specialists of Greensboro



**Thomas HAWKEN, MD\***  
Vascular and Vein Specialists of Greensboro



**Christopher CLARK, MD\***  
Vascular and Vein Specialists of Greensboro



**Todd F. EARLY, MD**  
Vascular and Vein Specialists of Greensboro



**Gregory SCHNIER, MD**  
Alamance Vein and Vascular Surgery, PA

## ADVANCED PRACTICE PROVIDERS AND CLINICAL PHARMACISTS

## Cardiology

Kristin Alvstad, PharmD  
 Rhonda Barrett, PA-C  
 Christopher Berge, NP  
 Vin Bhagat, PA-C  
 Donna Carroll, NP  
 Jesse Cleaver, NP  
 Amy Clegg, NP  
 Anna Drane, PA-C  
 (Kernodle)  
 Angie Duke, PA-C  
 Dayna Dunn, PA-C  
 Ryan Dunn, PA-C  
 Clint Fenton, NP  
 Cadence Furth, PA-C  
 Lori Gerhardt, NP  
 Callie Goodrich, PA-C  
 Tina Ann Hackney, NP  
 (ARMC)  
 Laura Ingold, NP  
 Lauren Kemp, PharmD  
 Luke Kilroy, PA-C  
 Krista Kroeger, PA-C  
 Kathryn Lawrence, NP  
 Michele Lenze, PA

Laura Liggett, NP  
 Melissa Maccia, PharmD  
 Jill McDaniel, NP  
 Hao Meng, PA-C  
 Jessica Milford, NP  
 Trevor Packer, NP-C  
 (Alliance Medical)  
 Christopher Pavero, PharmD  
 Andy Quinn, NP  
 Lindsay Roberts, NP  
 Raquel Rodriguez-Guzman, PharmD  
 Amber Seiler, NP  
 Brittainy Simmons, PA  
 Nicole Stephens, PA-C  
 (Kernodle)  
 Brittany Strader, PA-C  
 Megan Supple, PharmD  
 Katie Thompson, PA-C  
 Michael "Andy" Tillery, PA-C  
 Renee Ursuy, PA-C  
 Jacquelyn Visser, PA-C  
 Caitlin Walker, NP  
 Scott Weaver, PA-C  
 Delicia White, APRN  
 (Kernodle)

## Cardiothoracic Surgery

Erin Barrett, PA  
 Tessa Conte, PA-C  
 Wayne Gold, PA  
 Myron Roddenberry, PA-C  
 Donielle M. Zimmerman, PA

## Vascular Surgery

Corrie Baglia, PA-C  
 (VVS)  
 Fallon Eileen Brown, NP  
 (AVVS)  
 Emma Collins, PA  
 Matthew M. Eveland, PA-C  
 Samantha Rhyne, PA  
 Sandra Setzer, PA-C  
 Kimberly Stegmayer, PA-C  
 (AVVS)

## PHYSICIAN PRACTICES

## Advanced Cardiovascular Services, PA

104 W. Northwood Street, Suite E  
 Greensboro, NC 27401  
 Phone: 336-273-3335  
 Fax: 336-273-3315

Advanced Heart Failure Clinic  
at Moses Cone Hospital

1121 North Church Street  
 Greensboro, NC 27401  
 Phone: 336-832-9292  
 Fax: 336-832-9293

Alamance Surgical Associates  
at Burlington

1041 Kirkpatrick Road, Suite 150  
 Burlington, NC 27215  
 Phone: 336-538-1888  
 Fax: 336-538-1313

## Alamance Vein and Vascular Surgery

2977 Crouse Lane  
 Burlington, NC 27215  
 Phone: 336-584-4200  
 Fax: 336-584-3616

## Alliance Medical Associates

2905 Crouse Lane  
 Burlington, NC 27215  
 Phone: 336-538-2494  
 Fax: 336-538-2497

Atrial Fibrillation Clinic  
at Moses Cone Hospital

1121 North Church Street  
 Greensboro, NC 27401  
 Phone: 336-832-7033  
 Fax: 336-832-7634

Cone Health Medical Group (CHMG)  
HeartCare at Annie Penn

618 South Main Street  
 Reidsville, NC 27320  
 Phone: 336-951-4823  
 Fax: 336-951-4550

## CHMG HeartCare at Asheboro

542 White Oak Street  
 Asheboro, NC 27203  
 Phone: 336-610-3720  
 Fax: 336-610-3719

CHMG HeartCare  
at Burlington

1236 Huffman Mill Road, Suite 130  
 Burlington, NC 27215  
 Phone: 336-438-1060  
 Fax: 336-438-1076

CHMG HeartCare  
at Church Street

1126 North Church Street, Suite 300  
 Greensboro, NC 27401  
 Phone: 336-938-0800  
 Fax: 336-938-0755

CHMG HeartCare  
at Drawbridge Parkway

3518 Drawbridge Parkway, Suite 220  
 Greensboro, NC 27410  
 Phone: 336-890-3020

## CHMG HeartCare at Eden

110 South Park Terrace, Suite A  
 Eden, NC 27288  
 Phone: 336-627-3878  
 Fax: 336-627-3870

## CHMG HeartCare at Madison

401 West Decatur Street, Suite A  
 Madison, NC 27025  
 Phone: 336-938-0800  
 Fax: 336-275-0433

CHMG HeartCare  
at MedCenter High Point

2630 Willard Dairy Road, Suite 301  
 High Point, NC 27265  
 Phone: 336-884-3720  
 Fax: 336-884-3769

CHMG HeartCare  
at MedCenter Kernersville

1635 NC Hwy 66 South, Suite 155  
 Kernersville, NC 27284  
 Phone: 336-938-0800  
 Fax: 336-275-0433

## CHMG HeartCare at Northline

3200 Northline Avenue, Suite 250  
 Greensboro, NC 27408  
 Phone: 336-938-0800  
 Fax: 336-275-0433

## Glen Raven Medical Care Center

1611 Flora Avenue  
 Burlington, NC 27217  
 Phone: 336-270-5622  
 Fax: 336-585-1816

## Ajay S. Kadakia, MD

108 E Northwood Street  
 Greensboro, NC 27401  
 Phone: 336-574-2100  
 Fax: 336-574-1260

## Kernodle Clinic West

1234 Huffman Mill Road  
 Burlington, NC 27215  
 Phone: 336-538-2381  
 Fax: 336-538-2320

## Kernodle Clinic Mebane

101 Medical Park Drive  
 Mebane, NC 27302  
 Phone: 336-506-1214  
 Fax: 919-563-2500

LeBauer-Brodie Center  
for Cardiovascular

Research and Education  
 1121 North Church Street  
 Greensboro, NC 27401  
 Phone: 336-832-3799  
 Fax: 336-832-7746

## Piedmont Cardiovascular, PA

1910-A North Church Street  
 Greensboro, NC 27405  
 Phone: 336-676-4388  
 Fax: 336-419-0042

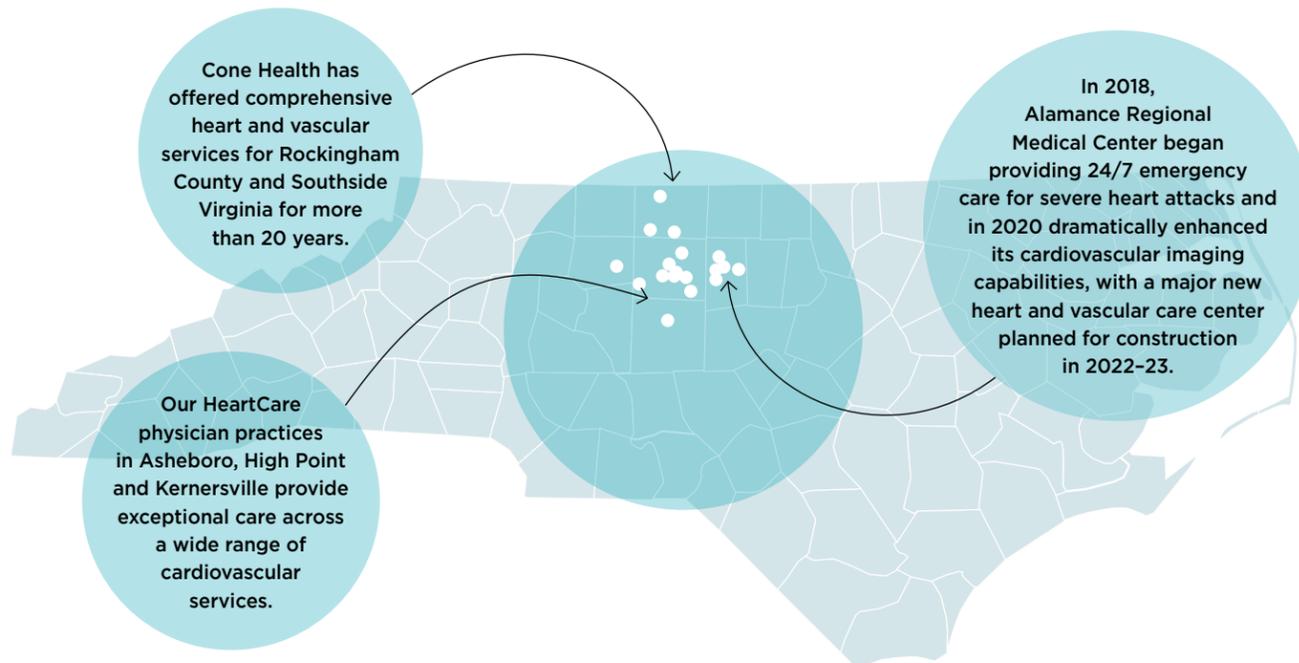
Triad Cardiac  
and Thoracic Surgery

301 East Wendover Avenue, Suite 411  
 Greensboro, NC 27401  
 Phone: 336-832-3200  
 Fax: 336-832-3201

Vascular and Vein Specialists  
of Greensboro

2704 Henry Street  
 Greensboro, NC 27405  
 Phone: 336-663-5700  
 Fax: 336-663-5734

## PHYSICIAN PRACTICES





## Top Honors

Cone Health continues to be nationally recognized for its excellence in cardiovascular care. Here is a sampling of our 2021–22 awards.

### THE MOSES H. CONE MEMORIAL HOSPITAL

Top 50 Cardiovascular Hospital  
— IBM Watson Health, 2022

High-performing in abdominal aortic aneurysm repair, heart bypass surgery, aortic valve surgery, transcatheter aortic valve replacement, heart failure and heart attack care  
— U.S. News & World Report, 2021–22

Platinum Performance Achievement Award for the treatment of heart attacks  
— American College of Cardiology, 2021

Top 100 in the nation for medical excellence in major cardiac surgery and coronary bypass surgery  
— CareChex® Awards by Quantros, 2022

Top 100 in the nation for patient safety in major cardiac surgery, coronary bypass surgery and heart failure treatment  
— CareChex® Awards by Quantros, 2022

Get With The Guidelines® – AFIB GOLD  
— American Heart Association, 2021

Top Three-Star Rating for Aortic Valve Replacement and Coronary Artery Bypass Grafting  
— Society of Thoracic Surgeons, 2017–2019

Blue Distinction® Center+ for Cardiac Care  
— Blue Cross and Blue Shield, 2021

### ALAMANCE REGIONAL MEDICAL CENTER

Top 10% in the nation for patient safety in cardiac care and vascular surgery  
— CareChex® Awards by Quantros, 2022

Platinum Performance Achievement Award for the treatment of heart attacks  
— American College of Cardiology, 2021