



UNC REX Heart & Vascular

ANNUAL UPDATE



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The North Carolina Heart & Vascular Hospital was created to serve the people of North Carolina and beyond, and to lead the field in innovative, compassionate care delivery.

Our team of cardiologists, vascular specialists and surgeons come together at UNC REX from three specialty practices—North Carolina Heart & Vascular, REX Cardiac Surgical Specialists and REX Vascular Specialists. The collaboration across the UNC REX service line allows us to deliver comprehensive, precise, and patient-focused care for every cardiovascular condition.



UNC REX HEART & VASCULAR 2017 ANNUAL REPORT



In 2017, we opened the North Carolina Heart & Vascular Hospital on the UNC REX Healthcare campus. This facility brings together UNC REX's heart and vascular services into one location that serves as the hub for our vast network across central and eastern North Carolina. Every aspect of the facility was designed with the comfort of patients and their families in mind. The hospital has the latest technology for patient care and procedures, with 10 cardiovascular procedure rooms and 2 state-of-the-art hybrid rooms, a diagnostic imaging station, and an on-site cardiac rehabilitation facility. In addition, we built a brand-new center for innovation and learning and demonstration kitchen that foster the culture of education and empowerment, which are fundamental to our care model.

Some of our noteworthy clinical and operational achievements in Year 1 at the North Carolina Heart & Vascular Hospital:

- Offered 25 training sessions for physicians, nurses, and techs from across the US and internationally
- Expanded our same-day discharge program for patients undergoing cardiac catheterization and intervention
- Achieved 3-star rating from The Society of Thoracic Surgeons for cardiothoracic surgery for coronary artery bypass grafting
- Became the first in the state to implant Micra, Medtronic's smallest and first leadless pacemaker
- Performed UNC REX's first pulmonary valvuloplasty
- Opened 4 new vascular surgery office locations in Cary, Clayton, Smithfield, and Wakefield
- Initiated a comprehensive acute stroke program
- Implemented the TECSYS inventory system in our catheterization labs
- Expanded our cardiac rehabilitation offerings by 35% and developed new care models to increase access



Our goal for cardiovascular care at the N.C. Heart & Vascular Hospital is to exceed the expectations of our patients in every aspect and to invigorate the region with progressive, groundbreaking care. From leading the field with novel coronary stent options for bifurcated lesions, to globally recognized leadership in vascular therapies, to the use of the latest MRI cardiac imaging technology, we are continuously striving for enhanced clinical care delivery. With our focus on digital innovation, the patient is no longer bound by the traditional constraints of the four walls of the hospital or office, or by the limits of a time-based visit. We are seeking to provide a customized care experience that supports patients in every stage of their condition and in every setting in which they live life.”



RAVISH SACHAR, M.D., F.A.C.C.
Physician and Chief
UNC REX Heart & Vascular Services



UNC REX has long embraced the mission of UNC Health Care in leading, caring, and teaching, and we believe the N.C. Heart & Vascular Hospital offers patients and providers the broadest range of education and treatments available. The collaboration with UNC Medical Center affords unmatched opportunities for synergy in quality initiatives and comprehensive research endeavors. In addition, we are able to offer experience for young physicians in their last years of advanced training in interventional cardiology and vascular surgery. The N.C. Heart & Vascular Hospital enables the health system to continue executing on its vision for the transformation of healthcare.”

JAMES ZIDAR, M.D., F.A.C.C.
*UNC Health Care System Physician-in-Chief
Heart & Vascular*



In 2017, our focus at the N.C. Heart & Vascular Hospital has been on reducing care variation with the intention of achieving patient-centered, quality outcomes. We continue to uphold the longstanding UNC REX tradition of providing exceptional acute care services but have made tremendous strides in achieving outpatient strategies for primary and secondary prevention through new care models. Our network with primary care physicians and other specialists across the state provides options in local communities for patients who want access to world-class care close to home. Our prioritization of research in the latest technologies, devices, and clinical approach is raising the bar in the global cardiovascular community.”

KIRSTEN RIGGS, M.H.A., B.S.N., R.N.
*Vice President
Heart & Vascular Services*



UNC REX HEART & VASCULAR *at* A GLANCE

Our program offers comprehensive access to quality care by providing acute and longitudinal health services and programs.



125 quality cardiovascular physicians and advanced practice providers



More than 400 highly trained RNs and allied health professionals



4 acute-care hospitals, as well as partnerships with other hospitals in the surrounding counties



2 Wake County skilled nursing facilities and home health services in 6 counties



Advanced imaging and diagnostic centers



Cardiac rehabilitation facilities and customized rehab programs



Comprehensive heart failure outpatient program with 24/7 clinical support



Remote biometric patient monitoring through in-home devices



Digital and in-person behavioral health programs for management of chronic conditions

BY *the* NUMBERS*

OFFICE LOCATIONS

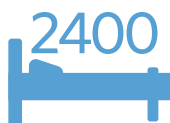


MORE THAN

80,000



PATIENTS TREATED FROM 92/100 COUNTIES IN NORTH CAROLINA AND FROM 44 STATES



CARDIOVASCULAR PATIENTS TRANSFERRED FROM REFERRING HOSPITALS

8300

INVASIVE CARDIAC PROCEDURES

ANNUAL CARDIOTHORACIC PROCEDURES

700



VASCULAR PROCEDURES



400

ST-ELEVATION MYOCARDIAL INFARCTION CASES

*Approximated annual totals.

OUTPATIENT PROCEDURAL SERVICES OFFERED OUTSIDE OF UNC REX HEALTHCARE

	Wayne UNC Health Care	UNC Health Care Johnston Health	Wilson Medical Center
TEE	▪	▪	▪
Cardioversion	▪	▪	▪
Diagnostic heart cath	▪	▪	▪
Coronary stenting	▪	▪	▪
Peripheral angiography	▪	▪	▪
Peripheral stenting	▪	▪	▪
PPM implant	▪	▪	▪
AICD implant	▪	▪	▪
Biventricular ICD implant		▪	▪
AV node ablation		▪	

Providing patient-centered, quality clinical care is a task that requires all staff and providers to prioritize national benchmarking and accreditation standards. We are proud of what we've accomplished over the last few years, and in 2017, we received the following accolades for our care delivery.

DELIVERY IN OVERALL QUALITY

The only CMS five-star rated hospital in the Triangle, placing us among the top 9.1% of hospitals in the nation.



93RD PERCENTILE
2017 Patient Satisfaction Score
 PRESS GANEY REGIONAL PEER GROUP

DELIVERY IN PATIENT EXPERIENCE



DELIVERY IN NURSING CARE



DELIVERY IN STEMI CARE



The American Heart Association recognizes this hospital for achievement in adherence to the guidelines for Mission: Lifeline STEMI Receiving Center performance achievement indicators, quality measures, and First-Door-to-Device times.

QUALITY of CARE DELIVERY



Patients first. The delivery of quality care foremost begins with understanding the needs of our patients and their families. We follow with state-of-the-art technology, highly skilled doctors and staff, then endless dedication.”

JOEL SCHNEIDER, M.D., F.A.C.C.
 UNC REX Heart & Vascular Quality Champion



ACUTE CARDIAC CARE/INTERVENTIONAL CARDIOLOGY

UNC REX Heart & Vascular offers a comprehensive range of cardiac interventional procedures across several locations that provides patients with innovative treatment options for coronary artery disease. In 2017, thousands of patients received care from industry-leading interventionalists who provided rapid emergent ST-elevation myocardial infarction (STEMI) care and the latest revascularization strategies. Our center has become the highest-enrolling site for clinical trials investigating bioabsorbable and other novel, cutting-edge coronary stents, and we are the national primary investigators in the leading bifurcating coronary lesion trial. We also provide strategies for chronic total occlusion lesions and multi-vessel disease, which would have historically required open surgery.

In 2017, we expanded our program for same-day discharging of patients who have undergone percutaneous coronary interventions (PCIs). This has allowed for enhanced catheterization lab throughput as well as an improved patient experience.

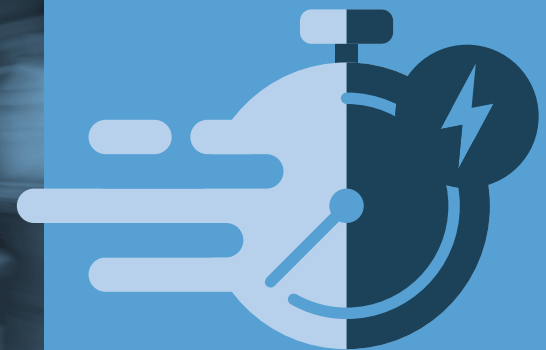
UNC REX has received American College of Cardiology Chest Pain with PCI Accreditation and Mission Lifeline Gold status for 2017, and we continue to prioritize quality measures for our STEMI patients. Extensive efforts are continuously occurring to maintain the patient as the center of our workflow from arrival to their first visit back in the office.

We provide several innovative strategies for assisting patients in bridging the gap between the hospital and home, which include the use of telephone visits with a nurse navigator in the 7 days following their hospitalization, remote monitoring devices to track biometrics, and telemedicine virtual visits. By offering patients enhanced access to our clinical care teams through nontraditional modalities, we consistently maintain acute myocardial infarction readmission rates that are below state and national benchmarking.

ST-ELEVATION MYOCARDIAL INFARCTION CARE

The STEMI program is a recognized leader for expedited treatment of ST-elevation myocardial infarction (STEMI) patients. Our current door-to-device time is 13.5 minutes faster than the national median of like hospitals R4Q 2017. (Action Registry)

13.5 MINUTES FASTER D2D



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MORE THAN
600 SURGICAL
PROCEDURES
PERFORMED
ANNUALLY



UNC REX Cardiac Surgical
Specialists achieved a 3-star
(highest) rating in coronary
artery bypass grafting for
the 3-year period ending in
June 2017.



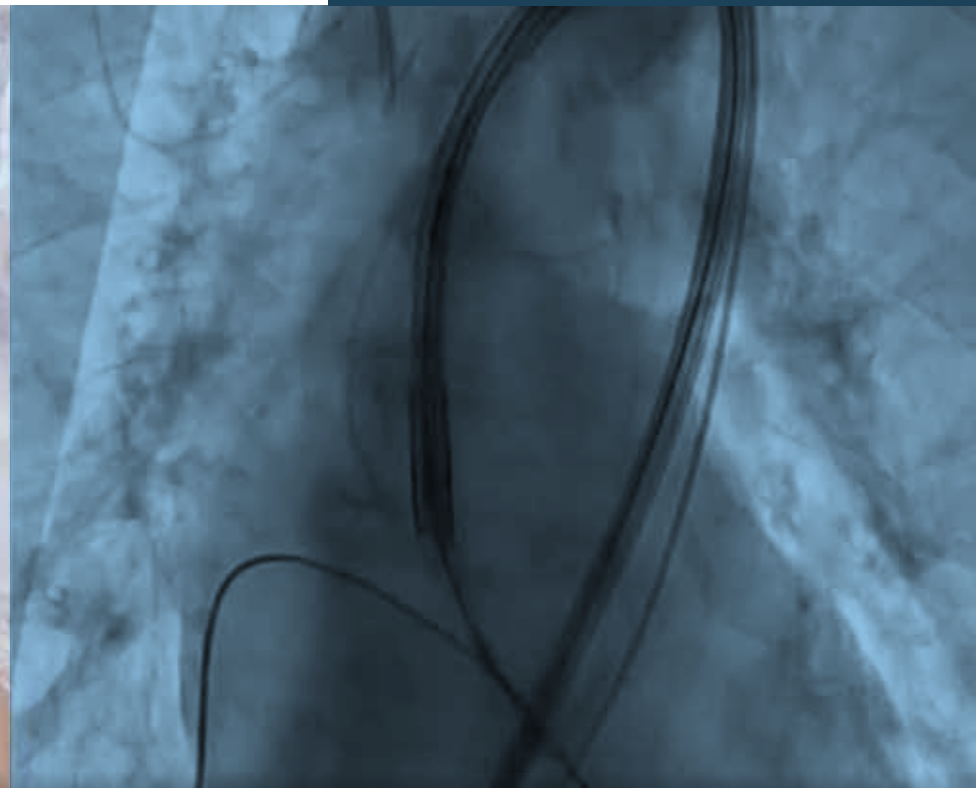
CARDIOTHORACIC SURGERY

Cardiothoracic surgery at UNC REX is a highly regarded program with superior quality and nationally recognized surgeons. Our team comprises expert surgeons and advanced practice providers who work closely with cardiology and thoracic surgery colleagues to provide a comprehensive, multidisciplinary approach.

The cardiac surgery team holds a coveted 3-star rating by the Society of Thoracic Surgeons. Specialized surgeons provide care for coronary artery disease, congestive heart failure, aortic disease, and advanced valve pathology with an emphasis on a minimally invasive approach.

SERVICES PROVIDED

- Aortic repair/replacement
- Aortic valve replacement
- Coronary bypass grafting
- Lead extractions
- Mitral valve repair/replacement
- Trans-catheter aortic valve replacement
- Minimally invasive valve surgery
- Clinical trials and research



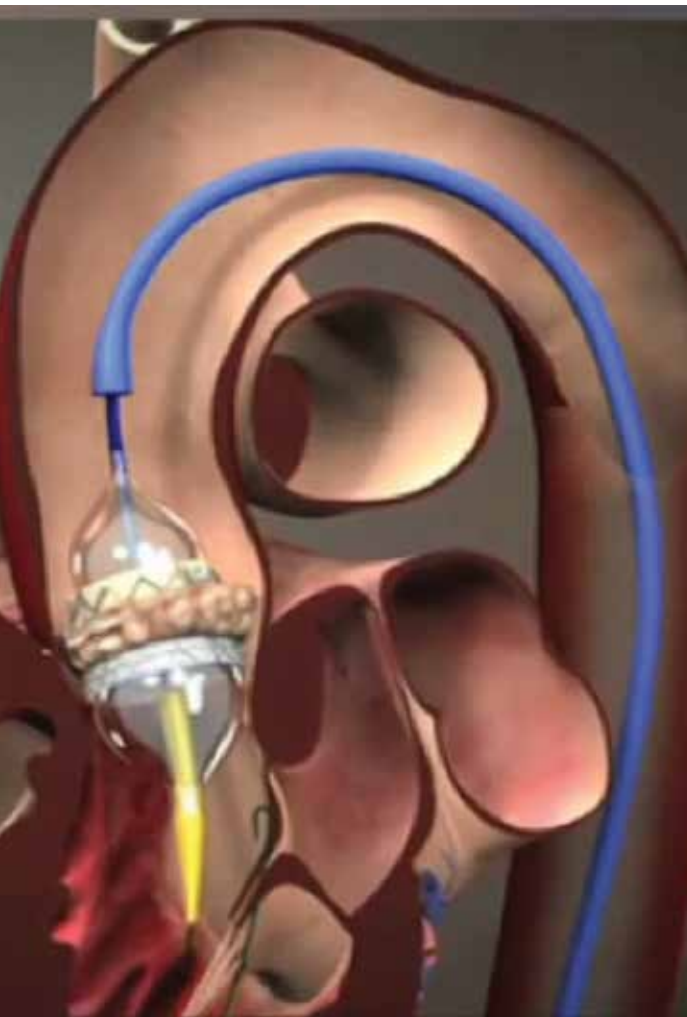
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STRUCTURAL HEART

The structural heart program at UNC REX began in 2012 with a focus on transcatheter aortic valve replacement. Over the past 5 years, our multidisciplinary team has grown to include doctors, nurses, and nurse practitioners from cardiology, cardiothoracic surgery, and anesthesiology. Our focus has expanded from the aortic valve to also include mitral valve interventions, left atrial appendage occlusion, septal closures, and paravalvular leak closures. This multispecialty team approach ensures that all treatment options are considered and that the selected treatment plan reflects the best possible option for that patient.

UNC REX Healthcare has been selected as a site for cutting-edge clinical trials including new percutaneous heart valves (Lotus valve) as well as national trials investigating broader application of transcatheter valves to lower risk in asymptomatic patients.



More than 125 transcatheter aortic valve replacements performed annually

One of the few centers doing transseptal mitral valve replacements

One of the first sites regionally to perform catheter-based mitral valve repairs in patients who are at high risk for surgery

Selected for participation due to excellence in outcomes for REPRISE III, PARTNER III, and EARLY TAVR

High-volume center for

- Percutaneous left atrial appendage closure devices
- Aortic and mitral balloon valvuloplasty
- Paravalvular leak closure
- Septal and patent foramen ovale (PFO) closure



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IMAGING

Noninvasive imaging at N.C. Heart & Vascular Hospital provides state-of-the-art, multimodality technologies to evaluate heart and vascular structure and function. Accurate and comprehensive imaging is critical to diagnosing and guiding treatment for our patients. Our cardiac imagers work collaboratively with cardiac surgeons, vascular surgeons, our heart failure team, and our structural heart team to help decide which interventions and medications are most appropriate for our patients.

Our labs place a high value on achieving accreditation through the ICAEL, ICAVL, and ICANL certification organizations. We are pleased to have a robust cardiac PET imaging program that is unique in Wake County. We have been able to use this imaging technology for evaluation of viability, stress testing, and for detection of more complicated cardiac problems such as endocarditis and sarcoidosis. Our use of 3D echocardiography has revolutionized our ability to image complex cardiac valve problems, and our cardiac MRI program has grown dramatically over the past 2 years, allowing us to better evaluate congenital heart disease, cardiac tumors, and unusual causes of heart failure. Through our multiple vascular labs, we are able to offer comprehensive vascular imaging, particularly of carotid arteries, peripheral arterial disease of the legs, and imaging of aortic aneurysms.

We have a state-of-the-art multislice CT scanner that allows for highly-detailed, noninvasive assessment of blood vessels in the heart as well as the rest of the body. Because of our high-quality and consistent cardiac CT imaging, the N.C. Heart & Vascular team was selected to participate in imaging research on transcatheter aortic valve replacements.

IMAGING SERVICES PROVIDED

- Transthoracic and transesophageal echocardiography
- 3D echocardiography
- Viability, stress testing, and assessment of cardiac inflammation or infection
- Nuclear cardiology stress testing
- Cardiac MRI
- Cardiac CT angiography: Coronaries and peripheral vascular assessment
- Comprehensive vascular ultrasound

ELECTROPHYSIOLOGY

The electrophysiology program at UNC REX is one of the leading programs in the region and provides state-of-the-art care for patients with arrhythmia disorders and related complications. The team comprises 4 electrophysiologists, a dedicated heart failure physician and specialty clinic, 6 advanced practice providers, pharmacists, and a team of EP nurses and supporting clinical staff who are able to care for patients across the care continuum. Our team is able to provide the highest level care in the acute setting, in 15 practice locations, and through our extensive remote monitoring program.

Our procedural achievements in the last year include leadless pacemaker implantations, expansion of our left atrial appendage closure program, and the accomplishment of nearly 100 lead extractions. Our providers perform complex ablations targeting atrial and ventricular arrhythmias using the latest technology and approach. Our team is also participating in a landmark study investigating broadening the scope of ICD indications and is involved in a number of other clinical research opportunities with the latest cardiac care technologies. With over 20 years of experience, our lead extraction team is comprised of cardiothoracic surgeons and electrophysiologists that work seamlessly to deliver highly effective, safe care. In the outpatient setting, patients suffering with atrial fibrillation have rapid access to our specialists for avoidance of hospitalization and for targeted symptom management through a comprehensive, institution-wide care pathway. Our remote monitoring program allows patients to remain connected to the care team regardless of geography, and detection of latent arrhythmias results in rapid access to the appropriate and often life-saving treatment strategies.



REMOTE MONITORING

More than 6000 patients enrolled in remote monitoring with more than 20,000 remote interrogations annually

2017 VOLUMES

- Nearly 450 EP studies and ablations
- More than 1300 device implantations
- Nearly 100 lead extractions in 2016-2017
- High-enrolling sites for 3 EP device trials



MILLION HEARTS®: CARDIOVASCULAR DISEASE RISK REDUCTION MODEL

In 2017, the cardiology team at North Carolina Heart & Vascular began participating in the Million Hearts®: Cardiovascular Disease Risk Reduction Model, a program initiated by the Centers for Medicare and Medicaid to focus on reducing the incidence of heart attacks and stroke in the US. The Million Hearts® Model is a 5-year randomized controlled trial that seeks to bridge a gap in cardiovascular care by encouraging providers to engage in beneficiary CVD risk calculation and population-level risk management. Instead of focusing on the individual components of risk, participating organizations will engage in risk stratification across a beneficiary panel to identify those at highest risk for atherosclerotic cardiovascular disease (ASCVD). N.C. Heart & Vascular has enrolled thousands of patients in this program and has been recognized by CMS as a Promising Practice with regard to primary prevention of cardiovascular outcomes and leadership in population health management.



HEART FAILURE

The heart failure program at UNC REX provides comprehensive heart failure management strategies for every stage of the disease. Dr. Christopher Chien joined the UNC REX team in 2016 and has developed a robust outpatient clinical program that combines face-to-face visits, telephone monitoring, self-management techniques, and remote biometric data monitoring. With 2 highly skilled advanced practice providers and a team of compassionate nurses, we are able to provide patients with exemplary resources they need for managing their condition. In 2017, we opened a satellite location in Goldsboro to further meet the growing needs of our patients in that community. The heart failure program also works in collaboration with UNC Medical Center to offer advanced surgical treatment options (including cardiac transplantation and left ventricular assist devices) for patients with medication-refractory heart failure.

The inpatient heart failure team provides consultation over the course of the patient's admission to optimize heart failure management. We combine an academic approach with the use of electronic population-health data registry tools to prioritize patients in our community with the greatest clinical needs. Our specialist care team works in collaboration with our hospitalists to provide the patient with personalized care plans aimed at improving both quality of life and life expectancy. In the last year, we have seen a marked reduction in length of stay by focusing on simple inpatient care redesign. With commitment from a dedicated heart failure committee, we continuously investigate how we may augment our clinical care delivery and improve the lives of our patients.

INNOVATIONS IN HEART FAILURE

In 2017, we began testing the use of the external wearable ReDS VEST for heart failure point-of-care testing in the emergency department. This noninvasive technology assists our ED physicians in determining the patient's lung fluid volumes, thereby expediting diagnosis and treatment decision making.

In 2015, UNC REX Healthcare deployed the first CardioMEMS™ HF System device to continuously measure a patient's pulmonary artery pressure. In 2017, we implanted nearly 40 CardioMEMS™ PA sensors, allowing for prediction of heart failure exacerbations and enabling early pharmacologic interventions.



CardioMEMS™ HF System device

VASCULAR SURGERY

At UNC REX, vascular care is provided by teams who are among the most well-trained and experienced in the field. With internationally recognized physicians who are leading in innovative care and vigorous research, as well as a comprehensive range of diagnostic and imaging services, patients are able to receive the highest quality of care available in the world.

The vascular surgery team began in 2011 with Dr. Robert Mendes and has grown rapidly over the last 7 years to include 6 vascular surgeons, 2 vascular medicine physicians, and 6 advanced practice providers. The team currently provides outpatient care in 6 offices in Wake and Johnston counties and inpatient hospital services at UNC REX Healthcare and Johnston Health. The development of such a comprehensive team allows us to provide both surgical and noninvasive procedural options for patients with vascular disease.



VENOUS PROGRAMS

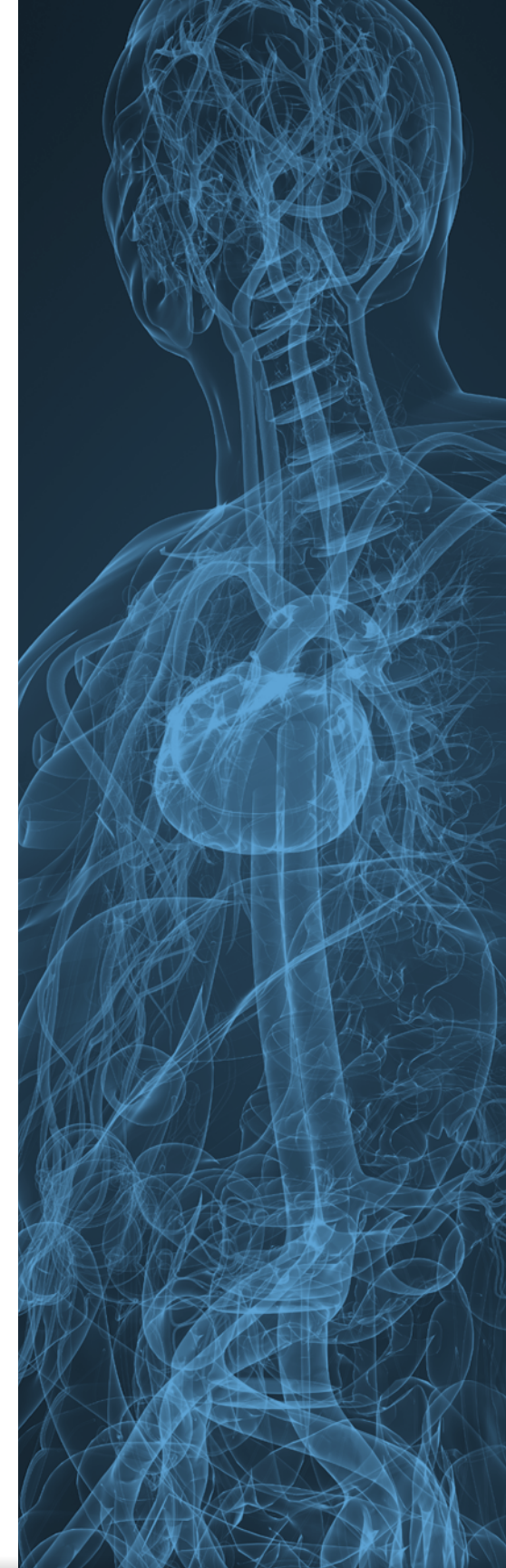
REX Vascular Specialists has a nationally recognized vascular ultrasound laboratory that performs about 15,000 exams a year. All of our offices offer onsite exams with certified sonographers and same-day consultation with a vascular specialist. Our group treats more than 300 patients per year with blood clots on a completely outpatient basis, avoiding unnecessary emergency department visits. We have an onsite anticoagulation clinic, lipid clinic, and tobacco cessation clinic. REX Vascular Specialists offers all modalities of treating venous disease from treatment of cosmetic spider veins to endovascular and open procedures for vein occlusions, which include stents and cutting-edge technology available through multiple research trials.

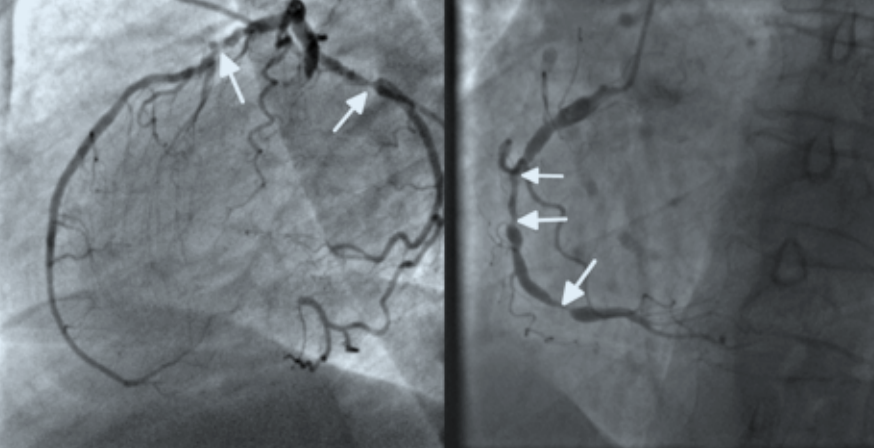
AORTIC CENTER OF EXCELLENCE

UNC REX Healthcare has a state-of-the-art facility that allows the management of a spectrum of elective and urgent aortic pathology. The team is expertly trained and actively participates in clinical trials advancing aortic care. Patients are able to undergo a full workup and treatment of aneurysms, dissections, and penetrating ulcers of the aorta at the North Carolina Heart & Vascular Hospital.

SERVICES PROVIDED

- Aortic aneurysm repair, including endovascular aneurysm repair
- Carotid endarterectomy and stenting
- Complex mesenteric reconstruction
- Complex venous intervention and reconstruction
- Lower extremity arterial intervention and reconstruction
- Renal intervention
- Venous sclerotherapy and laser ablation
- Dialysis access creation





200
CAROTID
PROCEDURES
ANNUALLY

CRITICAL LIMB ISCHEMIA

UNC REX has earned a prestigious reputation as a global leader in limb preservation. Our physicians are both passionate and dedicated to the treatment and outcomes of our peripheral artery disease and critical limb ischemia patients. Striving to provide the best clinical care, our robust research enterprise allows patients the opportunity to receive cutting-edge therapies through the most current clinical trials. Our skilled team has also gained great notoriety for peripheral artery disease and critical limb education opportunities, servicing peer physicians, nurses, technologists, engineers, and many others from the medical device and pharmaceutical industry. More than 1500 endovascular and 1200 surgical lower extremity procedures were performed in 2017.

In 2017, we opened our critical limb ischemia onsite clinic at the N.C. Heart & Vascular Blue Ridge office location. These multidisciplinary visits combine the expertise of rapid vascular assessment with the latest wound care techniques to enable patients the greatest chance for limb preservation. With early ultrasound assessment and support from our pharmacists and nursing staff, patients have an expedited pathway to revascularization with the support of behavioral health strategies through risk factor management and education. We work in collaboration with our colleagues in general surgery, podiatry, infectious disease, endocrinology, and nephrology to deliver a holistic approach.

2700
ENDOVASCULAR
AND SURGICAL
LOWER
EXTREMITY
PROCEDURES
ANNUALLY

CAROTID ARTERY STENOSIS

The care for carotid artery stenosis at the N.C. Heart & Vascular Hospital is unparalleled. For patients with significant carotid stenosis, our comprehensive multispecialty team provides carotid artery revascularization options with carotid endarterectomy or carotid artery stenting. Our physicians are renowned for their success in perioperative patient safety, as demonstrated by a postoperative endarterectomy complication rate significantly below the regional and national averages. Our interventionalists and surgeons have received international acclaim for their technical expertise, and we perform more than 200 carotid interventions per year. We offer access to the latest clinical trials, which can often provide a superior interventional option and ensure powerful clinical surveillance. Patients can be seen in any of our locations for convenient carotid consultation and imaging.

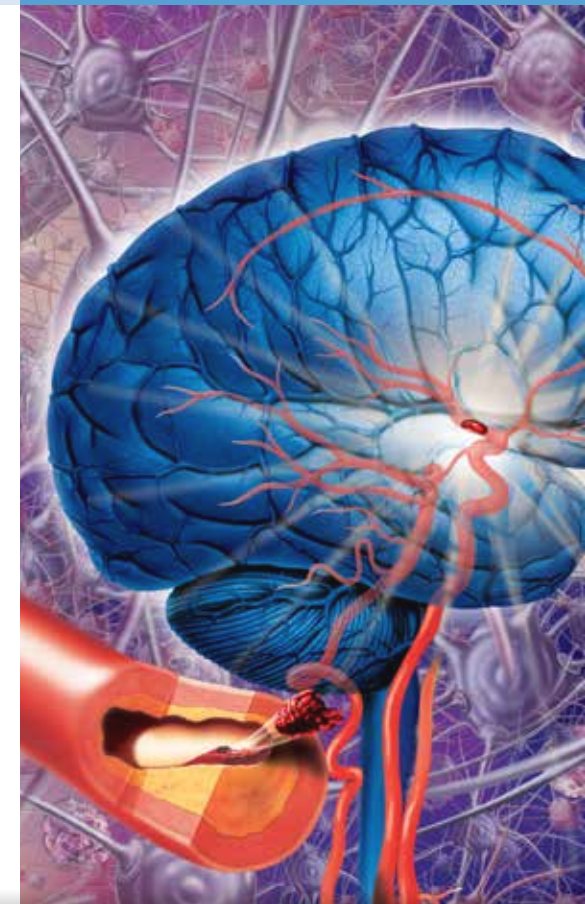
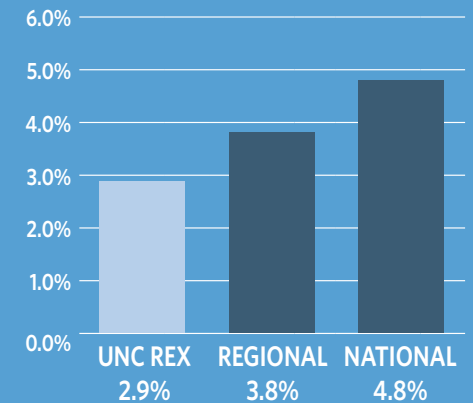
ACUTE STROKE EVALUATION & INTERVENTION

For acute cerebrovascular care, our cardiovascular service line partners with our stroke team to offer rapid evaluation and acute intervention if indicated. UNC REX Neuroscience Program includes neuroendovascular care, stroke services, and neurosurgery. The Primary Stroke Center sees more than 1000 stroke patients per year and was awarded Gold Plus Target Stroke Honor Roll from the American Heart Association for 2016 and 2017. While rapidly expanding its capabilities, in 2017 the program began performing endovascular thrombectomy up to 24 hours after the patient's onset of symptoms. This service greatly improves the chances of a patient returning to their normal life, instead of being severely disabled from a stroke. The program began performing aneurysm repair in 2018 and is continuing to expand their neurological intensive care services. Because the causes of stroke are closely related to cardiovascular health, the stroke team works closely with our cardiology partners. We are dedicated to improving the care of patients with acute neurologic events both inside Wake County and in eastern North Carolina.

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CEA POSTOPERATIVE COMPLICATIONS

Carotid Endarterectomy post-op complication rates from 2017 VQI Data Registry



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GROWTH IN 2017

Our cardiac rehab department relocated to the North Carolina Heart & Vascular Hospital facility in March 2017. Geographically, this has made our program more accessible for patients due to proximity to physician offices, visibility, and ample parking. A 12-channel telemetry monitoring system was implemented at the Raleigh location. Patient enrollment in classes has increased by 35% since 2016, fostering such high demand that an additional class has been added in the Raleigh location. In addition to offering dietary education classes, we've added individual 45-minute nutrition consult sessions with a registered dietitian. Patients can receive a customized experience that provides the physical and emotional support needed in recovering from a cardiac event or procedure.

CARDIAC REHAB

Cardiac rehabilitation is a medically supervised program designed for patients who have experienced a recent cardiac event or intervention. This program includes an individualized exercise plan, dietary counseling, education, and emotional support. Medical evidence suggests that attending a cardiac rehabilitation program increases functional capacity, decreases modifiable risk factors, improves collateral circulation, and decreases risk of coronary artery disease. Other potential benefits include weight management, decreased anxiety and depression, and improved overall well-being.

UNC REX CARDIAC REHAB LOCATIONS

2800 Blue Ridge Road
Raleigh, NC 27607

1515 SW Cary Parkway
Cary, NC 27511

MENDED HEARTS

Mended Hearts is a national cardiovascular group that provides ongoing education and support to cardiovascular patients. Group leaders also visit newly diagnosed cardiovascular patients at UNC REX Healthcare. Members listen, share their stories, learn from medical professionals, and volunteer to speak with other heart patients about lifestyle changes, depression, recovery, and treatment. Each meeting also features a new topic presented by a featured speaker. The support group meets once a month in the N.C. Heart & Vascular Hospital.

MENDED HEARTS CONTACT

(919) 784-3756



PROGRAM *at a* GLANCE

101 active studies

Drug phases 2-4

Investigational Device
Exemption (IDE) and
Post-Market (PM)
device trials

High-enrolling site in
the majority of active
studies

For information regarding
clinical research trials, please
contact [Rebecca.palermo@
unchealth.unc.edu](mailto:Rebecca.palermo@unchealth.unc.edu).

N.C. HEART & VASCULAR RESEARCH, LLC

The North Carolina Heart & Vascular Hospital and N.C. Heart & Vascular Research, LLC, a locally owned and independent research enterprise, join forces with local academic centers, federal agencies, and biomedical device companies on nationally and internationally recognized clinical research trials. Together with N.C. Heart & Vascular Research, LLC, we are able to offer our patients cutting-edge therapies and protocols with the goal of improving overall mortality and quality of life.

STUDIES WITH NATIONAL PRIMARY INVESTIGATORS

- RANGER II: RAVISH SACHAR, M.D.
- TOBA II BTK: GEORGE ADAMS, M.D.
- TRYTON PAS: JOEL SCHNEIDER, M.D.
- LIBERTY 360: GEORGE ADAMS, M.D.
- LIMBO-ATX: GEORGE ADAMS, M.D.
- SurVeil DCB: RAVISH SACHAR, M.D.

HIGH-ENROLLING STUDY SAMPLE

- Disrupt PAD III - Shockwave Medical Peripheral Lithoplasty System Study for PAD
- DEFINE PCI - Physiologic Assessment of Coronary Stenosis Following PCI
- HEART-FID - Randomized Placebo-controlled Trial of FCM as Treatment for Heart Failure With Iron Deficiency
- Gore ISR - Reline-GORE® VIABAHN® Endoprosthesis for treatment of In-Stent Restenosis of the Superficial Femoral Artery
- Ranger II - Ranger™ Paclitaxel Coated Balloon for treating lesions located in the Superficial Femoral and Proximal Popliteal Arteries (SFA/PPA)
- TRYTON PAS - Tryton Post Approval Study (PAS) for the Tryton Side Branch Stent (PAS)
- REALITY - Directional Atherectomy + Drug-coated Balloon to treat long calcific Femoropopliteal Artery Stenosis
- OPTIMIZE - Svelte IDS and RX Sirolimus Eluting Coronary Stent Systems for the treatment of atherosclerotic lesions in a randomized study
- GUIDE HF - Hemodynamic-GUIDEd Management of Heart Failure (GUIDE-HF)



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