Welcome

The Department of Cardiovascular Medicine at Morristown Medical Center, Overlook Medical Center and Newton Medical Center is leading the way in innovative cardiovascular care in New Jersey. It encompasses the largest cardiovascular surgical program in New Jersey and nationally recognized expertise in each of cardiology’s major disciplines. We offer advanced individualized team-based care for all forms of adult heart disease and are proud of our numerous awards and accolades, including recognition by U.S. News & World Report as one of the nation’s best hospitals for cardiology and cardiovascular surgery.

The center of the program is the Gagnon Cardiovascular Institute, a state-of-the-art heart hospital opened in 2009 on the Morristown Medical Center campus. As highlighted in subsequent pages, this facility includes eight operating rooms (two hybrid), five catheterization labs, three electrophysiology labs and advanced non-invasive imaging capability. We also have integrated programs for treating heart failure, heart disease in women, valvular heart disease, rhythm disorders and vascular disease. Through the partnership of our Advanced Interventional Therapies Program and Cardiovascular Surgical Program, we are one of only 20 programs nationally to offer all currently available catheter-based treatments for valvular heart disease (the SAPIEN® and CoreValve® valves for aortic stenosis and the MitraClip® for mitral regurgitation).

In addition to providing high quality care, optimizing the patient experience is also a priority. From friendly greeters who meet patients at the front door to our exceptional group of physicians, nurses and allied health professionals, the Department of Cardiovascular Medicine is truly patient-centered.

Education is also part of our commitment. We offer a series of live and web-based programs for our professional and patient communities as well as live case transmissions to professional society meetings and New Jersey’s Liberty Science Center. Our ACGME core cardiology fellowship and an advanced imaging fellowship are training the next generation of cardiologists.

The Department of Cardiovascular Medicine also has a fully staffed research division supporting both federally and industry-funded trials.

Excellence in all aspects of cardiovascular medicine and surgery is the hallmark of our program. I am proud to lead this exceptional team. Please take a few minutes to read more about our program and its accomplishments and consider a personal visit as well.

Sincerely,

Linda D. Gillam, MD, MPH, FACC, FAHA, FASE
Chair, Cardiovascular Medicine
Atlantic Health System
Morristown Medical Center's Gagnon Cardiovascular Institute is recognized as a national leader in the research and treatment of cardiac diseases. Every aspect of the comprehensive cardiovascular services at the Gagnon Cardiovascular Institute and the Charles L. Tice Heart Center demonstrates a dedication to quality and a passion for advancing the art of cardiac care to patients at Morristown Medical Center, Overlook Medical Center and Newton Medical Center.

Expert care is provided here by more than 700 board-certified cardiac and vascular care specialists, nurses and technologists. Clinical excellence correlates strongly with experience — more heart surgeries are performed at Morristown Medical Center than at any other New Jersey hospital.

**Gagnon Cardiovascular Institute’s services encompass the entire spectrum of cardiac treatment and include:**

- A catheterization laboratory that completes more than 6,500 successful catheterizations and angioplasties annually.
- The Cardiac Rhythm Management Program, which performs approximately 2,000 procedures a year including ablation and device implantation.
- The Valve Program, whose surgeons perform nearly 600 surgeries involving valvular repair each year, placing Morristown Medical Center in the top two percent of all cardiac surgical programs in the United States in terms of experience. Gagnon Cardiovascular Institute is also a leader in non-surgical approaches to valve disease.
- Rehabilitative Medicine and Cardiac Integrative Medicine programs that help outpatients return to their communities at lower risk of heart disease than before, reducing the risk of chronic events.
- The comprehensive Thomas E. Reilly Heart Success Program, which helps patients with heart failure manage their chronic disease through a collaborative approach that includes both MDs and APNs.

Gagnon Cardiovascular Institute is at the forefront of research, working to develop new life-saving diagnostic, medical, surgical and interventional treatments. Our goal is to prevent all types of heart disorders and illnesses and to share our advanced knowledge with current and future cardiac care professionals.

We employ the latest technologies, including 320-slice CT, percutaneous valve repair, epicardial ablation and robotic surgery where appropriate. In addition, patients have the opportunity to access the newest treatments through the institute’s research programs and clinical trial participation. Comprehensive planning and care make for better outcomes at every level, even for high-risk patients who, in other facilities, might not be considered candidates for some treatments.
Many patients come to our facility as rapid transfers from either an outlying acute care hospital’s emergency department or an inpatient unit when a patient is deemed to need a higher level of care or the specialty services offered by Gagnon Cardiovascular Institute.

A single call by either a referring physician or hospital representative to the Atlantic Patient Transfer Center sets in motion a variety of patient transfer coordinating services to achieve a safe and seamless transition in a timely fashion. These include targeted physician-to-physician consultation, updated communications of patient status en route to all involved clinicians, intake logistics, and necessary insurance reviews and authorizations. Teams of registered critical care nurses, on call 365 days per year, stand ready to assist referring doctors and accompany patients. One phone call to 877-441-4450 is all it takes to mobilize all parties and the transport team can reach any location in New Jersey, by ambulance or helicopter, within 20 minutes if necessary.

Morristown Medical Center is also a Level I Regional Trauma Center and a Stroke Center, which are served by Atlantic’s 911 Mobile Intensive Care Unit. When a call involves a possible AMI or stroke patient, attending paramedics are able to assess and send, via telemetry, the results of 12-lead electrocardiograms to the awaiting ER, activating the STEMI team when appropriate to be ready when the patient arrives. It’s one more essential step in making our door-to-balloon times well below national norms.
U.S. News & World Report has named Morristown Medical Center a “Best Hospital” in the country for Cardiology and Heart Surgery. It’s the latest example of our dedication to providing the highest quality medical care as well as the latest diagnostic and treatment tools to our patients and their families.

The Society of Thoracic Surgeons (STS), which uses 11 separate quality standards in measuring cardiac surgery performance at hospitals throughout the country, awarded Morristown Medical Center three stars, its highest rating. Only 14 percent of participating institutions achieve this high honor. For the last decade, Morristown Medical Center’s mortality rates have been statistically lower than the STS national database benchmark.

Beacon Award by the American Association of Critical Care Nurses. The Beacon Award for Excellence lauds North American hospital units that employ evidence-based practices to improve patient and family outcomes. Two Gagnon Cardiovascular Institute units, the Cardiac Care Unit and Gagnon A, at Morristown Medical Center have received this honor. Only 166 units in the country achieve the Beacon Award. Recipient of the Beacon Award since 2009, Morristown Medical Centers’ Cardiac Care Unit has been recognized as demonstrating continuous learning and effective systems to achieve optimal patient care.

Thomson Reuters Top 100 Hospitals for Cardiovascular Care. After examining 970 hospitals, Thomson Reuters recognized Morristown Medical Center as a standout facility in the region. Analyzed in the rating were clinical outcomes, patient safety and patient satisfaction among persons diagnosed with heart failure, heart attacks or patients who underwent CABG or angioplasties.

Magnet Recognition by the American Nurses Credentialing Center. Only six percent of all registered hospitals in the US have achieved this prestigious status to date. Morristown Medical Center has held this honor for 12 years running, in recognition of the hospital’s sustained support for education and professional development among its nursing staff and the concomitant effect it has on nursing recruitment, retention and quality patient care. The Magnet recognition also contributes to Gagnon Cardiovascular Institute’s selection as a participant in major clinical trials.

ACTION Registry® — Get with the Guidelines™ 2009, 2010, 2011 Gold Performance Achievement Award, and 2012 Platinum Performance Achievement Award conferred by the American College of Cardiology Foundation/ American Heart Association. The award was made in recognition of Morristown Medical Center’s adherence to current national guidelines for treatment of patients with coronary artery disease, specifically high-risk STEMI and NSTEMI patients.

Gold Seal of Approval™ for a Ventricular Assist Device Program. Awarded by the Joint Commission in recognition that the hospital’s VAD program is patient-centered, comprehensive, well-developed and has met stringent standards of care. Morristown Medical Center is one of 60 hospitals nationwide to receive this recognition. We implant approximately 10 LVADs annually.

Consumer Reports has given Morristown Medical Center a 3 star designation as a cardiac surgery program with excellent coronary artery bypass outcomes.
At Morristown Medical Center, successful cardiac surgery relies on multiple disciplines contributing to the individualized care of our patients. Our program is the largest in New Jersey, with nearly 1,300 surgical procedures performed each year. The Gagnon Cardiovascular Institute at Morristown Medical Center offers a full range of open and minimally invasive heart surgeries, and is one of the few programs in the country that has grown each year over the last five years.

The growth of our program is largely attributable to an increase in valve surgery. Minimally invasive surgical repair and replacement for the mitral and aortic valves is routine and combines the durable results of conventional surgery with a faster recovery time, reduced pain and obvious cosmetic advantages over approaches using larger incisions. It will remain the destination of choice for most patients needing expert care for valvular heart disease.
We are also recognized for being early leaders in the field of percutaneous valve therapy and offer transcatheter aortic valve replacement with both the SAPIEN® and CoreValve® devices. We have also been early adopters of the MitraClip® for mitral valve repair and we are about to begin the SURTAVI trial which is comparing percutaneous aortic valve therapy in an intermediate risk group. It has already been proven more effective than medical therapy in the group of patients who are not candidates for surgery and has been proven as effective as surgery in the high-risk group at two years.

Our results with surgical revascularization continue to be excellent. The duration of cross-clamp time is increasingly correlated with overall operative risk. Our cross-clamp times are shorter than the national average and we feel this translates to a better patient outcome. Surgical volume is also often used as a marker for surgical results. Each of the surgeons at Morristown Medical Center performs approximately 300 heart surgeries a year. Our surgical results compare favorably with established national benchmarks despite our comparatively high number of older patients with complicating co-morbidities. We expect that the need for surgical revascularization will only increase in recognition of the early results of the FREEDOM trial.

In addition to surgery for valvular heart disease and surgical revascularization with beating heart and MIDCAB procedures, Morristown Medical Center provides surgical devices for heart failure, valve-sparing aortic root procedures, laser-guided lead extractions, robotically assisted MIDCAB procedures and transmyocardial laser revascularization.
Under the directorship of Stephen Winters, MD, the cardiac rhythm management (CRM) program at Morristown Medical Center remains at the forefront of established and investigative approaches to the evaluation and management of the most complex abnormal heart disturbances. The core group of cardiac electrophysiologists, Jay Curwin, MD, Robert Coyne, MD, Jonathan Sussman, MD and Timothy Mahoney, MD, perform more than 2,000 procedures annually, including diagnostic electrophysiology evaluations, catheter ablations and implantations of rhythm control devices. The team has expertise in evaluating cardiac rhythm disturbances, from benign palpitations to the most complex inherited arrhythmia syndromes and channelopathies (e.g. long QT syndrome, Brugada syndrome, catecholamine-dependent polymorphic ventricular tachycardia (CPVT), arrhythmogenic right ventricular dysplasia (ARVD)). A large focus of the program is comprehensive treatment of syncope, bradyarrhythmias, heart block, supraventricular tachycardia, atrial fibrillation and flutter, ventricular tachycardia, ventricular fibrillation and risk assessment for sudden cardiac death. Physician members of the program are all ABIM certified in cardiac electrophysiology and are active in the department’s training of cardiology fellows, medical residents, cardiovascular technologists and nurses.

The team has expertise in advanced ablation techniques that include the use of radiofrequency and cryoenergy for such complex rhythm disturbances as ventricular tachycardia and atrial fibrillation, as well as supraventricular tachycardia. Ours was the first program in the state to utilize cryoballoon technology to cure atrial fibrillation, and we are involved in an ongoing multicenter study to assess the “real-world” experience with catheter ablation of atrial fibrillation. Our capabilities for ablation of ventricular tachycardia include the concomitant use of hemodynamic support modalities, along with endocardial, epicardial, transseptal and supra-aortic approaches.
State-of-the-art electroanatomic mapping technology helps maximize procedural success while minimizing patient risk.

Our pacemaker and defibrillator (ICD) implantation complication rates are consistently at or below nationally published benchmarks. The group has been, and remains extensively involved in, prospective trials of indications for new technology and evolving utilization of these devices. In addition to participating in trials including MADIT, CABG-Patch, DEFINITE, and MADIT-RIT, our electrophysiologists have been leading enrolers in two important ongoing NIH trials (M2RISK, a trial aiming to define which patients benefit most from ICDs post myocardial infarction in primary prevention against sudden death, and RAID, which explores the benefit of ranolazine in preventing harmful shocks in ICD recipients). The importance of the comprehensive on-site and remote monitoring by our Pacemaker and Defibrillator Follow-up Center, which ensures continuity of patient care with over 11,000 evaluations per year, is ever more crucial in light of recently recognized lead and device alerts. We work closely with our cardiac surgical colleagues in providing lead extraction to appropriate patients.

The program’s efforts extend to improving the clinical and functional states of patients with congestive heart failure. We have been active in investigational, as well as established electrode and pulse generator technology for cardiac resynchronization therapy (CRT) pacemakers and defibrillators. In conjunction with the Thomas E. Reilly Heart Success program, our electrophysiologists are very involved with monitoring and optimization of implanted CRT systems. We participate in investigations of advanced approaches to the management of congestive heart failure such as LAPTOP, which evaluates the benefit of transcatheter left atrial pressure recording systems to enable patient-directed care.

Along with leading edge facilities and technology, the program boasts fully dedicated nursing and technical staffs that delivers outstanding patient care. Our electrophysiologists welcome the opportunity to work closely with our referring physicians in providing state-of-the-art evaluation and treatment of patients with cardiac rhythm abnormalities.
The Advanced Interventional Therapies Center specializes in the latest techniques for minimally invasive catheter-based treatment for complex cardiac diseases. This state-of-the-art facility offers the latest imaging modalities and therapeutic technologies to treat patients with complex coronary, structural heart (including valvular diseases) and endovascular diseases.

The AIT Center, which includes more than 20 expert interventional cardiologists is led by its director, Maurice Buchbinder, MD, Professor of Medicine, Stanford University School of Medicine; Robert Kipperman, MD, Director of Structural Heart Disease; Barry Cohen, MD, Medical Director of the Cardiac Catheterization Laboratories and Jordan Safirstein, MD, Director of Radial Coronary Intervention.

Through our well-established and highly regarded research program, Morristown Medical Center offers the latest technologies, often prior to approval for general use (through
IRB-approved trials. Studies include the latest stent technologies, including the use of drug eluting stents with biodegradable polymer or other polymeric scaffolds, which are fully biodegradable. For patients at high-risk during coronary interventions, hemodynamic supported procedures with the Impella™ system are also available. Morristown Medical Center was the first center in New Jersey to perform systemic cooling with the Artic Sun® device in a patient following cardiac arrest to preserve brain function. Hypothermia is now the standard of care in treating such patients.

Morristown Medical Center was the first hospital in New Jersey to offer minimally invasive catheter-based treatment for mitral regurgitation with the MitraClip® system and the first to perform transcatheter aortic valve implantation/replacement (TAVI/TAVR) for patients with severe aortic stenosis. The “Heart Team,” comprised of our expert interventional cardiologists and cardiac surgeons, works together with our nationally renowned echocardiographers and cardiac anesthesiologists in treating patients at “high” or “prohibitive risk” for open surgical aortic valve replacement (AVR). Procedures can now be approached via transfemoral, transapical, direct aortic or subclavian access routes.

Patients with congenital heart disease such as atrial septal defects (ASDs) are being treated routinely at Morristown Medical Center using catheter-based techniques. Our interventional cardiologists have also teamed up with our colleagues in neurology to treat selected patients with cryptogenic stroke when associated with a patent foramen ovale (PFO).

The latest endovascular techniques are also available for patients with refractory hypertension. Under a research protocol with the ARDIAN System, we provide renal denervation to help control otherwise drug-resistant hypertension. Selected patients with severe carotid artery narrowing can be treated with stenting instead of surgery.

Radial access for coronary procedures is growing under the leadership of Dr. Safirstein, who has also instituted an annual education program entitled MARS: the Mid-Atlantic Radial Symposium.

Morristown Medical Center has been recognized as a leading STEMI center, ranked amongst the top institutions for care of heart attacks using standardized core measures that compare to Morristown Medical Center to all other institutions nationwide. A team of dedicated physicians, nurses and technicians are on call, ready to respond at every hour of every day throughout the year.

Gagnon Coronary Artery Procedures

Radial artery access is associated with fewer complications and a faster recovery.

Gagnon Advanced Interventional Therapies
Advanced Heart Failure

The Thomas E. Reilly Heart Success Program, the advanced heart failure program based at Morristown Medical Center, is nationally recognized as a leader in advanced heart failure treatment and mechanical circulatory support. Our program offers a comprehensive, multi-disciplinary and personalized approach to the management of complex cardiovascular disease involving specialists at our institution. This care is provided through a collaborative approach with the patient’s referring physician in order to optimize patient care. We are able to offer advanced therapies for the treatment of patients with dilated, hypertrophic and infiltrative cardiomyopathies as well as pulmonary hypertension.

Our institution employs advanced cardiac imaging, including PET, CT, cardiac MRI and 3D echocardiography to gain a detailed
assessment of each patient’s cardiac condition. We can also perform risk stratification through cardiopulmonary stress testing. The Thomas E. Reilly Heart Success Program offers both established and investigational treatments for heart failure involving pharmacological, interventional and surgical approaches. We work collaboratively with our electrophysiology, interventional cardiology, cardiothoracic surgery and cardiac rehabilitation colleagues. Our program has an innovative, nurse practitioner-driven approach to improving care by optimizing heart failure treatment regimens and pioneering the use of remote monitoring of patients through various pathways. As a result, at five percent, our 30-day readmission rates are among the lowest in the nation.

For patients with end-stage heart failure, the Thomas E. Reilly Heart Success Program can offer advanced therapies beyond intravenous inotropes. Morristown Medical Center is one of the region’s leading advocates for the use of mechanical assist devices that have dramatically improved both the prognosis and quality of life for patients with end-stage heart failure. We are among the largest non-transplant centers in the nation to offer left ventricular assist devices either as a bridge to transplant or as destination therapy for those who are not transplant candidates. We offer the latest generation of LVADs that have been shown to offer greater reliability and durability compared to older and larger devices. Our LVAD program has received the Gold Seal of Approval™ from the Joint Commission. For those who have sustained acute cardiogenic shock, we also have the ability to offer short-term support with the Abiomed Impella®, Thoratec CentriMag® or ECMO. These devices allow us to support a patient until more definitive therapy can be safely offered.
Imaging

Imaging is essential for the evaluation and management of patients with known or suspected cardiovascular disease and the Gagnon Cardiovascular Institute at Morristown Medical Center and Overlook Medical Center ensures that state-of-the-art equipment and expert imaging staff are available for all imaging modalities.

Cardiovascular Ultrasound and Optical Coherence Tomography

Our cardiovascular imaging equipment includes the newest generation Philips and GE systems with 3D transthoracic and transesophageal capability. Offline analysis is available through Philips Q-Lab, Tomtec and GE Echopac™ systems. This ensures optimal evaluation of all patients, particularly those with structural heart disease. 3D echocardiography is an important tool for evaluating patients with valvular and congenital heart disease and helps guide surgical and percutaneous approaches to treatment. In addition to 3D, other advanced approaches to evaluating left and right ventricular anatomy and function are also available including strain, strain rate, twist and torsion. These provide sensitive tools for identifying early ventricular dysfunction before a reduction in ejection fraction occurs.

We also use intracardiac echo (ICE) in guiding transcatheter closures of PFOs and ASDs, and Intravascular Ultrasound (IVUS) and Optical Coherence Tomography (OCT) in procedures where we need a detailed and accurate measurement of lumen and vessel size, plaque area and volume, or other tissue characterizations within a suspect coronary artery. Imaging findings help us determine if an arterial lesion is stable or vulnerable.

OUR IMAGING DEPARTMENT IS LEAD BY NATIONAL LEADERS IN THE FIELD.
Nuclear imaging

Nuclear imaging remains an essential tool in managing patients with known or suspected coronary artery disease. Morristown Medical Center has the capability to perform standard myocardial perfusion imaging as well as PET scanning alone or in combination with CT (PET-CT). Together these studies can define coronary anatomy, myocardial perfusion and function, thus facilitating clinical decision-making.

Cardiac CT

CT plays an important role in delineating structural abnormalities of the cardiovascular system and in identifying and quantitating atherosclerotic disease. Gagnon Cardiovascular Institute has two GE 64-slice CT scanners. In addition, we are the only cardiac center in the region with the Toshiba 320 Multislice CT scanner. While 64-slice has been rightly regarded as a great achievement in imaging, the new Toshiba scanner can generate large image “slices” in one second or less, wide enough to display most of the body’s organs with a single rotation of the gantry, a major advantage over earlier devices. This system provides the best cardiac and brain perfusion images available.

MRI

Magnetic resonance imaging is the gold standard for evaluating infiltrative cardiomyopathies and evaluating myocardial viability/fibrosis. Led by cardiovascular MRI experts, our MRI program is the busiest and most robust in the state.

Electro-Anatomical Mapping

Similar in concept to a GPS system, the CARTO 3 system creates a magnetic field that pinpoints catheters in 3D space during electrophysiology procedures, thereby facilitating ablations.
The Valve Center at Morristown Medical Center offers state-of-the-art, evidence-based evaluation and management of patients with valvular heart disease. Our team approach includes expert non-invasive cardiologists, interventional cardiologists and cardiovascular surgeons as well as colleagues in integrative medicine and rehabilitation medicine, all committed to the appropriate use of resources including non-invasive testing.

WE ARE ONE OF ONLY 20 CENTERS IN THE U.S. TO OFFER ALL AVAILABLE CATHETER-BASED APPROACHES FOR VALVE REPAIR AND REPLACEMENT.
We medically manage our patients until evidence-based triggers for further intervention are met, taking advantage of our access to new imaging techniques that are no more costly than less-advanced approaches. When surgical intervention is indicated, we have the most experienced open-heart surgery program in the state of New Jersey. Morristown Medical Center surgeons perform more open-heart surgeries than any other facility in New Jersey, have some of the lowest mortality rates and achieve patient satisfaction scores in the 90th percentile. Our Cardiovascular Surgery and Cardiology Programs are ranked 38 in the country in the most recent *U.S. News & World Report* and our Cardiovascular Surgery Program is one of only 14 percent nationally that have received three stars, the highest rating offered by the Society of Thoracic Surgeons (STS).

For patients who are at high risk for surgery, we are one of only 20 centers in the nation to offer all available catheter-based approaches for valve repair and replacement: the FDA-approved SAPIEN® aortic valve and two investigational devices, CoreValve® (aortic valve) and MitraClip® (mitral valve). The Valve Center coordinates patient testing and evaluation, including valve expert board certified cardiologists and cardiothoracic surgeons in the discussion of treatment options. Quality is continuously monitored through structure, process and outcomes measures, including those metrics that assess quality of life.

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**We offer the latest in transcatheter aortic valve implantation (TAVI), including the CoreValve® and SAPIEN® valve.**
Offering comprehensive, gender-optimized care to women from early adulthood through reproductive years, menopause and advanced age is the mission of the Women’s Heart Working Group and its programs at Morristown, Overlook and Newton medical centers. Claire Boccia Liang, MD, director of the Women’s Heart Program, works with a team of cardiologists to provide advanced care in the treatment of coronary artery disease, valvular heart disease, peripartum cardiomyopathy, heart failure, rhythm disorders and congenital heart disease in women. Primary and secondary prevention of heart disease is an essential component of the program. Our team of nationally recognized cardiac surgeons specializes in the minimally invasive treatment of heart disease and ongoing surveillance of congenital diseases of the aorta.

Women’s Heart Program

WE STRIVE TO PROVIDE THE BEST CARDIAC CARE, TAILORED FOR THE NEEDS OF WOMEN.
Comprehensive care comes through collaboration with our colleagues in Obstetrics and Gynecology, Pediatric Cardiology and Integrative Medicine, whose services include dietary counseling, smoking cessation, exercise physiology and wellness coaching for women who are known to have, or are at high risk for, developing cardiovascular disease.

Linda Gillam, MD, MPH, chair of the Department of Cardiovascular Medicine and the Gagnon Cardiovascular Institute, is a national leader in women’s heart health and advanced echocardiography imaging and the treatment of valvular heart disease. She has initiated and strengthened our ongoing relationships with several national organizations that promote patient education and advocacy for women with heart disease.

The Women’s Heart Program has become a member of the WomenHeart National Hospital Alliance and Dr. Gillam is the Chair of 2013 American Heart Association’s Garden State Go Red for Women™ Luncheon, one of the largest events held nationwide on behalf of the Go Red for Women Campaign.

The Gagnon Cardiovascular Institute at Morristown Medical Center has a longstanding partnership with the Morristown, NJ Chapter of Mended Hearts, a national organization of heart disease survivors who offer hope and support through, among other activities, in-hospital visits to those recently experiencing heart disease for the first time. Finally, the Woman’s Association of Morristown Medical Center is providing resources to construct a Women’s Resource Center within the main atrium of the Gagnon Cardiovascular Institute at Morristown Medical Center. The resource center will provide visiting women with a physical space for “drive by” access to resources, which will help promote improved heart health.

Our Women's Heart physicians are dedicated to diagnosing heart disease by the most effective means possible, ensuring that radiation exposure is minimized.

Advanced echocardiographic, nuclear, MRI and CT imaging are all available to assist in the evaluation and management of patients with structural and ischemic heart disease. Microvascular disease is a particular diagnostic and treatment challenge fully embraced by our Women’s Heart physicians and our Advanced Interventional Therapies Center offers state-of-the-art catheter-based techniques for the diagnosis of this form of ischemic heart disease.

The Cardiac Rhythm Management program at Morristown Medical Center’s Gagnon Cardiovascular Institute implements gender-tailored care for cardiac rhythm in women. It does so by offering in-depth counseling to women regarding issues as complex as the safety of intracardiac defibrillator shock during pregnancy, to those as common as the concordant pattern seen between rising progesterone levels and arrhythmia frequency in women with supraventricular tachycardia. Gender-optimized care is also provided for women with valvular heart disease through the Morristown Medical Center Valvular Heart Program.

Working together with the Divisions of Pediatric Cardiology and High Risk Obstetrics, Women’s Heart Program physicians offer comprehensive care to women with congenital heart disease who require ongoing care and genetic counseling, both anticipatory to and during pregnancy.

Minimizing cardiac symptoms and cardiovascular events during menopause is a priority for women in our program. The Women’s Heart Program works closely with the Atlantic Health Menopause Center to offer comprehensive services to women at this critical juncture in their physical and emotional health.
Vascular Surgery

MORRISTOWN MEDICAL CENTER PERFORMS MORE ABDOMINAL ANEURYSM REPAIRS THAN ANY OTHER HOSPITAL IN NEW JERSEY.

Morristown Medical Center’s vascular specialists treat problems of the aorta and peripheral vessels with the same “whole system” care that their cardiologist colleagues bring to problems within the heart. Our vascular physicians offer a wide range of vascular surgery techniques that include catheter-based interventions, carotid stenting, and in the case of severe peripheral arterial disease (PAD), revascularization procedures, based on nonsurgical and surgical approaches to restore leg artery patency.

We perform approximately 150 procedures for aneurysms annually, the majority of them abdominal aortic aneurysms (AAAs); with Morristown Medical Center being the highest volume center in New Jersey and among the highest in the country. Hybrid therapies,
which represent more of a revolution than an evolution in cardiovascular therapies, bring together interventional cardiologists, cardiac surgeons, vascular surgeons, and other clinical experts in a single hybrid operating room to offer a complete, collaborative solution to what used to require staged treatments and the moving of patients from one suite to another over time. The two dedicated hybrid suites at Gagnon Cardiovascular Institute allow for vascular imaging, implanting stents and open-heart surgery as needed within the same sterile setting. This makes the procedure extremely efficient for physicians and for patients who undergo far less physical stress than in conventional staged treatments.

Morristown Medical Center was among the first hospitals in the country to construct such a space and to install the Siemens Artis Zeego® medical imaging system, which makes this possible. The Zeego is particularly valuable in helping repair aneurysms that require both surgical and interventional endovascular components to be done consecutively. The Zeego’s robotic multi-axis C-arm gives surgeons extraordinary flexibility in maneuvering the imaging system to get a clear 3D picture of the patient’s endovascular anatomy and to deploy the appropriate stent from almost every angle without moving the patient. While our vascular specialists treat all levels of vascular repair, technical advances like the Zeego allow us to treat more complex disease cases and older patients with better outcomes than were possible in the past. In addition to advanced imaging techniques used in the operating room, Morristown Medical Center provides vascular ultrasound imaging in its ICAVL-accredited lab.
Rehabilitation Services

NATIONALLY CERTIFIED BY
THE AMERICAN ASSOCIATION
OF CARDIOVASCULAR AND
PULMONARY REHABILITATION.
The cardiac rehabilitation program of the Gagnon Cardiovascular Institute at Morristown Medical Center and Overlook Medical Center is a state-of-the-art program designed to help patients with heart disease recover faster and return to a full, productive life.

The Phase I program starts with early ambulation 1-2 days post open-heart surgery, myocardial infarction, or other invasive procedure, and continues throughout the hospital stay. It educates patients and their families about cardiovascular disease and risk factor modification in preparation for the initial return to the activities of daily living. Phase II is a medically supervised, outpatient, monitored exercise program, which takes place over 12 weeks and 36 visits. Candidates for this program include those who have had a heart attack, coronary artery bypass surgery, cardiac valve surgery, angioplasty and/or intracoronary stent placement or ongoing stable angina. Phase II's main objective is a rebuilding of patient cardiovascular and muscular endurance, improved flexibility, and facilitation of a return to work and daily living. Proper exercise principles, nutritional counseling, stress management and other aspects of a healthy lifestyle are also taught.

Our program is nationally certified by the American Association of Cardiovascular & Pulmonary Rehabilitation, a mark of top quality standards. Cardiologist directed, the staff is comprised of critical care registered nurses, cardiovascular technologists, exercise physiologists and a clinical dietician.
Gagnon Cardiovascular Institute at Morristown Medical Center, Overlook Medical Center and Newton Medical Center is at the forefront of cardiovascular research, working to develop new life-saving cardiology treatments. We participate in dozens of clinical trials each year, including those that are federally and industry-funded. These national and international studies enhance our physicians’ familiarity with promising advancements in interventional cardiology, electrophysiology, cardiac surgery, vascular surgery, cardiac imaging and clinical cardiology. The result: improved outcomes for our patients.

Research and Education

STAYING AT THE FOREFRONT OF CARDIOVASCULAR RESEARCH MEANS BETTER OUTCOMES FOR OUR PATIENTS.
Our physicians regularly present their clinical findings and treatment techniques at well-regarded regional, national and international cardiac conferences. In sharing clinical results with national and international leaders in cardiology, our doctors train the next generation of cardiac experts, underscoring our reputation as a highly respected center for cardiovascular research.

Morristown Medical Center has comprehensive teaching programs for cardiology fellows, medical residents and medical students. Gagnon Cardiovascular Institute also has a robust program of educational seminars, offering CME-award programs for physicians and other medical personnel several times a year. We provide transmission of surgical and interventional cases to professional society meetings and offer webinars on a variety of subjects. We are particularly proud of our cardiac classroom transmissions to the Liberty Science Center (at right). Our well-attended Friday grand rounds presentations typically feature nationally recognized specialists.

The Department of Cardiovascular Medicine is committed to quality assessment and improvement with activities that include a number of local initiatives as well as participation in the national registries of the American College of Cardiology (NCDR) and Society of Thoracic Surgeons. Mark Blum, MD, leads our Gagnon Cardiovascular Institute quality team.

**CARDIAC CLASSROOM-LIVE!**

From the first incision to the last suture, middle and high school students have, for the past 10 years, had the opportunity to watch open heart surgery at an interactive theater suite within Liberty Science Center, Jersey City, New Jersey. The two-hour long program, offered twice a week during the school year, features interactive videoconferencing with a Morristown Medical Center surgical suite. It provides students with a front-row seat to cardiac surgery in real time. Students are encouraged to ask questions and to hold in their hands surgical tools just like those seen on the screen, as surgeons, perfusionists, anesthesiologists, nurses and other specialists describe what is happening to the patient before them. As they proceed, team members talk informally about the consequences of coronary disease and the role of smoking, nutrition, exercise, other risk factors in ways that are intended to engage students to think about their own habits while exposing them to the drama and potentials of science.
The Patient Experience

PROVIDING THE BEST QUALITY CARE MEANS CARING FOR THE WHOLE PATIENT.
High-tech, high-touch, high quality and innovation sums up the care provided to patients treated at Morristown Medical Center’s Gagnon Cardiovascular Institute. The five-story, 230,000-square-foot building, which opened in 2009, is dedicated to meeting and the challenges of adult heart and vascular diseases. Everything about the Gagnon Cardiovascular Institute experience is designed to make an inherently stressful time more transparent, patient-centered, caring and supportive for patients and their families.

The Gagnon Cardiovascular Institute facilities have eight surgical rooms, two of which are hybrid, five cardiac catheterization labs, and three EP labs, any of which can be staffed and in service 24/7. Other features include 14 cardiac recovery bays for post-anesthesia care, eight cardiovascular intensive care rooms, 18 CCU beds and 28 cardiac access bays. All are equipped with the newest diagnostic, monitoring and treatment equipment. Our staff and programs are focused on ensuring that our patients and their families are holistically supported and cared for. Nationally known cardiologists, cardiac and vascular surgeons, and electrophysiologists lead our care teams, assisted by outstanding nurses and technicians with advanced cardiovascular training.

Gagnon Cardiovascular Institute patients also appreciate the Institute’s welcoming accommodations. Award-winning interiors include 106 private and 46 semi-private rooms as well as family lounges that provide the comforts of a first-class hotel within a hospital setting. Gagnon Cardiovascular Institute’s patient satisfaction scores consistently rank in the high 90th percentiles.

Gagnon Cardiovascular Institute understands that what patients do at the end of their hospital stay is as important in their recovery as the cardiac services we provide. To assist our patients, as well as serve high-risk patients, Morristown Medical Center also offers integrative medicine outpatient services. These services provide patient support, organized around a heart-healthy action plan in four key areas: nutrition and weight loss, physical activity, stress relief, and emotional well-being. Located in a spacious spa-like facility within the Institute, and available to the public, services include individual and group sessions in yoga, Pilates, meditation, cranial sacral therapy, massage, acupuncture, healthful cooking classes, smoking cessation training and other programs.
For More Information:

Women's Heart Program | 973-971-8811
Advanced Interventional Therapies/ Valve Center | 973-971-7001
Cardiac Surgery | 973-971-7300
Non-Invasive Imaging | 973-971-5110
For one of New Jersey’s elite cardiac specialists, Call 1-888-4AH-DOCS or visit atlantichealth.org