





Inova<sup>®</sup>



Top to bottom: Mark C. Vives, MD, FACC Anne M. Safko, MD, FACC Mark P. Tanenbaum, MD, FACC Sara Kulangara, MD

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## PHYSICIANS AND ADVANCED PRACTICE PROVIDERS

### **Physicians**

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### **Advanced Practice Providers**

Andrew Allen, PA-C Neil Bautista, FNP-C Kelly Bell, PA-C Haena Bryant, F-NP Alicia Campbell, PA-C Stephanie Cook, BSN, MSN, NP-C Jennifer DoCampo, MSN, FNP-BC Jennifer Durham, MSN, AGPCNP-BC Sara L. Gillam, PA-C Christine Jansen, MSN, ANP-BC Jenny Kim, MSN, AGPCNP-BC Ki Kim, MSN, FNP-BC Tre Landry, MPH, PA-C Morgan Maddox, MSN, FNP-C Kari Manfredi, MSN, ANP-BC Hannah Moon, MSN, FNP-BC Laura Muntzer, MPA-C Melissa Myers, MSN, ANP-BC, AGACNP-BC James O'Hara, PA-C, DMSC Amy Pitha, MSN, AGACNP-BC Erin Simon, MSN, AGACNP-BC Lanna Smith, MSN, ANP-BC Mary Tisch, PA-C, MS Daniel Valcicak, PA-C Drew Venuto, PA-C Annette Vernail, MSN, FNP-BC Katie Wrenn, MSPAS, PA-C Rachel Yomtob, PA-C Sarah Younan, MPH, MSPAS, PA-C Alexandra Young, MSN, FNP-C

### MESSAGE FROM VIRGINIA HEART LEADERS



Stuart E. Sheifer, MD, FACC

### **Quality Assurance Chairman**

Compassionate, connected, world-class patient care lies at the Heart of the Virginia Heart mission. To drive that mission, we have intentionally cultivated a culture of quality, safety, and continuous improvement. Our quality journey starts with our people, through a rigorous and deliberate process for selecting new providers to join our team. It continues through an infrastructure that monitors the quality of care we provide, iteratively looking for opportunities for improvement.

The Virginia Heart Quality Committee takes a holistic, comprehensive approach to driving outstanding care quality. It supports a Peer Education Series, wherein our subject matter subspecialty experts share the state-of-the-art with our full corps of physicians and advanced practice providers. It also monitors quality metrics from the office setting, the accuracy of our diagnostic studies, key hospital metrics including survival and readmission rates, and the outcomes of key invasive cardiac procedures we perform. The Committee has also created a reporting structure, wherein providers can share opportunities for improvement that they see in our daily work. These efforts dovetail with our ongoing monitoring of Patient Satisfaction. Each of these metrics is routinely reported to our providers. In each of these efforts, we apply a continuous improvement mindset, to remain true to our mission.



Ketan K. Trivedi, MD, FACC

### **President & Chief Medical Officer**

Virginia Heart remains committed to our mission to "improve the health and wellbeing of our community by providing worldclass, patient centered cardiovascular care". Our extraordinary team of medical professionals strives to fulfill that mission each and every day at our ten clinical offices and the seven regional hospitals we serve. In our post-pandemic world, we have seen unprecedented demand for our services. Our team has met these challenges while still providing compassionate care tailored to our patient's individual needs. With this approach, our patient satisfaction survey results are extremely strong. We remain the region's preeminent practice with expertise across the entire spectrum of cardiovascular and sleep medicine including interventional and structural cardiology, electrophysiology, and advanced cardiac imaging. We have partnered with Inova Schar Heart and Vascular to care for patients who require sub-specialty care in the areas of advanced heart failure, cardio-obstetrics, cardiooncology, amyloidosis, and women's heart health. Our outpatient clinical research program remains one of the best in the nation offering our patients access to clinical trials and state-of-the-art treatment that they otherwise might not be able to receive. This program has contributed greatly to the field of cardiology allowing for better care of patients not just in our practice, but around the world. Tens of thousands of patients have entrusted us with their health, and that is a responsibility that we are honored to uphold. It is with great pride that we present our 2024 Quality Report to highlight why so many have trusted us with their well-being.



Audrey L. Fisher, MPH, FACHE

### **Chief Executive Officer**

Our commitment to clinical quality for each one of our patients is the foundation of everything we do at Virginia Heart. With more than 75 providers, we continue to provide comprehensive premier cardiovascular care, and our team-based model ensures the best possible outcomes.

Whether it is a routine office visit or a complex interventional procedure in the hospital, our cardiologists provide the most advanced treatments available, ensuring the best possible outcome and a healthy quality of life for our patients.

Expertise and technology are but two pillars in the success and growth of Virginia Heart. What differentiates us among other cardiovascular care providers is the individualized care our physicians dedicate to each of their patients. Through patient surveys and unsolicited reviews, our team continually hits the highest marks for their personal touch. We believe this not only enhances the patient experience, but also benefits their physical health and wellness.

This report summarizes the results achieved through that commitment.

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## INOVA PARTNERSHIP

# Inova™



Inova Schar Heart and Vascular is one of the nation's leading programs in cardiovascular medicine, providing state of the art care delivered with compassion and quality. Virginia Heart is an integral part of our services. Virginia Heart physicians, advanced practice providers, and its entire care team have contributed greatly to Inova's on-going growth and success. Virginia Heart physicians hold several key leadership positions throughout the Inova system.

Their leadership, as you will see detailed in this report, extends both regionally and nationally. Virginia Heart's partnership with Inova has enabled us to innovate and advance the care provided to our community. Together, we have developed multiple subspeciality programs that aid complex patients who require medical intervention across different medical specialties. Their research program, along with Inova's, is one of the finest in the nation and their reputation for quality care and physician leadership is known nationally. It has been a pleasure to work alongside the outstanding professionals at Virginia Heart and I congratulate them on this report and the success that it illustrates.

Christopher O'Connor, MD, MACC, FESC, FHFSA, FHFA President, Inova Schar Heart and Vascular

## VIRGINIA HEART LOCATIONS AND HOSPITAL AFFILIATIONS

Alexandria Office 4825 Mark Center Drive, Suite 150 Alexandria, VA 22311

Arlington Office 1005 N. Glebe Road, Suite 750 Arlington, VA 22201

Fair Oaks Office 3580 Joseph Siewick Drive, Suite 305 Fairfax, VA 22033

Fairfax Office 2901 Telestar Court, Suite 200 Falls Church, VA 22042

Fairfax Office - Heart Rhythm Center 2901 Telestar Court, Suite 100 Falls Church, VA 22042

Fairfax Office - Sleep Center 2901 Telestar Court, Suite 600 Falls Church, VA 22042 Lansdowne Office 19450 Deerfield Avenue, Suite 100 Leesburg, VA 20176

Loudoun Office 44035 Riverside Parkway, Suite 400 Leesburg, VA 20176

Purcellville Office 120B North Maple Avenue Purcellville, VA 20132

Reston Office 11800 Sunrise Valley Drive, Suite 500 Reston, VA 20191

Stone Springs Office 24430 Stone Springs Blvd, Suite 425 Dulles, VA 20166

Vienna Office (Moving soon!) 130 Park Street SE, Suite 100 Vienna, VA 22180

### **Hospital Affiliations**

Virginia Heart cares for patients at seven major hospitals in Northern Virginia:

Inova Alexandria Hospital Inova Fairfax Hospital Inova Fair Oaks Hospital Inova Loudoun Hospital Reston Hospital (HCA) Stone Springs Hospital (HCA) VHC Health



Virginia Heart's patients come from a wide area across the tri-state region, shown here by zip code. The darker orange and red indicate the greatest concentration of unique patients seen in 2023. Our 10 offices located throughout Northern Virginia are indicated on the map with red circles.

## SERVICE VOLUMES

### **Inpatient Volumes**

Virginia Heart physicians and advanced practice providers are available 24 hours a day, 365 days a year in the 7 area hospitals that we support, meeting the needs of our patients and providing the rapid response necessary in urgent or emergent situations.

The Virginia Heart interventional cardiologists work alongside teams of surgical and Critical Care experts in order to provide our patients with the best life-saving treatments for acute heart conditions.

### **Outpatient Volumes**

In 2023, Virginia Heart's physicians and advanced practice providers documented more than 123,000 patient visits, making us the largest provider of cardiovascular services in the Washington, D.C. Metropolitan area. Patient access and convenience remain paramount, and our 10 convenient office locations are dedicated to the growing needs of the communities we serve.

| Hospital Services               | 2022   | 2023   |
|---------------------------------|--------|--------|
| Total Patient Encounters/Visits | 37,166 | 37,450 |
| Total Catheterizations          | 2,501  | 2,347  |
| Total PCIs                      | 972    | 973    |
| Pacemakers/ICDs/Ablations       | 1,164  | 1,133  |

| Office Services              | 2022   | 2023   |
|------------------------------|--------|--------|
| New Patients                 | 23,373 | 26,987 |
| Follow-Ups                   | 96,633 | 97,697 |
| Echocardiograms              | 24,582 | 26,885 |
| Sleep Studies                | 3,886  | 4,328  |
| Myocardial Perfusion Imaging | 5,986  | 6,211  |



Left to right: Cristobal Goa, MD, FACC; Lindsey A. Cilia, MD, FACC, FSCAI



## QUALITY AND VALUE

At Virginia Heart, we are committed to providing the highest quality care to our patients in a compassionate and efficient manner. In partnership with our patients, we achieve the best possible outcomes and improve their overall quality of life. Our patients receive the most innovative treatments by using cutting-edge technology. All Virginia Heart diagnostic labs are accredited by the International Accreditation Commission. We measure our quality of care and benchmark our success in that care through comparative analysis with national statistics. What follows are the 2023 quality metrics compared with the published national data. Our goal is to provide the highest quality, most cost-efficient cardiovascular care from diagnosis to treatment.

### **Readmission Rates**

Collaboratively with clinical leaders and quality monitoring teams at Inova Schar Heart and Vascular, over the past seven years, Virginia Heart has conducted a focused quality improvement project addressing our care of patients hospitalized with heart failure (HF) and acute myocardial infarction (MI). These are some of the most common cardiac conditions for which people are hospitalized, and on a national level, the quality of care we provide for these conditions has received focused attention. In this work, we focus on hospital survival, and measure that on a standardized metric of Observed-to-Expected Ratio (O:E), wherein anything under 1.0 represents favorable performance for the population served. We also focus on the rate at which patients must be re-hospitalized within 30 days of discharge.

In this collaborative work, we have embedded checklists into our hospital work to optimally align care with best evidence, and we have streamlined the transition of care, regarding prompt return to office to confirm stability and advance the care path, in terms of medications, self-care, and cardiac rehabilitation.

We are thrilled and humbled that our collaborative efforts have yielded favorable results. Our most up-to-date data, for the calendar year 2023, for each of these hospital metrics is as follows:

### **Hospital Survival**

(Observed-to-Expected Ratio, <1.0 Represents Favorable Performance)

| Condition                 | Observed-to-Expected<br>Mortality Ratio | Interpretation                           |
|---------------------------|---|--|
| HF and MI combined metric | 0.52                                    | Survival rate 48% greater than expected  |
| HF-specific metric        | 0.45                                    | Survival rate 55% greater than predicted |

### 30-Day Readmission Rate (%)

| Condition | Readmission Rate | National Average |
|-----------|------------------|------------------|
| HF        | 12%              | 22%              |
| МІ        | 7.9%             | 12%              |

### **Interventional Coronary Procedures**

When patients present with acute heart attacks or ST Elevation Myocardial Infarction (STEMI), prompt management is critical to successfully limit heart muscle damage by restoring blood flow in the blocked artery.

In 2023, Virginia Heart performed over 1,000 interventional cardiac procedures. Virginia Heart has an excellent success rate with low complication and mortality rates.

### Interventional Coronary Procedure Summary 2023

| PCI | LV Assist | CTOs |
|-----|-----------|------|
| 973 | 29        | 62   |



## MYOCARDIAL PERFUSION IMAGING



In 2023, Virginia Heart implanted a fully digital Cardiovascular PET-CT program at the Fairfax location.

The evaluation of chest discomfort and shortness of breath for the presence of coronary artery disease is the backbone of all cardiovascular practices. This is predominantly performed with stress myocardial perfusion imaging (MPI) with nuclear scintigraphy, also referred to as a nuclear stress test. In 2023, Virginia Heart implemented a fully digital Cardiovascular PET-CT program at the Fairfax location. Over 6,200 SPECT and PET-CT images were done in 2023. The benefits of PET-CT are many, including the ability to detect flows in each of the major coronary territories regardless of body size or habitus, resulting in the most advanced definitive testing of the importance of blockages in heart arteries, and whether they represent "boulders" or "pebbles" in the stream of coronary arteries.

Virginia Heart continues to provide traditional SPECT (single photon emission computed tomography) MPI. All of the Virginia Heart sites maintain the highest standards as evaluated by the International Accreditation Commission (IAC).

Our advanced technology allows us to reduce imaging time by half of what older systems may use; this allows our patients a more comfortable and timely process while still maintaining excellent technical quality with advanced iterative reconstruction.

To ensure we are meeting high quality standards, Virginia Heart has a complex quality assurance program that uses direct correlation and quantitative analysis to measure our performance. We have exceeded each threshold of standards in test appropriateness, technical quality and safety of imaging, interpretive quality, and report completeness and timeliness.

The Nuclear Cardiology Program at Virginia Heart is directed by Dr. Ibrahim M. Saeed. He participates in academic endeavors including serving on the Board of Directors for the American Society of Nuclear Cardiology (ASNC) Annual Scientific Session and speaks widely on how to implement PET-CT into clinical practice.

Obstructive sleep apnea (OSA) and other complex sleep-related breathing disorders have been strongly associated with cardiovascular disease. The relationship between sleep disorders and cardiovascular disease has become so well established that the American Heart Association has included sleep as one of life's essential 8 for optimal cardiovascular health. Treatment of sleep apnea and obtaining the recommended 7-9 hours of sleep nightly has been associated with a reduction in cardiovascular disease. OSA and other complex sleep-related breathing disorders have been strongly associated with cardiovascular disease. 83% of patients with drug-resistant hypertension and 49% of patients with atrial fibrillation also have sleep apnea. Studies show that treatment of sleep apnea normalize the patient's risk for having recurrent atrial fibrillation after ablation procedures.

The Sleep Center at Virginia Heart began in 2015 with the goal of identifying and treating sleep disordered breathing in our cardiovascular population. Since that time the program has grown dramatically, and we are now the leading sleep medicine program in the Northern Virginia area serving the sleep needs of the entire community. In addition to treating sleep disordered breathing, we also specialize and treat all sleep disorders including, but not limited to, insomnia, narcolepsy, hypersomnolence, sleep walking and circadian disorders.

In 2023, the Sleep Center experienced a 26% increase in new patient consultations when compared to the prior year. The program has expanded to include 4 board-certified sleep medicine physicians and 2 sleep medicine advanced practice providers. Our Sleep Medicine Practice also includes two American Academy of Sleep Medicine (AASM) accredited in-lab sleep testing centers, in-home sleep testing capabilities, and a durable medical equipment (DME) program. We employ industry leading equipment, specialized testing and are also exploring remote PAP therapy monitoring as an adjunct therapy assessment to improve our overall patient care and PAP compliance.

Our Program and providers are involved with on-going sleep related research. Dr. Amit Patel, Medical Director of the Sleep Center, is actively involved with the Inspire Device, a mask-free solution for people with obstructive sleep apnea. We continue setting the standard in up-to-date medical care with continued partnerships with novel sleep therapeutic companies as their key opinion and leadership sites including devices such as eXcite OSA, iNAP and Noctrix health.



Above: Sleep study monitoring; Right, top to bottom: Amit V. Patel, MD, FCCP, ABIM Sleep Medicine, Medical Director, Sleep Medicine Program; Jessica A. Riggs, MD, FCCP, ABIM Sleep Medicine; Tajender S. Vasu, MD, MS, ABIM Sleep Medicine

## ELECTROPHYSIOLOGY

The use of new advanced highdensity mapping catheters that have improved our ability to better understand a patient's arrhythmia.

The field of cardiac electrophysiology has continued to offer technologic advancements that promote improved patient safety and care outcomes. Virginia Heart's electrophysiologists have been on the forefront of adopting cutting-edge techniques and participating in clinical research trials to enhance procedural safety and achieve meaningful improvements in patients' quality of life and survival.

2023 has offered many exciting developments in the arrhythmia field. We have continued to embrace new techniques in surgical pacemaker implantation to better mimic human physiology. This novel approach in pacemaker implantation reduces risk of adverse effects on heart function from continuous pacing. Virginia Heart providers will be instructing other physicians from across the country as part of an education program at recognized centers of excellence. Leadless pacing technology continues to advance, with 2023 bringing the FDA approval of a dual-chamber leadless pacing system. Such leadless systems can avoid many of the complications that can arise from traditional pacing systems.

In 2023, we saw an ongoing expansion in the use of ablation procedures in the treatment of atrial fibrillation, with further data showing the superiority of cardiac ablation in early treatment of atrial fibrillation patients. Virginia Heart has spearheaded the development of an Atrial Fibrillation ablation program at Inova Loudon Hospital allowing patients to have their procedures closer to home. Virginia Heart providers also participated in clinical trials using artificial intelligence platforms looking to improve efficacy of ablation procedures. The use of new advanced high-density mapping catheters have improved our ability to better understand a patient's arrhythmia. This past year, the team also participated in clinical trials evaluating a new ablative strategy called Pulse Field Ablation and look forward to offering this technology to patients in the future outside of clinical trials.

### Electrophysiology Ablation Procedure Summary 2023

| Afib Ablation | SVT Ablation | VT Ablation |
|---------------|--------------|-------------|
| 458           | 206          | 50          |

## Electrophysiology Implantable Device Procedure Summary 2023

| Pacemakers | ICDs | Watchman |
|------------|------|----------|
| 321        | 105  | 39       |

The Virginia Heart Electrophysiology Team has also been on the forefront in helping to reduce patients' stroke risk from atrial fibrillation. We were and continue to participate in multiple international clinical trials surrounding new oral anticoagulants and strategies. For those patients who cannot tolerate blood thinning agents, we have seen increased safety in the use of the newest generation Left Atrial Appendage Occlusion technology and are looking to identify more patients than can benefit from Watchman via participation in clinical trials. The future continues to offer further advancements to improve arrhythmia care. Virginia Heart providers will continue to provide state-of-the-art care for their patients in the years to come.



Left to right: With the use of the latest generation multi-electrode high density arrhythmia mapping, our operators have increased precision in identifying the critical component of arrythmia circuits, increasing the likelihood of a curative ablation procedure; Adam S. Fein, MD, Medical Director of Electrophysiology

### COMPLEX CORONARY INTERVENTIONS

In 2023, Virginia Heart performed 2,347 catheterbased procedures across the seven hospitals we serve in Northern Virginia.

The Virginia Heart Interventional Cardiology Team continues to offer new advanced and highly specialized therapies for patients with complex coronary artery disease. In conjunction with our Cardiac Surgery, Structural Heart, and Heart Failure colleagues, care is tailored towards individual patient anatomy, underlying medical conditions, and treatment goals. New skills and technology increasingly facilitate less invasive therapies, often in lieu of open-heart surgery, and are currently only performed by a very small number of US interventional cardiologists. One such procedure, chronic total occlusion (CTO) percutaneous coronary intervention (PCI) is a minimally invasive technique to open chronically completely blocked coronary arteries to relieve symptoms of chest pain or shortness of breath and to improve exercise capacity and restore quality of life. In 2023, our Virginia Heart Interventional Team ranked very highly nationally in combined CTO volume, case complexity, and success rate. Newer miniaturized temporary heart pumps, also known as percutaneous ventricular assist devices, are also employed as needed by our team to support heart pumping function in patients with extensive coronary artery disease, heart failure, or reduced ejection fraction (EF) - many of whom have been deemed either prohibitive risk for open-heart surgery or other more invasive therapies.



Edward W. Howard, MD, FACC, RPVI, Medical Director, Interventional Cardiology

### **Charles Sarahan II**

Thanks to the world-class care Charles Sarahan II received from Virginia Heart's interventional cardiologists and entire care team, he survived a serious heart attack and cardiogenic shock and is now back to living a more balanced and appreciative life, spent with his family and friends.



Charles says he owes Dr. Pauley "a life debt. I'm alive because of Virginia Heart," he said. But he also knows he needs to take steps to improve his overall health and well-being. In addition to exercising and improving his diet, Charles has made dramatic lifestyle changes that support his heart health. "I am learning to manage things better," he said.

That means he now has more time to focus on the things that bring him joy in life, such as going on dates with his bride of 27 years, interacting with their grandchildren and watching football. "By all rights, I should be pushing daisies right now," Charles said. "But I've been given a second chance and I am not going to waste it."

## STRUCTURAL HEART DISEASE

Structural Heart Disease (SHD) is an important discipline that uses cutting-edge technology to perform catheter-based procedures previously requiring openheart surgery, including Transcatheter Aortic Valve Replacement (TAVR), as well as Mitral Valve Replacement and repair. Other structural heart procedures include valvuloplasty and closure of cardiac defects such as a Patent Foramen Ovale (PFO) or Atrial Septal Defect. SHD is a rapidly evolving and dynamic field. With continued research, it is likely that a significant majority of heart valve disease will be treated with a minimally invasive, catheter-based approach. This will allow for shorter hospital stays and rapid recovery. There are a multitude of new valves and devices under development, which could not only add years to patients' lives, but enhance the quality of those years.





Hazim El-Haddad, MD, FACC, FSCAI

Virginia Heart has been at the forefront in offering structural heart evaluations and therapies to our patients as an integral part of the Heart Valve Clinic at Inova. In 2023, Virginia Heart's Structural Team has performed over 150 TAVRs and over 50 Mitraclips, seeing a 30% increase in total procedural volume and a 112% increase in Mitraclip volume since 2022. This is a result of increased disease identification, expanded indications, and improved procedural techniques allowing us to offer the procedures in patients who were previously excluded.



Top left: TAVR Valve Device; Bottom left: The MitraClip device is a small clip that is attached to your mitral valve. It treats mitral regurgitation by allowing your mitral valve to close more completely, helping to restore normal blood flow through your heart; Above: Amplatzer Talisman PFO Occluder used for patent poramen ovale closure.

### Structural Heart Procedure Volumes 2023

| TAVR | MitraClip | PFO/ASD Closure |
|------|-----------|-----------------|
| 152  | 53        | 29              |

Virginia Heart's PFO/ASD Program completed 29 closures in 2023 and is actively driving the development of a multidisciplinary Cardio-Neuro Program to help improve the workup and treatment of stroke patients for the hospital system. The goal is to streamline patient care, improve outcomes, and identify which patients would benefit from structural interventions to help reduce their stroke risk.

The Structural Heart Program's growth has come along with the maintenance of a high standard of care, maintaining excellent quality metrics and outcomes. Our Mitral Program meets or exceeds national averages in terms of hemodynamic improvement and reduction of mitral regurgitation. Our team collaborates with the Inova Valve Clinic and cardiothoracic surgeons to provide comprehensive and cutting-edge therapies that are individualized for each patient, with a focus not just on the immediate ailment, but on a lifelong plan for their structural heart disease.

## HEART FAILURE

### **Congestive Heart Failure**

Virginia Heart is a recognized leader in the care of patients with congestive heart failure (CHF). Our Practice provides rapid access and protocol-driven, evidence-based care. The Heart Failure Program is supervised by our physicians and staffed by a talented pool of nurse practitioners and physician assistants at all Virginia Heart locations. In recent years, we have engaged in pioneering efforts to improve the care of patients recently hospitalized with CHF resulting in reduced exacerbations and hospital readmissions. Through targeted efforts, our patients with CHF have consistently charted lower rates of re-hospitalization, significantly below national benchmarks. Virginia Heart's Advanced Practice Providers were instrumental in opening the Urgent Heart Failure IV Diuretic Clinic at Inova Loudoun Hospital. This initiative was developed to reduce hospitalizations due to decompensated systolic or diastolic heart failure. This specialized clinic facilitates the urgent evaluation, labs and IV diuretics in the outpatient setting. This approach has been successful in preventing hospital readmissions as well as diverting ER CHF admissions. The entire team of providers work to quickly recognize patients who are clinically declining and facilitate evaluation in our Advanced Heart Failure Clinic.

## Advanced Heart Failure and Cardiomyopathies

The Advanced Heart Failure Team at Virginia Heart specializes in the diagnosis and management of heart failure. Heart failure itself is a broad field that has many related conditions including infiltrative cardiomyopathies, pulmonary hypertension, cardio-oncology and inherited cardiac diseases. Each patient and condition are unique. The Clinic's focus is designing individualized, research-based treatment plans to help prevent or slow progression of the disease, improve a patient's life and reduce hospitalization. Patients with infiltrative cardiomyopathies such as amyloid, Fabry's disease and sarcoidosis will have conditions affecting more than the heart therefore a multidisciplinary approach to their care is routine. For those patients with the later stages of heart failure, this program performs evaluations for cardiac transplantation and mechanical circulatory support. Dr. Timothy Welch is the Medical Director of the Virginia Heart Advanced Heart Failure Program. He is Board Certified in Advanced Heart Failure and Transplant Cardiology.

### **Remote Heart Failure Monitoring**

Virginia Heart monitors our heart failure patients in our Remote Heart Failure Clinic. Currently, this remote program monitors heart failure patients' thoracic impedance (Medtronic Optivol Device), weight and blood pressure (Boston Scientific Latitude Device), and pulmonary artery pressure (Abbott Cardiomems device). With remote monitoring we can closely track physiologic changes as an early indicator of evolving heart failure, even before symptoms develop. Early detection allows for early therapy often preventing symptoms and improving overall quality of life. Our heart failure patients receive regular follow-up phone calls by our heart failure nurses in the comfort of their own home to provide ongoing education and support.

### **Amyloid Clinic**

Cardiac amyloidosis is an underdiagnosed cause of heart failure. Virginia Heart, in partnership with Inova, has recognized this specific population of patients and is continuing to bring together multiple specialties to help coordinate complex care. This specialized group of physicians help promote earlier recognition, streamline diagnostic evaluation, discuss pathways of care and complex patient management including novel therapeutics.



Timothy S. Welch, MD, FACC, Medical Director, Advanced Heart Failure Program

Virginia Heart is proud to have advanced cardiac imaging to help with the diagnosis and treatment of both types of cardiac amyloidosis. There are two dominant types of cardiac amyloidosis, AL (associated with hematologic abnormalities), and ATTR (or transthyretin), which is often seen as an inherited condition or in the older population. For the latter, all of our SPECT sites perform Tc99m PYP scintigraphy to screen for TTRw amyloidosis. As part of our multidisciplinary work with Inova, we have monthly meetings to review complex patients with a team of hematologists, nephrologists, neurologists, pathology, palliative care, cardiogenomics, heart failure and cardiovascular imaging specialists.

In early 2023, Virginia Heart have added a dedicated amyloidosis clinical navigator to aid the management of complex subspecialties involved in the diagnosis of cardiac amyloidosis. In the last 3 years, the program has grown from 37 patients to over 130 patients evaluated for TTR and AL amyloidosis formally. The Cardiac Amyloidosis Program continues to find ways to engage in the research community to help expand the knowledge and treatment for this population of our community.

### SPECIALTY PROGRAMS



Top to bottom: Erin Simon, MSN, AGACNP-BC, Director, Advanced Practice Providers Program; Lanna J. Smith, MSN, ANP-BC Above: Pradeep R. Nayak, MD, FACC, FASE and Mark P. Tanenbaum, MD, FACC

### Advanced Practice Provider Program

The Virginia Heart team includes 30 Advanced Practice Providers (APPs) who practice in collaboration with our physicians. APPs, which include Nurse Practitioners (NP) and Physician Assistants (PA), provide care in both the inpatient and outpatient setting. As an inpatient, our patients often see APPs daily in consultation and rounds. As an outpatient, our patients see APPs for hospital follow-up visits, routine follow-up, and for urgent triage visits.

Our team approach, to which APPs are essential, allows our Practice to promptly address the needs of our patients while minimizing any delay in care. The APPs sub-specialize in general cardiology, advanced heart failure, structural heart, electrophysiology, and sleep medicine.

According to MedAxiom, an American College of Cardiology Company, APPs

are crucial to an effective cardiovascular practice. Across the United States, the APP per physician ratio has increased to 0.6 with most cardiovascular programs having APPs with independent schedules. Virginia Heart is proud to be aligned with this methodology and currently has a ratio of 0.54. The team-based approach aligns with Virginia Heart's mission to provide world-class patient centered care.

### **Adult Congenital Heart Disease**

Each year, the population of adults with a structural heart abnormality grows as 90% of children born with significant defects now live to adulthood. Many of these individuals have undergone complex surgeries in infancy and childhood. Some symptoms reappear, often dramatically, after a temporary absence from the ongoing care they received as children from a pediatric team. Others have had no knowledge of their congenital defect until symptoms present themselves in adulthood. At Virginia Heart, we are committed to serving this unique group of patients within our community. Drs. Pradeep Nayak and Mark Tanenbaum were founding members of the Adult Congenital Heart Program at Inova Fairfax Hospital over 25 years ago and have collaborated with other local specialists through the years to provide outstanding care. We have created an environment for optimal outcomes as this challenging field has developed into a mainstream cardiology sub-specialty.

In 2023, the Adult Congenital Heart Disease Program has expanded giving patients easier access to the personalized, collaborative, expert care they are used to receiving. Dr. Nayak and Dr. Tanenbaum see patients with Adult Congenital Heart Disease in our offices as well as at the Inova Center for Personalized Health in collaboration with Dr. Anurag Sahu.

### Women's Heart Health

Women frequently present with signs and symptoms of disease that are different than those found among men. Recognizing these differences and identifying disease indicators early is critical in providing the best possible care to women with heart disease. Spontaneous coronary artery dissection or angina with normal coronaries are two examples of variants of heart disease that are more prevalent among women. Additionally, there are issues specific to women surrounding menopause and a greater prevalence of autoimmune disease (like lupus or rheumatoid arthritis) and osteoporosis, with implications for both a woman's cardiovascular risk and treatment options. Virginia Heart is committed to the care and education of women in our communities. Dr. Rachel Berger, Dr. Paula Pinell-Salles and Dr. Jennifer Shea have spearheaded our efforts to be proactive in this important area.

### **Cardio-Oncology**

Cardio-oncology is a multi-disciplinary field that focuses on the cardiovascular prevention, diagnosis, and treatment of patients with cancer. Radiation therapy can grossly affect any level of the cardiovascular system. Certain chemotherapy agents have been shown to have potential cardio-toxic side effects. The core objective of the program is to ensure that "the cancer patient of today does not become the cardiology patient of tomorrow". The goal of the program is to help facilitate patients getting life-saving cancer treatment, not to prevent patients from getting cancer therapy due to cardiac fears.

Since the program's inception in 2019, it has grown to include over 800 patients. Dr. Jennifer Shea, Dr. Raymond Vlacancich, and Dr. Subash Bazaz of Virginia Heart have been co-leading the program along with their Inova colleagues, Dr. Ana Barac, Dr. Kelly Epps-Anderson, Dr. Joan Zhao, and Dr. Archana Reddy. The cardiologists The core objective of the Cardio-Oncology program is to ensure that "the cancer patient of today does not become the cardiology patient of tomorrow".

and oncologists work closely together to monitor and mitigate the patient's overall cardiovascular risk. The primary focus has been on breast cancer patients however, in 2023, the program expanded to include other types of cancers such as gynecological, gastrointestinal, leukemias/lymphomas, and newer immunotherapies for lung cancer.

To help determine the cardiac impact cancer treatment has had on the patient, different advanced cardiac imaging techniques are used at our Virginia Heart locations. Global longitudinal strain imaging is a type of technology we utilize during an echocardiogram. Changes in global longitudinal strain imaging can be an early marker of cardiotoxicity, as it detects subclinical myocardial dysfunction. If we detect changes in strain imaging we can start medications to keep the heart protected during the remainder of chemotherapy and hopefully prevent long lasting cardio toxicity.

### **Cardio-Obstetrics**

Virginia Heart is committed to treating high-risk obstetric patients both providing pre-conception counseling and following throughout pregnancy those who have established cardiovascular disease ante-partum i.e., prior heart failure, valve disease or arrhythmias, or have had prior pregnancy related complications like pre-eclampsia. In addition, we treat those who develop cardiovascular symptoms during pregnancy i.e., pre-eclampsia,

Top to bottom: Rachel L. Berger, MD, FACC Paula Pinell-Salles, MD, FACC Jennifer Shea, MD, FACC Raymond Vlacancich, DO Subash B. Bazaz, MD, FACC

## SPECIALTY PROGRAMS

peripartum cardiomyopathy or arrhythmias. The Cardio-Obstetrics Program combines the multidisciplinary expertise of cardiology and maternal-fetal medicine to provide care and expertise for women who are at risk of developing heart complications during pregnancy. The creation and standardization of inpatient and outpatient protocols has allowed for better management, education and treatment of these patients. Virginia Heart's Dr. Paula Pinell-Salles has been co-leading the Program along with her Inova colleagues Dr. Garima Sharma and Dr. Kelly Epps-Anderson.

### **Cardiac Rehab**

Cardiac Rehab remains an important part of the treatment and recovery of patients with cardiovascular illness. It enhances recovery, improves quality of life, and outcomes. Patients with coronary artery disease, myocardial infarction, percutaneous coronary interventions with stents and angioplasty, CABG (coronary artery bypass surgery), heart failure and other forms of heart disease are candidates that would benefit from this service which is integral to the care and recovery of our heart patients.

Inova has four dedicated cardiac rehab programs and Virginia Heart physicians Dr. Jennifer Shea and Dr. Tariq Aziz are Medical Directors of Inova Fairfax Cardiac Rehab and Inova Loudoun Hospital Cardiac Rehab. A recent Press Gainey survey of Inova Cardiac Rehab participants reveals that 92% of respondents would recommend Cardiac Rehab. We continue to adapt to the environment and to innovate on behalf of our patients. Results of individuals who participate in Cardiac Rehab after a cardiovascular event

- 87% improve their functional mobility to a CV risk reducing level5 METS
- 85% complete the program with a therapeutic blood goal of <130/80
- 80% improve their symptoms of depression and anxiety
- 100% of smokers are provided counselling and support for smoking cessation
- < 3% of participants experience a return hospitalization

### Vycky Lara



A specialized echocardiogram ordered by the Virginia Heart team revealed that Vycky Lara's debilitating shortness of breath had nothing to do with her lungs, but was due to valvular heart disease.

After a successful operation and seven days at the hospital, Vycky was home and began cardiac rehab and follow up care with Dr. Vlacancich. Dr. Vlacancich says, "The ability to accurately diagnose valvular heart disease and help patients through the treatment options is one of the more rewarding parts of cardiology and to see Ms. Lara get back to living her best life is the best part of my job."

"I can't say enough about Dr. Vlacancich. He was with me throughout the whole journey," Vycky said. "The entire Virginia Heart team really goes out of their way to make you feel special, like you are their only patient."



## GROWTH AND EXPANSION

### Locations

Virginia Heart has continued to grow and open more availability for patients as the demand for cardiovascular services has increased in the community. In 2022, the Alexandria Office relocated to a larger space in Mark Center, allowing more room for new providers.

In 2023, the Purcellville and Reston Offices moved to new buildings, increasing our general cardiology services available in these regions. In addition, the Fairfax location expanded to include a new state-of-the-art PET-CT laboratory and program. This also included building the sixth floor of the Fairfax office to expand our Sleep Center and Durable Medical Equipment Program to accommodate the increased patient demand.

Looking forward to 2024, Virginia Heart plans to expand the office facilities in Vienna.

### Areas of Recent Growth

### Cardio-Oncology

Cardio-oncology is a multi-disciplinary field that focuses on the cardiovascular prevention, diagnosis, and treatment of patients with cancer. This joint program between Virginia Heart and Inova has grown in the past few years to include over 800 patients. Global longitudinal strain imaging has been an added capability within the Virginia Heart offices to help detect early markers of cardiotoxicity. For more on Cardio-oncology, see page 15.

### Cardiac PET-CT

In 2023, Virginia Heart implemented a digital, dedicated, cardiovascular PET-CT program at its Fairfax Office. In the coming year, Virginia Heart plans on implementing coronary artery calcium scoring as well as FDG evaluation of non-traditional cardiovascular pathology such as inflammation, infiltration, infection, etc. For more on the Cardiac PET-CT program, see page 15.

### **Programs Coming Soon**

#### **Cardio-Neuro**

Stroke is the fifth most common cause of death in the leading cause of preventable adult disability in the United States. The work of stroke is a complex multi-disciplinary process requiring significant time, resources, and coordination. Currently, there's no system in place to help coordinate and streamline this process and to ensure optimal patient care. In 2024, Virginia Heart in partnership with Inova, will be starting a comprehensive Cardio-Neuro Program to establish an improved care model for the community.

#### Refractory Hypertension

We are happy to offer renal denervation at Virginia Heart. There are now two FDA approved devices that safely and effectively reduce blood pressure around the clock, with results lasting at least several years. These devices are used through a minimally invasive outpatient procedure which is similar to a cardiac catheterization. We know from previous clinical trials that lowering blood pressure by only 10 points can lead to 20% reduction in outcomes such as heart attack, stroke, hospitalization, and death. For our patients with uncontrolled blood pressure despite medications and lifestyle adjustments, renal denervation is an exciting new technology.

For growth and expansion in 2024, Virginia Heart is partnering with our local hospital systems to create an Interventional Hypertenstion Program utilizing newly available technology to perform minimally invasive renal denervation therapy in patients with refractory hypertension or significant medication intolerance, representing a new dawn in the treatment of the most common contributing condition to cardiovascular disease.



Top to bottom: Alexandria office and Purcellville office



The Virginia Heart Community Foundation was created in 2021 with the goal of improving the health and well-being of our community by providing support to regional organizations that run programs serving our community. In 2022 and 2023, the Foundation donated over \$55,000 to organizations who operate in the fields of refugee assistance, food insecurity, mental health, and homelessness. We partnered with our parent organization, Virginia Heart, in our annual Day of Service where we gathered as a team and collected and packed over 2,000 pounds of food for children facing food insecurity. As we look forward to 2024 and beyond, we will continue to grow our foundation and to further support those in our community who have the most need.

## RESEARCH

Virginia Heart's Research Program is nationally recognized as a leader in cardiovascular research and is among the top enrollers in the United States for countless practice-changing cardiology trials over the past decade. Most recently, we were the top enroller in North America for two Lp(a) studies: HORIZON and HERITAGE. We were in the top five of enrollers for the DELIVER trial that was one of the earlier trials with Dapagliflozen and improved how we treat patients with heart failure. We are currently in the top three of enrollers for the VICTORIAN-PLAQUE study evaluating a drug to treat hyperlipidemia. Our national reputation for high quality clinical research allows our patients the ability to participate in cutting-edge research and obtain therapies not otherwise available to them.

In 2022 and 2023, the Virginia Heart Research Program participated in multiple studies that changed the way we practice medicine today. Those studies included DELIVER, CLEAR, ORION-8, and ARTESIA.



Tariq M. Haddad, MD, FACC, Medical Director, Research Center Principal Investigator (PI) oversight is a crucial predictor of research success. Dr. Tariq Haddad leads Virginia Heart's research division and has created strategies that expedite start-up and improve enrollment among our 75 providers.

Virginia Heart currently has 4 clinical trials in the active enrollment stage and 4 clinical trials in the follow-up monitoring phase. Among these therapies are an oral PCSK9 inhibitor lipid trial, an anti-platelet trial for Myocardial Infarction (MI), trials of a twice-yearly injectable cholesterol reducing medication, and trials of medications that normalize lipoprotein(a).

Since 2015, the Virginia Heart Research Center has had over 1,500 patients participate in our research studies.

### **Enrolling Studies**

- Acute Myocardial Infarction (Post MI) SOS AMI, LIBREXIA
- Atrial Fibrillation, Not caused by a heart valve problem LILAC
- Atherosclerotic Heart Disease and Hyperlipidemia CORAL REEF
- High Cardiovascular Risk and Hyperlipidemia VICTORION PLAQUE, VICTORION PREVENT, CORAL REEF

### **Studies in Follow Up**

- Atrial Fibrillation, Not caused by a heart valve problem AZALEA
- Atherosclerotic Heart Disease and Hyperlipidemia and elevated Lipoprotein(a) – HORIZON, ALPACA, OCEAN A
- Atherosclerotic Heart Disease and Hyperlipidemia ORION 4
- Chronic Heart Failure preserved EF Fine Arts

### **Coming Soon**

- Chronic Heart Failure preserved or reduced EF BalanceD-HF
- Atherosclerotic Heart Disease and high cardiovascular risk plus elevated Lipoprotein(a) – ACCLAIM
- African American and Hispanic population with Elevated Lipoprotein(a) – Novartis AA study
- Aortic Valve disease and elevated Lipoprotein(a) Novartis CAVS study

### Future Research Initiatives/Studies Under Consideration

- Trials of lipoprotein(a) normalizing medications
- Lipid medication trials
- Anti-platelet trials
- Aortic stenosis trials
- Amyloidosis trials
- Sleep study trials
- Registries

## PATIENT SATISFACTION SURVEY RESULTS

A patient's experience is a reflection of the care they receive from the moment they schedule an appointment to the ongoing care provided by their team of medical professionals. Virginia Heart desires every encounter to be a positive one.

Our 2023 patient satisfaction results are derived from patient surveys and include every Virginia Heart physician and Advanced Practice Provider. When compared with a national database of more than 12,000 physicians, Virginia Heart patients score the care and attention they receive in the top 20% of all other practices. The data from their scores on a scale of 1-5 (5 being the highest score reflecting the most satisfaction) for physician-centric questions is contained in the chart.

| Our Practice Overall                               |      |
|--|------|
| 4  | .73  |
| 4.5  | 7    |
| The quality of your medical care                   |      |
|  | 4.78 |
| 4.5  | 59   |
| Overall rating of care from your provider or nurse |      |
|  | 4.79 |
| 4.   | 65   |

Your providers willingness to listen carefully to you

4.82 4.56

The amount of time provider spent with you

4.72 4.44

The provider includes you in the decision-making about your treatment





### **Drew Hooks**

When Andrew (Drew) Hooks, a 21 year old college student's life was threatened by a stubborn virus that attacked his heart, several Virginia Heart doctors worked together using their specialized expertise to save their patient.

Drew has high praise for the Virginia Heart team who took care of him during his long ordeal. "I was freaked out by the pain and worry, but every time they came into the room, I felt reassured," he notes. "Their bedside manner was great – they were honest with me and didn't hide the scary details, but still they managed to calm my anxiety. They always had a plan and a back-up plan if the first one didn't work. Because of these doctors, I can now look forward to a long and healthy life. These are my guys!"

## TEACHING AND LEADERSHIP POSITIONS

Virginia Heart physicians are not only premier providers of cardiovascular care within our communities, but also hold numerous leadership positions at many of our hospitals, as well as serving on various committees.

Additionally, we have been active in several regional and national organizations.



Ketan K. Trivedi, MD, FACC President & Chief Medical Officer

### Leadership Positions – Regional and National

### Warren S. Levy, MD, FACC

- Member, Board of Directors, Signature
  Partners
- Immediate past member, MedAxiom Advisory Council

### Ibrahim M. Saeed, MD, FACC

- Chair, US Advocacy, Society of Cardiovascular Magnetic Resonance
- Member, Board of Directors, American Society of Nuclear Cardiology

## Alexander G. Truesdell, MD, FACC, FSCAI

- Member, Interventional Section
  Leadership Council, American College
  of Cardiology
- Member, ECMO Domain Task Force, American College of Chest Physicians
- Member, International Andreas
  Gruentzig Society
- Member, Program Committee, American College of Cardiology Scientific Sessions
- Member, Program Committee, SCAI Shock Conference
- Editorial Board, Cardiovascular Revascularization Medicine

### Teaching Positions and Faculty Appointments

### Hampton A. Crimm, MD, FACC

 Assistant Professor of Medicine, Uniformed Services University of the Health Sciences

### Edward W. Howard, MD, FACC, RPVI

- CICU Faculty, Inova Fairfax
- Assistant Professor of Medicine, University of Virginia School of Medicine

### Warren S. Levy, MD, FACC

- Assistant Professor of Medicine, University of Virginia School of Medicine
- Faculty, American College of Cardiology, Cardiovascular Summit
- Faculty, American Association for
  Physician Leadership Annual Conference

### Alireza Maghsoudi, MD, FACC

- Assistant Professor of Medicine, University of Virginia School of Medicine
- Faculty, Inova Fairfax Hospital
- Amit V. Patel, MD, FCCP, ABIM Sleep Medicine
- Assistant Professor of Medical Education, University of Virginia School of Medicine

### Paula Pinell-Salles, MD, FACC

- Assistant Professor of Medicine, University of Virginia School of Medicine
- Faculty, Inova Fairfax hospital

### Gautam Ramakrishna, MD, FACC

 Assistant Professor of Medical Education, University of Virginia School of Medicine

### Ibrahim M. Saeed, MD, FACC

 Teaching Faculty, Cardiovascular Disease Fellowship, Inova Schar Heart and Vascular Institute

### Jennifer Shea, MD, FACC

- Assistant Professor of Medicine, University of Virginia School of Medicine
- Faculty, Inova Fairfax Hospital

## Alexander G. Truesdell, MD, FACC, FSCAI

- Faculty, Cardiac Intensive Care Unit, Inova Schar Heart and Vascular Institute
- Teaching Faculty, Cardiovascular Disease Fellowship, Inova Schar Heart and Vascular Institute
- Assistant Professor of Medicine, University of Virginia School of Medicine

### Leadership Positions – Virginia Heart

### Subash B. Bazaz, MD, FACC

• Member, Board of Directors

### Timothy P. Farrell, MD, FACC

• Member, Board of Directors

### Edward W. Howard, MD, FACC, RPVI

- Medical Director, Interventional
  Cardiology
- Vice President, Board of Directors

### Warren S. Levy, MD, FACC

 Immediate Past President, President and Chief Medical Officer

### Alireza Maghsoudi, MD, FACC

- Member, Quality Assurance Committee
- Member, PET-CT Team
- Chair, Innovation Committee
- Member, Pension Directors Committee
- Member, Echo Quality Panel

### Melissa Myers, NP

 Member, APP Advisory Council, Virginia Heart

### Pradeep R. Nayak, MD, FACC, FASE

Co-Director, Adult Congenital Heart
 Disease Program

### Gautam Ramakrishna, MD, FACC

- Chair, Scheduling Committee
- Member, Pension Directors Committee
- Member, Echo Quality Panel
- Member, Virginia Heart Community Foundation Finance Committee

### Ibrahim M. Saeed, MD, FACC

- Medical Director, Nuclear Cardiology and PET-CT
- Junior Member, Board of Directors

### Chirag Sandesara, MD, FACC, FHRS

• Member, Board of Directors

### Jennifer Shea, MD, FACC

Medical Director, Echocardiography Lab

### Stuart E. Sheifer, MD, FACC

Chair, Virginia Heart Quality Committee

### Erin S. Simon, MSN, AGACNP-BC

Director, Advanced Practice Provider
 Program

### Mark P. Tanenbaum, MD, FACC

Co-Director, Adult Congenital Heart
 Disease Program

### Ketan K. Trivedi, MD, FACC

- President and Chief Medical Officer
- President, Virginia Heart Foundation

### Timothy S. Welch, MD, FACC

Medical Director, Advanced Heart Failure



Top to bottom: Subash B. Bazaz, MD, FACC Timothy P. Farrell, MD, FACC Chirag Sandesara, MD, FACC, FHRS

## TEACHING AND LEADERSHIP POSITIONS



Left to right: Warren S. Levy, MD, FACC; Alexander G. Truesdell, MD, FACC, FSCAI

### Leadership Positions – Hospital

### Tariq A. Aziz, MD, FACC

- Medical Director, Cardiac Rehab, Inova Loudoun Hospital
- Member, Inova Schar Heart and Vascular Council

### Subash B. Bazaz, MD, FACC

- Chair, Credentials Committee, Inova Loudoun Hospital
- Member, Medical Specialty Peer Review Committee, Inova Loudoun Hospital
- Director, Non-invasive Lab, Inova Loudoun Hospital

### Casey R. Benton, MD, FACC

 Section Chief, Cardiology, Inova Fair Oaks Hopsital

### Lindsey A. Cilia, MD, FACC, FSCAI

 Co-Director, Complex Coronary Therapeutics, Inova Schar Heart and Vascular

### Stephen M. Day, MD, FACC

 Director, Cardiac Cath Lab, Alexandria Hospital

### Rajat Garg, MD, FACC, FSCAI

Director, Cardiac Catheterization
 Laboratory, Inova Loudoun Hospital

### Edward W. Howard, MD, FACC, RPVI

- Director, Louise Olmsted Sands Cardiac Cath Lab, Virginia Hospital Center
- Director, Interventional Cardiology QA Committee, Inova Fairfax Hospital
- Director, Interventional Cardiology QA Committee, Inova Alexandria Hospital
- Director, Interventional Cardiology QA Committee, Virginia Hospital Center
- Co-Director, Cardiology, Inova Alexandria Hospital

### Joseph M. Kiernan, MD, FACC, FSCAI

- Chief, Section of Cardiology, Inova Fairfax Hospital
- Member, Medical Executive Committee, Inova Fairfax Hospital
- Member, Inova Fairfax Hospital Invasive Cardiology QI Committee

### Warren S. Levy, MD, FACC

- Director, Inova/IHVI Physician Leadership
  Development Program
- Member, IHVI Leadership Council
- Member, IHVI Executive Leadership Council
- Member, Inova Eastern Region Steering Committee
- Member, Inova Eastern Region Public
  Support Workgroup
- Chair, IHVI Ambulatory Strategy Council
- Member, Inova Guiding Coalition
- Co-Chair, IHVI Strategic Planning: CV
  Prevention, Ambulatory Care
- Member, Inova Smarter Care Virginia Leadership

### Alireza Maghsoudi, MD, FACC

- Co-Director, Cardiac CT, Inova Fairfax
  Hospital
- Member, Credentialing Committee, Inova Fairfax Hospital
- Member, Advanced Imaging Steering Committee, Inova Health System

### Seth N. Meltzer, MD, FACC

 Member, Heart Failure Committee, Reston Hospital Center

### Laura Muntzer, MPA-C

- Member, Inova APP Professional Governance Committee
- Lead, Inova Loudoun Outpatient Urgent Heart Failure Clinic

### Melissa Myers, NP

 Member, Medical Executive Committee, Inova Fair Oaks Hospital

### Pradeep R. Nayak, MD, FACC, FASE

Founding Member, Inova Adult
 Congenital Heart Disease Program

### Michael P. Notarianni, MD, FACC

 Member, Cardiac Collaborative Committee, VHC Health

### Paula Pinell-Salles, MD, FACC

 Co-Director, Cardio-obstetrics Program, Inova Health System

### Gautam Ramakrishna, MD, FACC

- Secretary/Treasurer, Inova Fair Oaks Hospital
- Chair, Hospital Quality and Safety
  Committee, Inova Fair Oaks Hospital
- Member, Quality Management Council, Inova Fair Oaks Hospital
- Member, Medical Executive Committee
  (MEC), Inova Fair Oaks Hospital
- Member, Fair Oaks Hospital Bylaws
  Committee
- Member, Fair Oaks Hospital Credentials
  Committee
- Member, Fair Oaks Hospital Quality
  Committee
- Member, Fair Oaks Hospital Special Care
  Committee
- Member, Fair Oaks Hospital Reliability and Safety Forum Committee
- Vice President, Fair Oaks Hospital

Haroon Rashid, MD, FACC

 Director, Atrial Fibrillation Ablation and Research at Inova

### Ibrahim M. Saeed, MD, FACC

 Medical Director, Inova Schar Heart & Vascular Cardiac Amyloidosis Clinic

### Chirag Sandesara, MD, FACC, FHRS

- Director, Electrophysiology Lab, Inova Loudon Hospital
- Section Chair, Cardiology, Inova Loudon Hospital



Top to bottom: Joseph M. Kiernan, MD, FACC, FSCAI Michael P. Notarianni, MD, FACC Haroon Rashid, MD, FACC Above: Gautam Ramakrishna, MD, FACC

## TEACHING AND LEADERSHIP POSITIONS



Casey R. Benton, MD, FACC and team member



Stuart E. Sheifer, MD FACC

### Jennifer Shea, MD, FACC

- Medical Director, Cardiac Rehab, Inova Fairfax Hospital
- Co-Director, Cardio-obstetrics Program, Inova Health System

### Stuart E. Sheifer, MD, FACC

- Immediate Past Medical Staff President, Inova Fair Oaks Hospital
- Physician Champion for Care
  Transformation, Inova Shar Heart and
  Vascular Institute
- Member, Inova Our Drive to Excellence
  Guiding Coalition
- Member, Inova Leadership Forum

#### Mark P. Tanenbaum, MD, FACC

Founding Member, Inova Adult
 Congenital Heart Disease Program

### Ketan K. Trivedi, MD, FACC

- Member, Inova Our Drive to Excellence Guiding Coalition, Inova Health System
- Member, Physician Partnership Committee, Inova Health System

### Timothy S. Welch, MD, FACC

- Director, Inova Amyloid Program
- Director, Advanced Heart Failure
  Inpatient Consultation, Inova Loudoun
- Medical Director, Inova Loudoun, Urgent Heart Failure Clinic
- Assistant Medical Director, Inova Cardiac
  ICU







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