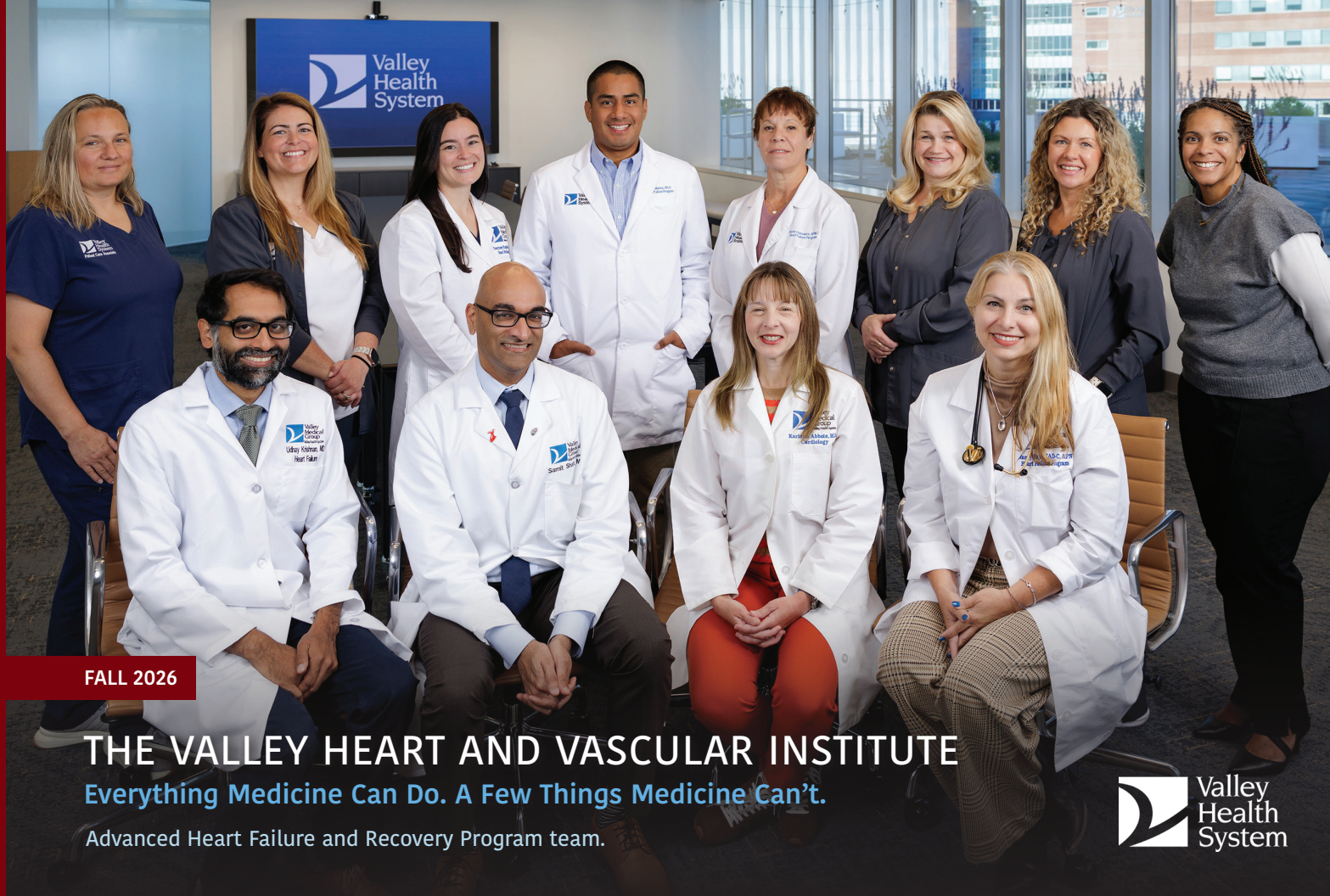


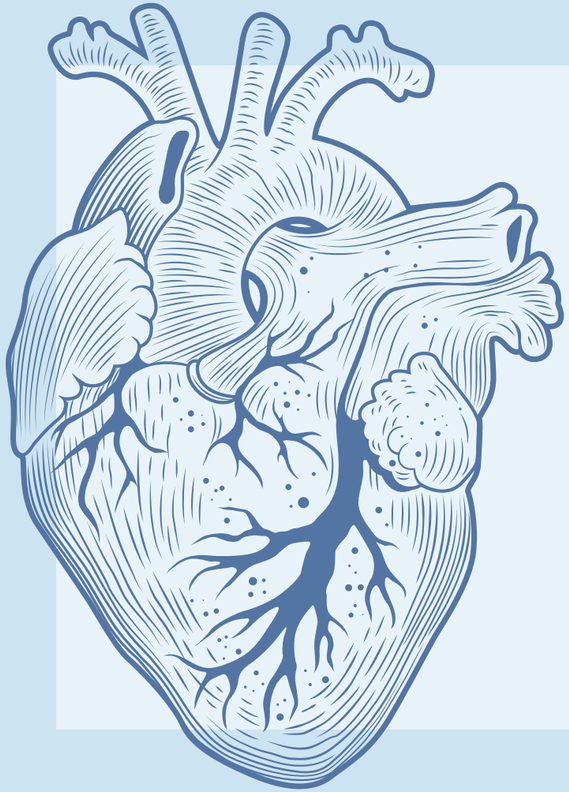
FALL 2026

THE VALLEY HEART AND VASCULAR INSTITUTE

Everything Medicine Can Do. A Few Things Medicine Can't.

Advanced Heart Failure and Recovery Program team.

Valley Health System



THE VALLEY HEART AND VASCULAR INSTITUTE

The Valley Heart and Vascular Institute is known for its depth of experience and high-quality care. Valley's multidisciplinary team approach to care represents a forward thinking and integrated strategy for the treatment of cardiovascular pathologies that is centered on each individual patient's needs.

We are pleased to present the latest programs, innovations, and research offered by Valley's cardiovascular team. For more information about The Valley Heart and Vascular Institute, please visit ValleyHealth.com/Heart.

INTRODUCING UDHAY KRISHNAN, MD



Valley Health System is pleased to welcome **Udhay Krishnan, MD**, as the new **Director of Advanced Heart Failure and Cardiomyopathy Research and Innovation** at The Valley Hospital.

Dr. Krishnan is a board-certified cardiologist who specializes in advanced heart failure and transplant cardiology. He focuses on the diagnosis and management of all forms of cardiomyopathy, caring for patients across the full clinical spectrum from early-stage optimization to the treatment of cardiogenic shock. Dr. Krishnan has significant experience in the evaluation and care of patients with left ventricular assist devices (LVAD) and cardiac transplantation. He also has specific interests in genetic screening and inherited cardiomyopathies, cardiac amyloidosis, infiltrative diseases, pulmonary hypertension, right heart failure, valvular heart disease, and cardiopulmonary exercise testing.

Drawing on a decade of experience as former faculty of NewYork-Presbyterian Weill Cornell Medical Center, Dr. Krishnan combines evidence-based medicine with experience in physiology, advanced imaging, and hemodynamics to identify the right therapy for each patient while honoring their individual goals.

Dr. Krishnan attended the University of Michigan Medical School and completed a residency at University of Michigan Health. He also completed a cardiology fellowship at NewYork-Presbyterian Weill Cornell Medical Center where he trained in advanced heart failure and transplant cardiology.

To hear from Dr. Krishnan, please scan the QR code.

To learn more about Dr. Krishnan, please visit ValleyHealth.com/DrKrishnan.

ADVANCED HEART FAILURE AND RECOVERY PROGRAM



Heart failure affects approximately 6.7 million Americans over age 20, and its prevalence continues to rise, making it one of the nation's most significant drivers of hospitalization and healthcare utilization, as noted by the Heart Failure Society of America. Early referral to a specialized program is critical for optimizing outcomes, reducing re-admissions, and improving quality of life.

Valley's Advanced Heart Failure and Recovery Program, offered through The Knispel Center for Comprehensive Cardiomyopathy Care, delivers multidisciplinary care across the full spectrum of disease — caring for patients with heart failure, hypertrophic cardiomyopathy, infiltrative disorders, such as amyloidosis and sarcoidosis, and pulmonary hypertension.

The team offers comprehensive, personalized care ranging from medication optimization, genetic counseling, and cardiac rehabilitation to advanced diagnostics such as cardiopulmonary exercise testing and remote monitoring. Patients have access to leading-edge therapies, including cardiac resynchronization therapy, cardiac contractility modulation, Barostim™ therapy, structural valve interventions, left ventricular assist devices, and Valley's Heart Therapy Center offering outpatient diuretic infusion, as well as opportunities to participate in clinical trials.

The dedicated heart recovery team provides timely access, seamless care coordination, and close collaboration with referring clinicians to support patients at every stage of their heart failure journey.

The team looks forward to partnering with you to provide specialized, multidisciplinary care for patients with advanced and complex heart failure.

TESTING

LEADING-EDGE TESTING FOR UNEXPLAINED CHEST PAIN

The Valley Hospital offers advanced invasive coronary function testing for patients with persistent angina despite non-diagnostic cardiac testing or medical therapy.



"ANOCA disproportionately affects women and younger patients and is frequently underdiagnosed," said **Steffne Kunnirickal, MD, interventional cardiologist**. "Identifying the underlying cause allows us to tailor treatment to the patient."

The testing evaluates angina with non-obstructive coronary arteries (ANOCA), including conditions such as coronary microvascular dysfunction and vasospastic angina that may not be detected through standard testing.

Performed during cardiac catheterization, testing includes pressure wire assessment to evaluate coronary physiology and spasm provocation testing to identify coronary artery spasm. The procedure is performed on an outpatient basis, with patients typically discharged the same day.

For patients with persistent angina and no evidence of obstructive coronary disease, advanced coronary function testing can provide a diagnosis and help guide targeted therapy.

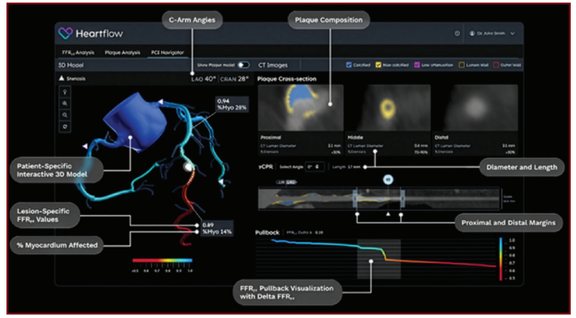


VALLEY INTRODUCES AI-POWERED PLANNING TO ENHANCE PRECISION OF HEART STENTING PROCEDURES

The Valley Hospital is pleased to be the first hospital in the country to utilize Heartflow PCI Navigator outside of a clinical study. This advanced software gives interventional cardiologists new insights into a patient's anatomy before performing coronary angioplasty.

Using artificial intelligence, the technology provides a personalized 3D model of a patient's heart with detailed information about vessel sizing, plaque buildup, and blood flow before a procedure is performed. These insights help physicians make more informed decisions about treatment and stent placement.

Heartflow PCI Navigator provides physicians with advanced planning tools before the procedure begins. **"In the past, interventional cardiologists often gained their most detailed view of a patient's coronary arteries during the procedure itself," said Rajiv Tayal, MD, Director of the Cardiac Catheterization Laboratory and Structural Heart Program at The Valley Hospital. "Having a more complete picture of a patient's coronary arteries before the procedure allows us to plan treatment in advance, make decisions, and deliver more personalized care."**



Heartflow PCI Navigator user interface and key features. Photo courtesy of Heartflow.

"Cardiovascular imaging plays a critical role in helping us understand the extent and complexity of coronary artery disease," said Himanshu Gupta, MD, Director of Cardiac Imaging for The Valley Hospital. "Access to earlier patient-specific insights reflects our commitment to leveraging innovative technologies that help us provide high-quality care for our patients."

NOW OPEN IN MONTVALE AND WESTWOOD

Valley is pleased to offer noninvasive cardiology services in two new locations: Valley Health System — Montvale Campus, located at 400 Market Street, second floor, in **Montvale**, New Jersey, and 400 Old Hook Road, Suite 2-1, in **Westwood**, New Jersey.

Designed with the patient experience in mind, these new outpatient locations offer modern, welcoming environments that prioritize comfort, privacy, and ease of access.

Valley's cardiology team provides comprehensive care focused on prevention, early detection, and personalized treatment of cardiovascular disease. Cardiologists assess individual risk factors, symptoms, and heart health to develop tailored care plans, with access to advanced diagnostic testing and imaging and coordinated care with cardiac subspecialists for complex conditions.

Clinicians practicing in Montvale and Westwood:
Stuart Barr, MD; Arieh Greenbaum, MD; Patricia Murphy, MD; Michael Anshelevich, MD; Joel Landzberg, MD; and Freda Hook, PA

Clinicians practicing exclusively in Montvale:
Kate Raiti-Palazzolo, MD





Valley Health System — Montvale Campus, located at 400 Market Street, second floor, in Montvale, New Jersey.

MONITORING



WEARABLES, ARTIFICIAL INTELLIGENCE, AND THE FUTURE OF CARDIAC MONITORING

As wearable technology and artificial intelligence (AI) become increasingly integrated into cardiovascular care, clinicians have new opportunities to identify arrhythmias earlier and personalize patient management. **Suneet Mittal, MD, Chair of the Cardiovascular Service Line for Valley Health System**, discusses the evolving role of these technologies in clinical practice.

Q: How are wearables changing cardiac monitoring?

A: Continuous monitoring through wearable devices enables clinicians to capture rhythm abnormalities during daily activities that may be missed with episodic testing, improving the detection of intermittent arrhythmias and increasing patient engagement.

Q: What are the clinical strengths and limitations of wearables?

A: Wearables perform well as screening tools for atrial fibrillation and heart rate abnormalities, but they do not replace diagnostic testing. Confirmation still requires clinical evaluation and, when appropriate, ECG monitoring, imaging, and other diagnostic studies.

Q: How is AI enhancing cardiac care?

A: AI helps clinicians interpret the large volume of data generated by wearables by identifying meaningful patterns, reducing false positives, and prioritizing clinically relevant findings. It serves as a decision-support tool that complements — not replaces — clinical judgment.

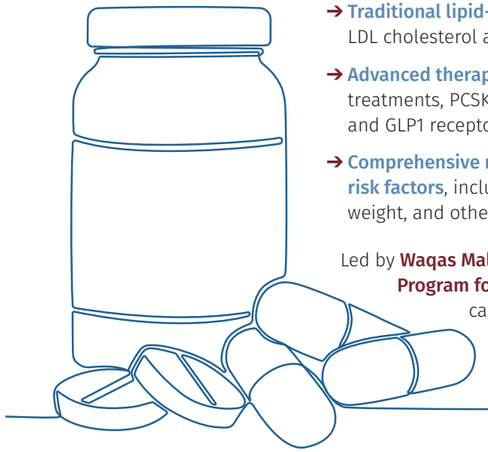
Q: What does the future of cardiac monitoring look like?

A: The integration of wearable data, AI, imaging, and clinical history is advancing predictive, preventive cardiovascular care, enabling earlier risk identification and more personalized management of conditions such as atrial fibrillation and heart failure.

At Valley, these technologies are being thoughtfully incorporated into cardiovascular care, helping physicians detect disease earlier, make more informed clinical decisions, and deliver more personalized care.

CARDIOMETABOLIC DISEASE PREVENTION: WHAT'S OFFERED AT VALLEY?

Valley's Lipids and Cardiometabolic Disease Program provides comprehensive care to help prevent cardiovascular disease — including heart attack and stroke — through advanced therapies, personalized care plans, and coordinated support with your healthcare team.



Treatment is tailored to each patient's cardiovascular risk profile and may include:

- ➔ **Traditional lipid-lowering medications** to reduce LDL cholesterol and other atherogenic lipids.
- ➔ **Advanced therapies**, including RNA interference treatments, PCSK9 inhibitors, SGLT2 inhibitors, and GLP1 receptor agonists.
- ➔ **Comprehensive management of cardiometabolic risk factors**, including blood pressure, glucose, weight, and other modifiable risks.
- ➔ **Lifestyle and risk-reduction strategies** focused on long-term cardiovascular health.
- ➔ **Coordinated care** with primary care physicians, cardiologists, and endocrinologists when additional specialty management is needed.

Led by **Waqas Malick, MD, Director of the Lipids and Cardiometabolic Disease Program for Valley Medical Group**, the program provides personalized cardiovascular risk assessment and evidence-based treatment plans for patients who may benefit from specialized lipid and cardiometabolic management.



RESEARCHING BREAKTHROUGH MEDICAL FRONTIERS

At the Okonite Research Center, Valley's state-of-the-art home for research and clinical trials, the cardiovascular team is spearheading a multitude of cardiac clinical trials, pioneering advancements in cardiovascular research and treatment methodologies.



TRIAL

Repeatable Evaluation of Functional Intra-procedural Signals for Effect in Pulsed Field Ablation: REFINE-PFA

OBJECTIVE

The study is a prospective, exploratory observational study with the ECGenius® System and the PFAnalyzer software module in pulsed field ablation (PFA) cases using the FaraPulse™ PFA Platform. The cohort will be patients with paroxysmal or persistent atrial fibrillation who undergo pulmonary vein isolation (PVI) using this system.

PRINCIPAL INVESTIGATOR

Dan Musat, MD, Associate Director, Electrophysiology, The Valley Hospital; Director, Electrophysiology Research, Valley Health System; Director, Hypertrophic Cardiomyopathy Program, The Valley Hospital



To learn more about the REFINE-PFA trial, please scan the QR code.

To learn more about clinical trials and research at Valley, please visit ValleyHealth.com/Research.

PUBLICATIONS

Hammad, A., Yeung, A., **Goldschmidt, H.**, **Gupta, H.**, **Musat, D.**, **Mittal, S.**, & **Habibi, M.** (2026). **Compound MYH7 mutations: Risk stratification challenges in an affected family.** *JACC: Case Reports*. https://doi.org/10.1016/j.jaccas.2026.109653.

Jabagi, H., O'Donnell, C., Haddad, F., Denault, A., & Sun, L.Y. (2026). **Defining perioperative right heart failure in cardiac surgery: A multiparametric approach to diagnosis and management.** *Anesthesiology*. https://doi.org/10.1097/ALN.0000000000005993.

Lee, B., Rahim, M.A., Specter, M., Wojewoda, O., **Goldschmidt, H.**, **Chang, E.**, **Rahim, H.**, **Litwok, Y.**, **Kunnirickal, S.**, **Kim, F.**, **Grau, J.**, & **Tayal, R.** (2026). **Valve migration after EVOQUE in annuloplasty band rescued with SAPIEN-in-EVOQUE strategy.** *Structural Heart*. https://doi.org/10.1016/j.shj.2026.101094.

To view additional publications, please visit ValleyHealth.com/CardiologyPublications or scan the QR code.



Valley Health System

The Valley Heart and Vascular Institute
4 Valley Health Plaza, Paramus, NJ 07652
ValleyHealth.com/Heart

SAVE THE DATE

11TH ANNUAL

Comprehensive Cardiovascular Disease Management Symposium

FRIDAY, APRIL 9, 2027

Marriott Park Ridge, 300 Brae Boulevard, Park Ridge, NJ

7:15 a.m. – 3:30 p.m. • More information to come.

