SUMMER 2025

THE VALLEY HEART AND VASCULAR INSTITUTE Everything Medicine Can Do. A Few Things Medicine Can't.

Valley Health System N=

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Aalap Chokahi, MD

Valley's Cardiac Imaging Team.



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. For more information about The Valley Heart and Vascular Institute, please visit ValleyHealth.com/Heart.



MEET THE NEW DIRECTORS

The Valley Heart and Vascular Institute is proud to announce the promotion of several esteemed team members. Their outstanding leadership and unwavering commitment to advancing patient care are key to the institute's continued success.



Arieh Greenbaum, MD Director, Cardiac Screening Program, Valley Medical Group Arieh Greenbaum, MD, is a board-certified cardiologist specializing in the prevention, diagnosis, and management of cardiovascular conditions. Dr. Greenbaum earned his medical degree from Albert Einstein College of Medicine, completed his internal medicine residency at Mount Sinai Medical Center, and his cardiology fellowship at Montefiore Medical Center. He is board-certified in both cardiovascular disease and internal medicine



Patricia Murphy, MD Director, Cardiac Rehabilitation, Valley Health System Patricia Murphy, MD, is a board-certified cardiologist with a special interest in echocardiography. Dr. Murphy earned her medical degree from the State University of New York and completed her residency and cardiology fellowship at New York Hospital-Cornell Medical Center. She is board-certified in cardiovascular disease and is a testamur of the American Society of Echocardiography.



Hussein Rahim, MD Associate Director, Structural Heart Program, The Valley Hospital Hussein Rahim, MD, is a board-certified cardiologist, specializing in structural heart disease and interventional cardiology. Dr. Rahim earned his medical degree from the University of Medicine and Dentistry of New Jersey, and completed his residency in internal medicine at Johns Hopkins Hospital and his fellowships in cardiovascular disease, interventional cardiology, and structural cardiology at NewYork-Presbyterian/Columbia University Irving Medical Center. Dr. Rahim is board-certified in internal medicine, cardiovascular disease, and interventional cardiology.

To learn more about heart care at Valley, please visit ValleyHealth.com/Heart.







ONE YEAR AT THE VALLEY HOSPITAL IN PARAMUS, NEW JERSEY: A MILESTONE

IN CARDIOVASCULAR EXCELLENCE



Hybrid operating room.

∧ s The Valley Hospital marks one year at its new Paramus Alocation, the cardiovascular team continues to advance high-quality, evidence-based care across all service lines.

At the center of it all is Valley's state-of-the-art Interventional Platform, where clinicians perform a full range of diagnostic and therapeutic procedures. The Interventional Platform includes two cardiac catheterization laboratories, a cardiac operating suite, and two hybrid operating rooms. The hybrid spaces have been designed with the ability to be used interchangeably as two additional cardiac catheterization laboratories or as hybrid cardiac operating rooms.

The hospital's transcatheter aortic valve replacement (TAVR) program continues to thrive, offering a minimally invasive option for patients with severe aortic stenosis. The program is supported by a multidisciplinary team and streamlined pre- and postprocedural care.

The hospital's left atrial appendage closure (LAAC) program continues to grow, offering patients with atrial fibrillation, who are not candidates for long-term anticoagulation, a safe, effective alternative for stroke prevention.

Valley's **electrophysiology (EP) team** remains a leader in diagnosing and treating heart rhythm disorders. The EP team specializes in advanced ablations, device implants, and lead management, supported by leading-edge mapping technologies and personalized care planning.

Finally, Valley's cardiac surgery program offers a full range of procedures, including valve repair and replacement, coronary artery bypass grafting (CABG), and aortic surgery. A team-based approach ensures continuity of care from evaluation through recovery.

As The Valley Heart and Vascular Institute looks ahead, the focus remains on expanding access to advanced cardiovascular therapies in a setting designed for collaborative, patient-centered care.



The Valley Hospital, located at 4 Valley Health Plaza in Paramus, New Jersey



Photon-counting computed tomography (CT) technology.

COLLABORATIVE CORONARY IMAGING

t Valley, advanced imaging is not just about technology — it is about how our experienced team uses it to deliver precise, efficient, and actionable results.

By combining **photon-counting** CT (computed tomography) with Cleerly Coronary CT phenotyping and HeartFlow Analysis. our cardiovascular imaging team provides high-resolution coronary assessments that enhance diagnostic accuracy, streamline workflow, and support more informed clinical decisions.

□ Siemens Healthineers Naeotom Alpha[®] photoncounting CT scanners deliver image detail beyond what traditional CT can offer.

- Cleerly Coronary CT phenotyping analyzes plaque type, volume, and distribution, including non-obstructive disease, for early detection and monitoring.
- HeartFlow[®] Analysis performs non-invasive FFR-CT (fractional flow reserve) analysis, helping identify functionally significant lesions and reduce unnecessary invasive procedures.

These tools are fully integrated into our team's workflow, allowing for a coordinated

MEET OUR TEAM (also featured on the front cover)



Himanshu Gupta. MD Director, Cardiac Imaging, Valley Medical Group



Using advanced imaging and a team-based approach, we're improving coronary artery disease diagnosis and care – even for the most complex patients. Our extensive published research highlights our excellence in cardiovascular imaging.



Isha Verma, MD Cardiologist



Ernest Chang. MD Cardiologist



Aalap Chokshi, MD Cardiologist



The Abbott TriClip[™] transcatheter edge-to-edge repair (TEER) system. Photo courtesy of Abbott.

EXPANDING TREATMENT OPTIONS FOR TRICUSPID VALVE DISEASE

The Valley Hospital's Structural Heart Program is now offering two novel, FDA-approved therapies for patients experiencing severe symptomatic tricuspid regurgitation (TR) - a condition in which the heart's tricuspid valve does not close properly, allowing blood to flow backward into the right atrium. Left untreated, TR can lead to heart failure, atrial fibrillation, or even sudden cardiac death.





care using the latest innovations.

Repair (TEER) System

4 To learn more about Valley's cardiovascular imaging program, please visit ValleyHealth.com/CardiacImaging.

The Evoque valve. Photo courtesy of Edwards Lifesciences.

Evoque Tricuspid Valve Replacement System

Valley recently completed its first implant of the Evoque tricuspid valve replacement system - the first transcatheter therapy approved for treating severe symptomatic TR. Performed using a minimally invasive transfemoral approach, the procedure involves replacing the faulty valve with a self-expanding frame and bovine pericardial leaflets, which help reduce or eliminate regurgitation.

Abbott TriClip[™] Transcatheter Edge-to-Edge

Valley is also implanting the Abbott TriClip[™] TEER System. This catheter-based device clips the tricuspid valve's leaflets together to reduce blood backflow. Designed specifically for the right side of the heart, the TriClip offers a safe, less invasive option for patients who are not surgical candidates.

Both procedures reflect Valley's commitment to providing advanced cardiovascular

THE VALLEY HEART AND VASCULAR INSTITUTE'S 9TH ANNUAL COMPREHENSIVE CARDIOVASCULAR DISEASE MANAGEMENT SYMPOSIUM

The Valley Heart and Vascular Institute's 9th Annual Comprehensive Cardiovascular Disease Management Symposium: From Fundamentals to Innovation 2025 successfully convened more than 400 healthcare professionals, including primary care and cardiovascular specialists, cardiologists, nurses, and allied health professionals.

Moderated by Suneet Mittal, MD, Chair of the Cardiovascular Service Line at Valley Health System, this in-person event provided attendees with in-depth discussions on critical topics, such as vascular disease, cardiothoracic surgery, interventional cardiology, electrophysiology, and cardiac imaging. Experts from Valley presented the latest advancements in treatment innovations. surgical techniques, and leading-edge technologies driving the future of cardiovascular care.



THE LATEST VIDEO HIGHLIGHTS FROM THE VALLEY HEART AND VASCULAR INSTITUTE

In case you missed it — take a moment to catch up on the latest highlights from The Valley Heart and Vascular Institute. Check out this selection of videos featuring the newest breakthroughs, expert insights, and key moments that are advancing cardiovascular care at Valley.



EXPLORING THE FUTURE OF HEART HEALTH Watch highlights from our 9th Annual Comprehensive Cardiovascular Disease Management Symposium, where more than 400 healthcare professionals gathered to explore the latest innovations in cardiovascular care.



PHOTON-COUNTING COMPUTED TOMOGRAPHY (CT) TECHNOLOGY

Discover how The Valley Hospital is leading the way with Siemens Healthineers' Naeotom Alpha[®] photon-counting CT, offering enhanced image clarity for more accurate diagnosis and treatment in pulmonary, cardiac, and oncologic care.



VENTRICULAR ARRHYTHMIA PROGRAM

Explore how Valley's Ventricular Arrhythmia Program provides comprehensive care for patients with ventricular arrhythmias, including premature ventricular contraction and ventricular tachycardia, using advanced diagnostic and therapeutic approaches.



HYPERTROPHIC CARDIOMYOPATHY (HCM) PROGRAM

Find out how Valley's Hypertrophic Cardiomyopathy Program delivers specialized care for patients with HCM, combining advanced diagnostics and a multidisciplinary team for personalized treatment plans.

To view additional videos, please visit Youtube.com/@ValleyHealthSystemNJ. /

THE LATEST CARDIOVASCULAR CLINICAL TRIALS AT VALLEY

A t the Okonite Research Center, Valley's state-ofthe-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 SPYRAL AFFIRM: The SPYRAL AFFIRM Global Clinical Study of Renal Denervation with the Symplicity Spyral Renal Denervation System in Subjects with Uncontrolled Hypertension



Additionally, long-term follow-up data will also be collected from eligible subjects previously treated in the SPYRAL PIVOTAL-SPYRAL HTN-OFF MED and SPYRAL HTN-ON MED studies.

PRINCIPAL INVESTIGATOR Rajiv Tayal, MD, Director of the Cardiac Catheterization Laboratory and Structural Heart Program, The Valley Hospital



RECENT PUBLICATIONS

Feuchtner, G.M., Lacaita, P.G., Bax, J.J., Rodriguez, F., Nakanishi, R., Pontone, G., Mushtaq, S., Buechel, R.R., Gräni, C., Patel, A.R., Singulane, C.C., Choi, A.D., Al-Mallah, M., Andreini, D., Karlsberg, R.P., Cho, G.W., Rochitte, C.E., Alasnag, M., Hamdan, A., ... **Gupta, H.**, ... van Rosendael, A. (2025). Al-quantitative ct coronary plaque features associate with a higher relative risk in women: CONFIRM2-registry. *Circulation: Cardiovascular Imaging.* https://doi.org/10.1161/ CIRCIMAGING.125.018235

Jabagi, H., Schalm, E.E., & Sun, L.Y. (2025). Disability after cardiac surgery. In Bennett, G., & Goodall, E. (Eds.), *The Palgrave Encyclopedia of Disability*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-40858-8_276-1

Rahim, H., Sohal, S., & Tayal, R. (2024). Alternative large bore access: Axillary, transcaval. In Kern, M.J., & Seto, A. (Eds.), *SCAI Interventional Cardiology Review*. Lippincott Williams & Wilkins (LWW).

Steinberg, B.A., **Mittal, S.**, Holubkov, R., Groh, C.A., Kennedy, R., Pokharel, P., Perez, M., Savona, S.J., Verma, N., Watt, K., Piccini, J.P., Bunch, T.J., & Deering, T.F. (2025). **Correlation between mobile and 12-lead ECG among patients loading with intravenous sotalol: A PEAKS substudy**. *Heart Rhythm O2, 0*(0). https://doi.org/10.1016/ j.hroo.2025.01.018

8 To learn more about the SPYRAL AFFIRM trial, please visit ValleyHealth.com/SpyralAffirm.





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



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

Introducing Conversations Like No Other: Heart Care, presented by The Valley Heart and Vascular Institute!







Dive into heart health with experts from Valley, who share insights on prevention, treatments, and innovations. Scan the QR code to listen now.