

## Diamondback Technology: A New Spin on Carving a Path Through Coronary Calcium

Many patients who undergo a percutaneous coronary intervention have significant arterial calcium present. This causes complications when treating CAD—limiting endovascular treatment options, increasing procedural risk and treatment costs, and contributing to poorer outcomes. Balloon angioplasty and stents are often problematic for treating such lesions: the high inflation pressures required may cause coronary dissection or create difficulties with stent expansion and delivery. However, a new treatment option is changing the heart health landscape for this high-risk population.

In February 2014, Robert Wood Johnson University Hospital (RWJ) became the second hospital in New Jersey to acquire the Diamondback 360° Coronary Orbital Atherectomy System, or OAS (Cardiovascular Systems Inc.; St. Paul, MN). The system is the first FDA-approved vessel preparation treatment for severely calcified coronary lesions. A similar OAS, approved for treating peripheral artery disease, has been used at RWJ since 2009. Ramzan M. Zakir, MD, FACC, FSCAI, Clinical Assistant Professor of Medicine at Rutgers Robert Wood Johnson Medical School and Director of Transradial Catheterization at RWJ, hails the new Diamondback OAS as a major breakthrough in treating high-risk patients with calcified coronary lesions.

Citing one-year results from the ORBIT II trial, Dr. Zakir notes how safe and effective the technology is. Unlike rotational atherectomy devices, the Diamondback OAS utilizes an eccentrically mounted diamond crown that employs centrifugal motion to differentially sand the calcified lesions. The device can sense the difference between plaque versus normal



Ramzan M. Zakir, MD, Clinical Assistant Professor of Medicine at Rutgers Robert Wood Johnson Medical School and Director of Transradial Catheterization at RWJ, uses the new Diamondback Orbital Atherectomy System as a for treating high-risk patients with calcified coronary lesions.

- Ultimate results of the new Coronary Orbital Atherectomy System:*
- Greater lesion compliance and a larger vessel lumen size
  - Ability to deploy stents at half the pressure required otherwise
  - Accessibility to treat difficult vasculature
  - An intervention that virtually eliminates bailout stenting
  - A technique that does not preclude future treatment options
  - Enhanced safety and low repeat target lesion revascularization
  - Reduced length of stay

percent of the PCIs we perform have heavily calcified lesions that may benefit from this device. Coronary calcium is undertreated in the cardiac cath lab. Having a user-friendly device available to effectively treat severe coronary calcium can increase the safety of CAD interventions for this difficult-to-treat population, while improving long-term patient prognoses."

To view a demo simulation and product video of the Diamondback Coronary Artery System, visit <http://www.conquercalcium.com/> and click on "Coronary." For OAS clinical trials, visit <http://www.csi360.com/>.

To refer a potential candidate for this intervention, call **732-937-8748**.

"This will expand RWJ's cardiovascular offerings significantly," Dr. Zakir predicts. "At least ten



The Diamondback 360 Coronary OAS technology treats calcified plaque in arterial vessels throughout the leg and heart in a few minutes of treatment time, and address many of the limitations associated with existing surgical, catheter and pharmacological treatment alternatives.

## Rebuild, Replace, Renew: The Structural Heart Program

In the past decade, structural heart disease has emerged as a dynamic new field in interventional cardiology. With its focus on percutaneous correction of heart valves and other abnormalities, Robert Wood Johnson University Hospital's (RWJ) Structural Heart Program offers less invasive interventions to complement its already exceptionally strong heart surgery program. The percutaneous options are geared to adults with structural heart problems that can now be addressed without open heart surgery—providing alternatives for elderly and frail patients who sometimes tolerate surgery poorly, as well as adults with congenital heart problems who often require further interventions.

"There are all sorts of things we can do to complement heart surgery, bringing in technologies where patients are spared from having their chest opened," explains Zoltan G. Turi, MD, Professor of Medicine, Rutgers Robert Wood Johnson Medical School, and Director of the Structural Heart Program at RWJ. "For example, atrial septal defect (ASD) is a relatively common congenital abnormality that in many cases isn't recognized or treated for years. ASD closure previously required surgery, general anesthesia, and a three- or four-day hospital stay; today patients go home the following morning."

While some coronary interventions are performed by all interventional cardiologists, transseptal puncture, PFO and ASD closures, alcohol septal ablation, paravalvular (paraprosthesis) leak repair, transcatheter mitral valve repair and transcatheter aortic valve replacement are relegated to only a few facilities. RWJ does them all.



### Dr. Turi on Technology

*Most important structural heart development in the last 25 years: the ability to fix heart valves without surgery. That harkens back to the 1980s when ballooning of obstructed aortic and mitral valves began. The ACC guidelines regarding ballooning are based on Dr. Turi's work from a series of randomized trials. In contrast to the success of ballooning mitral valves, ballooning the aortic valve to correct stenosis is generally ineffective. Advances for effective treatment of aortic stenosis took two more decades to arrive.*

*Most important development in the past few years: FDA approval (2011) of nonsurgical replacement of the aortic valve (see TAVR article) which is helping medically frail and elderly patients who are not candidates for open surgery.*

But that is meat and potatoes to Dr. Turi. "Structural cardiology was my interest well before the term was coined. I've been dealing with novel interventions in heart valve disease since the 1980s. I was interested in valve disease even as a medical student; it was a natural area for me to pursue."

Dr. Turi says he was attracted to RWJ by its forward-looking cardiac surgery program and its excellent people and resources. "There's an unusually high level of collaboration between cardiac surgery and cardiology, which is essential for this kind of program and is a particular feature of RWJ."

and portfolio as the dominant research university and medical school in the state.

From a teaching standpoint, the department is expanding its cardiology fellowship program with the additions of another cardiology fellow and a structural heart fellow. This October the department will host and lead a structural heart disease symposium for practitioners (see program details below) from across the state. The symposium will include some of the most prominent names in structural heart interventions. That and other community training efforts are underway.

RWJ's Structural Heart Program is a cooperative program with cardiac surgery. The mission is to provide consultative services and treatments for patients with all aspects of structural heart disease—whether they are ultimately the best candidate for medical therapy, surgery, or a catheter-based approach.

For more information, call **732-418-8030**.

**11th Annual Innovations and Trends in Cardiovascular Care  
MASTERS OF STRUCTURAL HEART DISEASE**

To register, visit <http://events.medintelligence.net/rwj.html>

**Saturday, October 18, 2014  
7 a.m. to 3 p.m.  
The Hyatt Regency, New Brunswick, NJ**

The management of structural heart disease has changed dramatically in the past 5 years. The purpose of this intense full day symposium is to bring the audience up-to-date on the expanding array of clinical management options for aortic and mitral valve disease in particular. Who should be treated, how and when, and whether or not it is ever too late to intervene will be discussed by the key opinion leaders in the field.



One Robert Wood Johnson Place  
New Brunswick, NJ 08903



### Cardiovascular Program Leadership

- James Coramilas, MD  
Professor of Medicine  
Rutgers Robert Wood Johnson Medical School  
Chief of Cardiology  
Rutgers Robert Wood Johnson Medical School  
Robert Wood Johnson University Hospital
- Leonard Lee, MD  
Associate Professor of Surgery  
James W. Mackenzie Chair of Surgery  
Interim Chair, Department of Surgery  
Rutgers Robert Wood Johnson Medical School  
Chief of Cardiothoracic Surgery  
Rutgers Robert Wood Johnson Medical School  
Robert Wood Johnson University Hospital
- Saum Rahimi, MD  
Interim Chief, Vascular Surgery  
Rutgers Robert Wood Johnson Medical School  
Vascular Surgeon  
Robert Wood Johnson University Hospital
- RWJUH Cardiovascular Connection  
Committee Members
- Michael Antoniadis, Vice President, Operations  
Stephen Allison, PA-C, Assistant Vice President,  
Cardiovascular Services  
Lana Christian, Medical Writer  
Tara Ramirez, Design  
Melissa Ruzbarsky, Project Manager

## WELCOME NEW PHYSICIANS



**ZOLTAN G. TURI, MD**  
Professor of Medicine,  
Associate Director, Cardiovascular  
Diseases and Hypertension,  
Rutgers Robert Wood Johnson Medical School  
Interventional Cardiologist  
Robert Wood Johnson University Hospital

Zoltan G. Turi, MD, Professor of Medicine, Rutgers Robert Wood Johnson Medical School, is Director of the Structural Heart Program at Robert Wood Johnson University Hospital (RWJ). Dr. Turi's past appointments include Cooper Medical School of Rowan University, Drexel University, University of California San Diego, Wayne State University, and Harvard Medical School.

Dr. Turi graduated from Harvard College and Columbia University College of Physicians and Surgeons. He completed his internal medicine training at St. Luke's Hospital in New York and his cardiology fellowship at Brigham and Women's Hospital in Boston. He did a sabbatical year at the Polyclinique Pasteur in France, training in carotid and peripheral interventions. He was an inventor of coronary autoperfusion catheters and holds patents for a transseptal sheath and a covered stent. He has been involved with structural heart interventions for more than two decades, was the principal investigator for a series of randomized trials on which the guidelines for the management of mitral stenosis are based and has performed balloon valvuloplasty in developing countries throughout the world. He has been involved in transcatheter aortic valve replacement for over a decade.

Dr. Turi is a Fellow of the American College of Cardiology, and his work has been published in over 100 articles and nearly 40 textbook chapters. He lectures extensively on invasive cardiology as well as cardiology education.

**Congratulations to Dr. Turi in his outstanding achievement in the field of Interventional Cardiology. He was selected to the inaugural class of MSCAI – Master Interventionalist of The Society for Cardiovascular Angiography and Interventions (SCAI). Dr. Turi was among 17 peers who were the first to receive this honor.**



**AZIZ GHALY, MD**  
Assistant Professor of Surgery, Rutgers  
Robert Wood Johnson Medical School  
Cardiothoracic Surgeon  
Robert Wood Johnson University Hospital

Aziz Ghaly, MD, Assistant Professor of Surgery, Rutgers Robert Wood Johnson Medical School and a Cardiothoracic Surgeon at Robert Wood Johnson University Hospital (RWJ) is the lead surgeon of the heart transplant program at RWJ. Prior to coming to RWJ, Dr. Ghaly was Assistant Professor of Surgery, Division of Cardiothoracic Surgery, at Loma Linda University in California.

Dr. Ghaly completed his heart transplant and assist device training at NY-Presbyterian Hospital, Columbia University College of Physicians and Surgeons, New York City. He completed his cardiothoracic residency at Cedars Sinai Medical Center, Los Angeles, CA. He completed his research fellowship in cardiac surgery, as well as his general surgery training, at the University of Louisville, Department of Surgery, Louisville, KY.

Dr. Ghaly's clinical interests include (1) heart transplantation and ventricular assist devices, (2) minimally invasive valve surgery and (3) aortic surgery. He was involved in research with the AbioCor® total artificial heart and has conducted animal studies to test new ventricular assist devices.

Dr. Ghaly is a board-certified cardiothoracic surgeon. He is a UNOS-certified heart transplant surgeon and has served on review boards for the United Network for Organ Sharing (UNOS).

He is a member of the International Society of Heart and Lung Transplantation (ISHLT), the Society of Thoracic Surgeons and the American Association of Thoracic Surgery.

His work on surgery for total artificial heart and VADs has been published in several journals. Dr. Ghaly is an invited reviewer for the *Annals of Thoracic Surgery* and an invited author for ISHLT.



Summer 2014



Robert Wood Johnson University Hospital  
**Cardiovascular Connection**  
Updates

[www.rwjuh.edu/heart](http://www.rwjuh.edu/heart)

## Leadership Spotlight: Cardiovascular Service Line at RWJ Introducing Stephern Allison, PA-C, MSM, MBA

Since she joined Robert Wood Johnson University Hospital (RWJ) in June 2013, Stephern Allison, PA-C, MSM, MBA, Assistant Vice President for Cardiovascular Services at RWJ, has hit the ground running with her direct oversight of the Electrophysiology and Cardiac Catheterization Laboratories, Non-Invasive Cardiology, Cardiodynamics, Cardiac Surgery and the Structural Heart Program. Ms. Allison is already well on her way to realizing her ambitious 2014 goals for the department, which include implementing a same-day discharge process for elective PCIs, streamlining physician reporting in the Cath and EP labs, launching remote reading and interpretation for stress and echo tests, improving scheduling efficiencies, relocating the pre/post-procedural area, and replacing Lab 7. Her ultimate goal for all of those activities is to optimize and facilitate patient throughput and increase ease of practice for physicians.

In her 20 years of previous healthcare experience, Ms. Allison most recently served as Senior Administrative Director for the cardiovascular service line at North Shore LIJ Health System in New York, where she oversaw clinical and administrative operations, regulatory affairs, quality assurance, and performance improvement initiatives such as



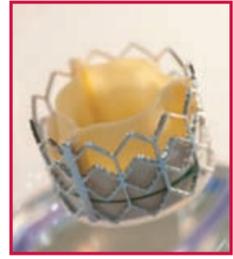
Stephern Allison, PA-C, MSM, MBA and Assistant Vice President, Cardiovascular Services at RWJ joined the organization in August 2013 because of RWJ's national reputation for academics and quality.

at the new Robert Wood Johnson University Hospital Somerset, where improvements are already underway, with a new Cardiac Cath Lab scheduled to open in August.

For the most part, cardiovascular services at Somerset will continue to run the same way, offering the high-quality basic services, like diagnostics and a robust non-invasive cardiology program. "Now, patients who come in for routine cardiovascular work-ups and procedures, will always have access to RWJ New Brunswick ambulances right on site to transport patients that need more advanced care like transplants and Ventricular Assist Devices," adds Ms. Allison.

To contact Stephern, please call Terry Powell at 732-937-8748.

## TAVR Program Update 2014



High-risk patients who are not candidates for open heart surgery may benefit from Transcatheter Aortic Valve Replacement (TAVR), which has been offered at Robert Wood Johnson University Hospital (RWJ) since 2012.

Four months ago, nationally recognized interventional cardiologist Zoltan G. Turi, MD, Professor of Medicine, Rutgers Robert Wood Johnson Medical School, joined RWJ as Director of the Structural Heart Program. Since Dr. Turi's arrival, the program has performed up to two TAVRs per week with an expectation of continued growth. Dr. Turi has been involved with TAVR since the technology's beginning.

Leonard Y. Lee, MD, James W. Mackenzie Chair in Surgery and Interim Chair, Department of Surgery, Rutgers Robert

Wood Johnson Medical School and Chief of Cardiothoracic Surgery at RWJ, says Dr. Turi is a valuable addition. "He's a great interface between our program and community cardiologists; they recognize his name. He brings a wealth of experience, and he's dedicating his clinical time to the growth and maintenance of our program, which also helps a lot in keeping up with patients' extensive workups and communications with them and their referring doctors."

RWJ is on the short list for participating in upcoming TAVR clinical trials: next-generation platforms that decrease device size are expected to lower complications and lengths of stay even further for TAVR.

For more information on TAVR, please call 1-855-795-TAVR (1-855-795-8287).

## Updates in Cardiac Catheterization: Laboratory with Highest Volume in the State Welcomes New Director

In a changing healthcare climate that is increasingly basing reimbursement on patient outcomes—while encouraging faster discharge times—every hospital walks a line with meeting patients' needs, practicing evidence-based medicine, and staying updated with the latest advances in the industry. This is increasingly more critical as America ages: patients are presenting with more comorbidities, and some will have less-than-ideal outcomes. At Robert Wood Johnson University Hospital (RWJ), the Cardiac Cath Lab's minimally invasive interventions help avert outcomes that could lead to a lengthy inpatient stay. "Over the past 10 years, due to technology, we've pushed the envelope more and more," says Tudor Vagaonescu, MD, PhD, Associate Professor of Medicine, Rutgers Robert Wood Johnson Medical School and Medical Director of the Cardiac Catheterization Laboratory at RWJ. "Patients who were too sick to intervene on are now treated more aggressively; and, after having successful interventions they return to their normal lives."

RWJ's cath lab is the highest-volume Cardiac Cath Lab in the state of New Jersey, seeing close to 12,000 cases per year. Offering the full spectrum of coronary diagnostics and interventions, structural heart and vascular studies, and electrophysiology studies, it also works seamlessly with the in-house invasive cardiac surgery services that a patient might need.

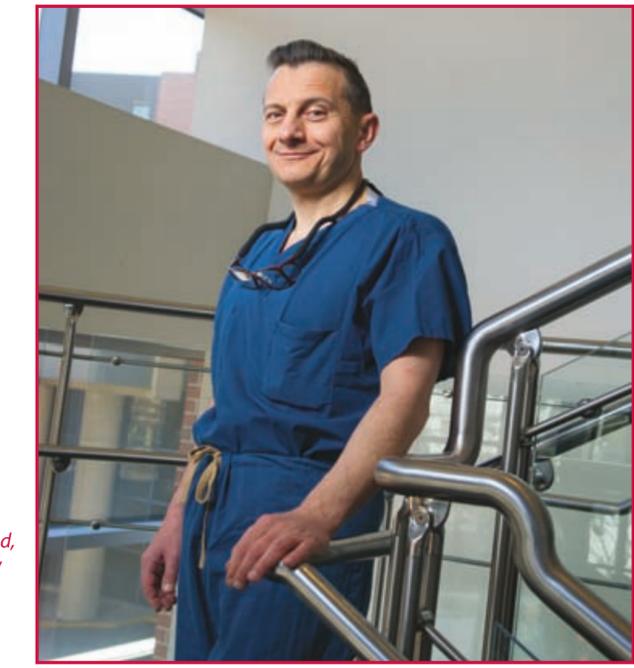
Growing and improving the cardiovascular service line's consolidated operations is Dr. Vagaonescu's primary focus, which includes the challenges of maintaining and surpassing national benchmarks for quality measures in the cath lab, integrating the university and community cardiologists within the same organization, minimizing practice variation, encouraging teamwork, and promoting continuing education.

*"Patients who were too sick to intervene on are now treated more aggressively; and, after having successful interventions they return to their normal lives."*  
— T. Vagaonescu, MD, PhD

Another plus of this consolidated service line is its same-day discharge initiative. Patients are screened as soon as they are recommended or referred to RWJ. Then their discharge planning can begin before they walk in the door. Stents and similar coronary interventions are prime candidates for same-day discharge. And, if the patient does not qualify for a cath lab intervention, he or she can be referred to cardiac surgery at the same institution without needing any other referrals.

Dr. Vagaonescu, who has been at RWJ for more than 10 years, says his greatest clinical interest is in the highly complex and high-risk coronary interventions. Integration of new technologies to meet complex needs offers patients the latest advances in care.

Tudor Vagaonescu, MD, PhD, Associate Professor of Medicine, Rutgers Robert Wood Johnson Medical School and the New Medical Director of the Cardiac Cath Lab at RWJ, plans to grow and improve consolidated operations like integrating university and community cardiologists.



## On the Grid in Electrophysiology: New Clinical Trials and Devices

Electrophysiology at Robert Wood Johnson University Hospital (RWJ) is busy testing and implementing new technology to monitor and treat patients at risk for sudden cardiac death.

### The CABANA trial (Catheter Ablation versus Anti-arrhythmic Drug Therapy for Atrial Fibrillation)

The number of people older than age 60 with atrial fibrillation (AF) is increasing, which increases their risk of stroke. Pharmacotherapeutic strategies to control heart rate in order to control AF have not yielded desired clinical results in maintaining sinus rhythm and reducing mortality. The CABANA trial is comparing left atrial catheter ablation to pharmacological rate or rhythm control interventions—with the hypothesis that ablative treatment will produce better outcomes and lower the risk of mortality from stroke. RWJ is one of 134 study locations for the CABANA trial (NCT00911508), which is recruiting 4,000 patients worldwide. The study, headed by Mayo Clinic, will run through 2018.

### The AnalyzeST trial (ST Monitoring to Detect ACS Events in ICD Patients)

Because symptoms of myocardial infarction can be vague, people often delay seeking treatment. As a result, more than half of patients experiencing an MI die before reaching a hospital. Continuous analysis of the electrical changes between heartbeats could provide new insight into early warning signs of MI and how to avert it. RWJ will

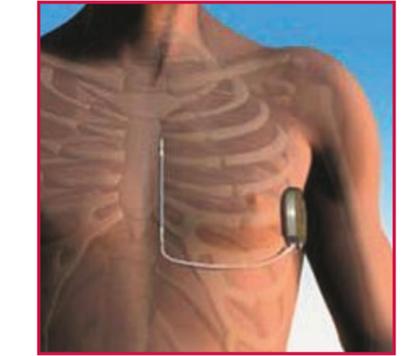
soon begin the recruiting phase of the AnalyzeST study (NCT01424722), to determine if the Fortify ST ICD is sensitive in accurately detecting acute coronary syndrome events.

### The Reveal LINQ™

Patients with infrequent syncope or cardiac arrhythmias minus other symptoms can defy diagnosis. The Reveal LINQ (Medtronic; Minneapolis, MN), an implantable heart monitor, allows physicians to continuously and wirelessly monitor a patient's heart for up to three years. About one-third the size of a AAA battery and 85 percent smaller than other monitors of its kind, it is inserted subcutaneously via a syringe in three minutes using local anesthesia—with no stitches and no hospital stay needed. Data recording/sharing occurs through the Reveal® Patient Assistant, a hand-held, battery-operated device about the size of a deck of cards. The patient's physician can download these data from any location in the world. RWJ will start using this device within a few weeks.

### S-ICD: the first ICD with no wires in the heart

In March, RWJ started using a totally subcutaneous Implantable Cardioverter Defibrillator (ICD). This is a major technological advance for people with difficult vascular access (e.g., dialysis patients with fistulas) and young people with cardiac diseases (e.g., tetralogy of Fallot) that are nonresponsive to anti-tachycardia pacing (but don't need pacemakers).



The subcutaneous implantable defibrillator (S-ICD) System provides a new solution for patients at risk of Sudden Cardiac Arrest.



Amardeep Saluja, MD, Assistant Professor of Medicine, Rutgers Robert Wood Johnson Medical School and an electrophysiologist at Robert Wood Johnson University Hospital provides the following overview of the current clinical trials available for patients in the area of electrophysiology.

With the S-ICD generator placed on the left side of the heart and a wire tunneled under the skin toward the sternum, the device eliminates potential problems that wires in the heart could cause, such as stenosis, vein occlusions, infections, or problems with lead placement. Subcutaneous placement of the electrode also subjects it to significantly less biomechanical stress than conventional transvenous leads undergo. Using three simultaneous analyses, the S-ICD identifies and classifies a heart rhythm—instead of individual beats—to discriminate what would require therapy.

Subhashini Gowda, MD, an attending electrophysiologist at RWJ, implanted the first S-ICD™ System (Cameron Health/Boston Scientific) in March of 2014.

For more information on our cardiovascular clinical trials, please call 732-418-8030.



Subhashini Gowda, MD, an attending electrophysiologist at RWJ, implanted the first totally subcutaneous Implantable Cardioverter Defibrillator.

## Standardized Cardiac Surgery Protocols Improve Outcomes

In acute coronary care, "time is muscle." In acute stroke care, "time is brain." Both emphasize what can be lost every moment that treatment does not occur, particularly in a cardiovascular setting. Using each treatable moment to its greatest advantage was the goal of scrutinizing all of Robert Wood Johnson University Hospital's (RWJ's) cardiac surgery protocols. In the past year, the department analyzed all their procedures to see how they could streamline OR setup, reduce time to treat, eliminate opportunities for errors, and decrease patient length of stay (LOS).

Based on the most recently published best practices, the protocols represent the most up-to-date treatment protocols available for cardiac patients at RWJ. Fully implemented only six months ago, the protocol changes are already reaping results in key outcomes indicators.

Now all pre- and postoperative care for cardiac patients in the ICU and on med-surg floors is standardized. "Preoperatively, approximately 40 percent of the patients we operate on are from an outside hospital," explains Leonard Y. Lee, MD, James W. Mackenzie Chair in Surgery and Interim Chair, Department of Surgery, Rutgers Robert Wood Johnson Medical School and Chief of Cardiothoracic Surgery at RWJ. "They come in on all sorts of different meds, so we standardized our pre-op testing and prep. The entire service knows

## Physician Relations: New Liaison Joins Cardiovascular Services

The Physician Relations Department would like to introduce Alvin Eclarinal, Physician Liaison, Cardiovascular Services at Robert Wood Johnson University Hospital (RWJ).

Within Cardiovascular Services, Mr. Eclarinal will focus on cardiothoracic surgery, the Advanced Heart Failure Transplant Program, non-invasive cardiology and the Cardiac Catheterization Labs on both the New Brunswick and Somerset campuses.

Mr. Eclarinal spends the majority of his time in the field visiting community physician offices and providing them with updates on clinical capabilities, new specialists, recent technologies and procedures and other special programs available at RWJ. He routinely holds educational events like grand rounds to showcase faculty and community physicians within medical leadership at the hospital. He also seeks feedback and input on the ways RWJ can improve on its cardiovascular services and care.

Mr. Eclarinal comes to us with more than 14 years of experience in the pharmaceutical sales industry where he worked closely with various specialists, including cardiologists.

If you have any suggestions, leads or would like to discuss outreach opportunities, please contact Alvin at 732-972-9932.



Leonard Y. Lee, MD, James W. Mackenzie Chair in Surgery and Interim Chair, Department of Surgery, Rutgers Robert Wood Johnson Medical School and Chief of Cardiothoracic Surgery at RWJ led the implementation of pre- and post-op protocols for cardiac surgery.

the extent of the patient's disease, whether it's lungs, kidneys, or vascular."

Dr. Lee continues, "Intraoperatively, the OR setup is the same for all the surgeons—from equipment to sutures. This saves time, cost, and confusion, especially if an emergency case arises."

"Post-operatively, all heart surgery patients go immediately to the ICU, where we manage them closely in conjunction with intensivists. We collaborated with the intensivists to develop preventive protocols for monitoring patients from the day they come into the hospital to the day they leave. We also codified treatment protocols, such as for prophylactic antibiotics, afibrillation treatment, anticoagulant use, and so on."

Dr. Lee emphasizes that if a protocol is in place and is done automatically, having one standard of care across the service translates to less time to treat

and reduced errors. To ensure that practice mirrors planning, a different attending surgeon makes daily multidisciplinary rounds, seeing staff and each patient once a day—in addition to follow-up by the patient's own particular surgeon.

Six months of data indicate that these measures are already helping reduce overall LOS and ICU LOS. In addition, renal failure after cardiac surgery has been cut by more than 60 percent, and stroke rates have decreased. Nobody can bottle time, but Lee's group is maximizing it with the new protocols.

The ultimate goal in this standardization process is to optimize every patient's outcome. "The way I look at it," Dr. Lee says, "every patient is my patient. Every patient is my partner's patient. There's no difference in the way we treat each patient."

For more information on cardiac surgery protocols, call 732-235-8725.

2 great hospitals are now greater as one. RWJ ROBERT WOOD JOHNSON UNIVERSITY HOSPITAL RWJ UNIVERSITY HOSPITAL SOMERSET rwjuh.edu