Comprehensive Cardiac Operating Suite

Case Statement



minumin

Project Summary

The creation of a new Comprehensive Cardiac Operating Suite, with advanced imaging and navigation technology, will take Dominican Hospital to a new level in cardiac surgery for our most critical heart patients. The advanced equipment allows us to minimize invasive surgical procedures and drive patient-focused care. An integrated multidisciplinary heart team will provide treatment of complex cardiovascular diseases. The new Comprehensive Cardiac Operating Suite is a space where interventional radiologists, cardiologists, and cardiovascular surgeons can work side-by-side in the same room, at the same time, quickly moving from an interventional procedure to open heart surgery.

BENEFITS TO PATIENTS

- Deliver faster and improved heart care
- Availability of high-tech imaging and diagnostic equipment
- Shortened procedure times
- Reduced hospital stays
- Reduced infection risks
- Faster recovery with fewer follow-up procedures
- Greater procedure scheduling flexibility
- The most advanced technology and equipment in the world

THE NEED

Cardiovascular disease continues to be the leading cause of death in the United States.

Each day, within the Santa Cruz County community, 5-6 patients are treated at Dominican Hospital for cardiovascular disease. More patients than ever are requiring cardiac care and interventions on a daily basis. With the vast improvements in techniques, technology, and equipment in the new Comprehensive Cardiac Operating Suite , we may remain at the forefront of high-quality cardiac care for our community.

Women's Heart Health

According to the American Heart Association, heart disease causes one in three deaths each year, making it the number one killer of women - affecting women at any age and at any time. Women's risk factors for heart disease may include age, high blood pressure, high cholesterol, diabetes, and family history. There are also other unique factors specific to women, such as a later onset of their disease as compared to men.



"Dominican Hospital's heart and vascular program delivers unsurpassed cardiac care to our patients, right here in our community," said Dominican Hospital President, Nanette Mickiewicz, MD.

CURRENT PROGRAM

Dominican Hospital offers a full spectrum of cardiac and vascular care from testing and diagnosis, through surgery and rehabilitation. When the need arises, access to emergency services and advanced cardiac services is critical to saving lives. Dominican Hospital is the receiving Emergency Room for cardiac emergencies throughout Santa Cruz County, and was named among the Top 5% in the Nation for Coronary Interventional Procedures by Healthgrades[®] in 2016 and received a three-star rating for Coronary Artery Bypass Surgery from The Society of Thoracic Surgeons.

Dominican Hospital offers the most comprehensive, nationally recognized heart program in the Monterey Bay region. Our services include prevention, diagnostic technology, and cutting edge treatment. Our team of cardiac specialists continually work to improve our cardiac care, shorten treatment times, and increase overall education for our community.

STATISTICS FOR DOMINICAN HOSPITAL

200 cardiac surgeries per year

We perform 200 cardiac surgeries/year, on average and 2017 looks to be even more.

40 advanced specialty procedures per year There are over 40 advanced specialty procedures/year to implant stents in the aorta.

5-6 daily procedures

The Cath-lab performs 5-6 procedures/day, which includes cardiac, peripheral stents, pacemakers, and other interventions.

100 emergency heart attacks per year

We respond to approximately 100 emergency heart attack cases/year, with cardiologists available 24-7.

10-21 minutes faster than national average

Dominican's response time for a heart attack is 50 minutes while the national average is 60-71 minutes. Our physicians and cardiac team live close enough to the hospital to get here fast; they are that committed to our care.



Richard "Dave" Cordano, a cancer survivor, retired from Segate Technology, and longtime Scotts Valley resident who is 83, suffered a heart attack while playing golf and was driven to Dominican's Emergency Department. He went on to have a number of cardiac procedures including insertions of a stent, by Dominican Cardiac Interventionalist Rajinder Singh, MD, and a pacemaker, by cardiologist Ryan Brandt, MD, and stayed in the hospital's Telemetry Care Unit.

"The medical staff was very attentive, and on top of everything the RNs were outstanding. They were very dedicated to making me feel comfortable and were so pleasant to my wife, Joanne."

Mr. Cordano recuperated and received cardiac rehabilitation therapy twice a week at Dominican Hospital's Health and Rehabilitation Services on Frederick Street.

In appreciation of the care he received, Mr. and Mrs. Cordano made a sizable end-of-year gift to the Dominican Hospital Foundation to help fund the new Cardiac Hybrid Operating Suite.

"I was so delighted with the people at Dominican that I wanted to contribute a meaningful amount to the hospital's hightech efforts," Mr. Cordano said. "When I heard about the hnew operating suite that the Foundation was raising funds for, I thought it was important to donate here locally."

COMPREHENSIVE CARDIAC CARE

Dominican Hospital's complete range of cardiac services includes:

- Certified cardiac rehabilitation program
- Dare to C.A.R.E.: Free and noninvasive vascular screenings
- Emergency diagnostic and interventional heart procedures available 24/7
- Heart surgical services including minimally invasive procedures and peripherally inserted heart valves (TAVR)
- Pacemaker and defibrillator implants
- Patient navigator to assist with cardiac care planning
- Peripheral procedures including aortic and peripheral stenting and repair
- Rhythm control management

RECENT AWARDS



Three-Star Rating for Coronary Artery Bypass Surgery from The Society of Thoracic Surgeons in 2017

Healthgrades[®] 2016 Report to the Nation

- Named Among the Top 5% in the Nation for Coronary Interventional Procedures
- Named Among the Top 10% in the Nation for Cardiac Surgery
- Named Among the Top 10% in the Nation for Coronary Interventional Procedures



- One of America's 100 Best Hospitals for Coronary Intervention
- Five-Star Recipient for Coronary Bypass Surgery
- Five-Star Recipient for Coronary Interventional Procedures, 3 Years in a Row (2014-2016)
- Recipient of the Cardiac Surgery Excellence Award™
- Recipient of the Coronary Intervention Excellence Award[™]

Prevention is Key

At Dominican Hospital, we offer a number of preventative health programs and tools for our patients.

DARE TO C.A.R.E.

Dare to C.A.R.E. is a free heart and vascular disease education and screening program provided as a cooperative effort through Dominican Hospital and Dominican Hospital Foundation. If caught early, vascular disease can be treated to prevent serious problems such as heart attack or stroke, amputations, or even death. The Dare to C.A.R.E. program focuses on abnormalities that cause carotid artery disease, responsible for at least 300,000 strokes a year; and abdominal aortic aneurysms, the third leading cause of sudden death in men over 60, among other abnormities.

The free screening for qualified participants is conducted by a vascular technologist to include a painless 15-minute, noninvasive ultrasound of your neck, abdomen, and legs and after the screening, your results are shared with you as well as sent to your primary care physician.

To learn more and to schedule your free screening, call 831.462.7788 or visit dignityhealth.org/dominican/daretocare.

CARDIAC RISK REDUCTION PROGRAM

For heart attack, angioplasty, stent and surgery patients, our cardiac rehabilitation team offers a safe, monitored environment for patients to regain their strength and confidence. Cardiac rehabilitation programs are customized for individual needs and led by clinical exercise physiologists and specially trained nurses.

Dominican's Cardiac Risk Reduction program is nationally certified by the American Association of Cardiovascular and Pulmonary Rehabilitation and offers nutritional assessment, risk factor counseling, lifestyle coaching, and monitored exercise therapy.



Dominican's cardiac team can quickly and easily mobilize the CardiacHelp portable life support machine around the hospital. The extra-corporeal life support (ECLS) machine, can temporarily take over for the heart and/or lungs, oxygenating and removing carbon dioxide from the blood before returning it to the body.

Next Steps

The Comprehensive Cardiac Operating Suite

High quality care for patients with heart disease often involves a combination of surgical and interventional procedures. The new Comprehensive Cardiac Operating Suite will have the capability to offer a range of cardiac procedures with cutting-edge technology and tools available.



"A cardiac operating suite is designed to function for major cardiac surgery and as an interventional suite," explains Elizabeth Sweeney-Villavicencio, Dominican's director of surgical services. "For example, it allows the interventionalist to first try the least invasive approach and then, if necessary, switch to open surgery."

PROVIDING ADVANCED IMAGING AND NAVIGATION TECHNOLOGY

The new suite will feature innovative technology to allow for more accurate diagnosis and treatment of cardiovascular disease.

The suite will include the latest in high-tech imaging, computer and diagnostic equipment, and newly developed surgical capabilities as well as a traditional cardiovascular catheterization lab. "The Comprehensive Cardiac Operating Suite is a critical part of our commitment to providing innovative, leading-edge cardiovascular services to the people of Santa Cruz County," says Sarah Edmundson, Dominican's director of cardiovascular services. "When it is finished, our cardiac team will be able to perform more advanced interventions and minimally invasive techniques."

PLANNING WITH VIRTUAL REALITY (VR)

The architects of the suite are working in collaboration with physicians by using virtual reality to visualize the space and provide recommendations to ensure that the needs of the surgical team will be met. Involving the doctors in the early stages with planning and designing an advanced Comprehensive Cardiac Operating Suite is helping Dominican complete the complex process more effectively and efficiently.

"The ability to see the Comprehensive Cardiac Operating Suite in a virtual reality form makes it much better for us to plan for what we need and how we're going to proceed forward. The suite is going to extend beyond just cardiac or heart related procedures. It's going to incorporate vascular surgical procedures where we're reestablishing blood flow to extremities and limbs. It's going to provide services for stroke intervention and interventional radiology. This is going to be the future, and this is what's going to define our future, and we don't want to be left behind." Dr. Bilal Shafi, cardiothoracic surgeon.



Dr. Bilal Shafi utilizing VR to provide suggestions to update the plan and design of the Suite to meet the needs of the surgical team.



Physicians help the architects to design the Suite.



Steve Snodgrass, CFO of Graniterock and Dominican Hospital board member, regularly runs in the Big Sur Marathon Relay, but this time was a different experience. After about the first hundred yards he was doubled over in pain but muscled through the 5-mile leg and continued to run an additional 4 miles. Although not feeling well, he ignored the signs of the pain in his heart.

Three days after the run, Steve was admitted to Dominican Hospital and had an echocardiogram, an ultrasound test, to evaluate his heart structure and blood flow. Cardiac surgeon Conrad Vial, MD, diagnosed Steve with a congenital heart defect.

Five days later he underwent a procedure, to replace the aortic valve in his heart with an artificial valve. Following the valve replacement, Steve had a pacemaker inserted.

"The conclusion I drew is that in life, it's not a question of 'if you're going to the hospital?' it's 'when you're going to the hospital?'" Says Steve, " I feel like I should be involved, because that's what we all have a responsibility to do in life - is not sit on the sidelines, but we need to get involved. By being on the board, I've received insight into how they strive to maintain good quality in health care."





In 2011 longtime Santa Cruz resident and retired president of Ledyard's, **Richard Fontana**, underwent a cardiovascular x-ray called an angiogram in care of Cardiologist Neil Sawhney, MD. He received alarming news that he was at high risk for a heart attack due to blockages in his coronary arteries which needed to be cleared immediately.

Fontana received successful treatment, with no permanent heart damage, and cardiac rehabilitation at Dominican which prevented further serious problems from developing.

But that's not the end of Fontana's story. A few months ago, in 2016, he underwent a vascular procedure to prevent his kidneys from failing. Stents were inserted into his renal arteries to ensure healthy blood flow to his kidneys.

To show his gratitude to Dominican, Fontana is supporting the creation of a Cardiac Hybrid Operating Suite to invest in state-of-the-art technologies.

"Dominican has made remarkable strides in creating top-quality cardiovascular care programs," he says. "I hope you'll join me in supporting the Comprehensive Cardiac Operating Suite, a truly significant advance in the medical resources available to our families, friends and neighbors."



Patient-focused Care

The integration of a multidisciplinary heart team for the treatment of complex cardiovascular disease facilitates patient-focused care.

The many players of a patients' heart-care team may include; cardiac or vascular surgeons, interventional cardiologists, anesthesiologists, nurses, perfusionists, and radiologists.

PARTNERSHIP WITH PAMF

Dominican collaborates with the Bay area Palo Alto Medical Foundation physician providers to provide expert cardiac surgery services. Under the leadership of medical director, Dr. Bilal Shafi from Palo Alto Medical Foundation (PAMF), a skilled cardiac surgical team provides Dominican Hospital with around-the-clock cardiac coverage. Our dedicated cardiac surgery suite ensures that emergency, as well as routine procedures can always be accommodated.

Cardiac Team



Ryan Brandt, MD



Ajanta De, MD,FACC,FSCAI



Fiona Dulbecco, MD



Jay Johnson, MD, FACC



Victor Ochoa, MD



Benjamin Potkin, MD, FACC,FSCAI



Neil Sawhney, MD



Bilal Shafi, MD



Raj Singh, MD



Anthony Sturzu, MD

WHEN A HEART ATTACK HAPPENS, EVERY MINUTE COUNTS

When it comes to treating someone who is having a heart attack, nothing is more important than fast access to expert care. Scientific studies have shown that heart attack recovery rates depend on rapid diagnosis and treatment to open a closed artery. When an emergency does arise, our cardiac team responds quickly and effectively. Dominican Hospital excels in response times, which are significantly **faster** than the national average, as the designated receiving center for heart attack in Santa Cruz county.



The Foundation's operating costs are covered by Dignity Health Dominican Hospital, which means 100 percent of your donations go directly towards the new Comprehensive Cardiac Operating Suite.

BUDGET

The Foundation is raising \$2 million for this critical facility. Dignity Health is providing \$5.7 million of the \$7.7 million total cost.

Philanthropic support is a key element to continue the high-quality, compassionate care that Dominican Hospital provides to our Santa Cruz County community. Our generous community creates such a profound impact on the health and well-being for years to come.

Healthcare is continuously evolving, but with the commitment of our community support for Dominican Hospital – and your confidence in our organization and ability to direct gifts wisely –top-quality medical care is accessible to all of us.

To get involved or for more information, please contact Beverly Grova, VP of Philanthropy, at 831.462.7712 or Beverly.Grova@DignityHealth.org. supportdominican.org



CONTACT US

Dominican Hospital Foundation 1555 Soquel Drive Santa Cruz, CA 95065

831.462.7712 supportdomincan.org

