



*With treatments “only found at Overlake,” Overlake attributes its sustained success to forward thinking and services tailored to the Eastside community.*

*By James McIntosh*

Overlake Medical Center is the preferred health care provider on the Eastside and maintains a hold on 65 percent of the health care market in Bellevue. Overlake attributes the hospital’s sustained success to its understanding of the unique needs of the local community.

“Eastiders are still overwhelmingly choosing Overlake because we are continually thinking of new and better ways to address their health care

needs,” said Overlake Executive Vice President and Chief Operating Officer David Schultz

Supporting this statement, Overlake has recently introduced a number of new medical services not found anywhere else locally and is helping lead clinical trials on the national stage. These are in addition to a new network of seven primary care clinics for adults and families stretching from Issaquah to Bellevue to Redmond and Kirkland.

“We think Eastside residents deserve world-class health care and that we can conduct critical research that will bring hope to patients in our community and around the world.”

### **Minimally Invasive Cardiac Surgery**

In February Overlake became the first hospital on the Eastside to perform an alternative procedure to invasive heart surgery that does

not require the patient's breastbone to be broken.

The procedure, called minimally invasive cardiac surgery, is primarily used to treat isolated mitral valve disease or aortic valve disease and is performed at Overlake by Dr. Robert Binford, a cardiothoracic surgeon.

“Minimally invasive cardiac surgery enables faster recovery, shorter hospital stays, better cosmetic results and increased patient satisfaction for those who qualify for the procedure,” said Dr. Binford.

“Standard heart surgery requires a minimum of three months for recovery, but the minimally invasive procedure recovery only takes about four weeks.”

Dr. Binford said the most exciting part about offering minimally invasive cardiac surgery at Overlake is seeing the happiness and gratitude it brings to his patients and their families.

## From Chile to Bellevue: International Cardiac Care

Although Overlake's primary focus is improving medical care for those living and working on the Eastside, the advanced level of cardiac care available at Overlake has recently attracted international attention.

In April 2013 Eduardo Engler traveled more than 6,000 miles from Osorno, Chile to Overlake to undergo an advanced treatment to cure his irregular heartbeat.

After endless pharmaceutical attempts to treat his heart condition in his home country, Engler finally sought out Dr. Derek Rodrigues, a cardiologist at Overlake, who had been practicing atrial fibrillation ablation since 2001.

During catheter ablation, a thin tube is guided through a blood vessel from the patient's leg into

their heart. A machine then sends surges of radiofrequency energy through the tube to destroy the tissue that is the source of the arrhythmia.

In 2005 Engler flew to Washington to meet with Dr. Rodrigues and undergo his first atrial fibrillation ablation procedure. His heart responded well to the treatment and his quality of life immediately improved.

“The last few years really were beautiful years,” Engler said.

Since the initial procedure he has been able to return to work on his ranch in Chile and once again do what he loves most, fly helicopters.

A number of medical centers practice atrial fibrillation ablation throughout the United States, including the Mayo Clinic in Minnesota, but Engler said he chose to have the procedure at Overlake because of the

highly experienced team and proven success rate.

“It was very humbling that somebody would travel that far because he likes the level of treatment we can provide for his condition,” said Dr. Rodrigues. “And because of that we were determined to help him any way we could.”

Although the procedure in 2005 was successful, Engler had some level of recurrence. With the significant medical advancements in the last eight years, Dr. Rodrigues recommended to Engler that he return to Overlake to undergo a second atrial fibrillation ablation procedure.

Engler underwent his second atrial fibrillation ablation procedure at Overlake on April 26, 2013, and according to doctors the procedure went very well.

“We feel very confident the second procedure has been able to provide a complete cure for

Eduardo,” said Dr. Rodrigues. “It should entirely eliminate the need for him to continue ongoing medical therapy.”

“It’s a new life for me, really,” Engler added.

Since 2001, Dr. Rodrigues alongside his partners Drs. Alan Heywood and Jeff Fowler have performed more than 1000 atrial fibrillation procedures and have been able to achieve a 95 percent success rate in patients with a paroxysmal pattern of atrial fibrillation.

### **For Severe Asthma Sufferers: Bronchial Thermoplasty**

Cardiac care isn’t the only department at Overlake enhancing and expanding its services. The Pulmonary Division at Overlake Medical Clinics has just taken a significant step to improve its level of asthma care.

Overlake is the only hospital in King County to offer bronchial thermoplasty for patients

suffering from persistent asthma.

According to the Washington State Department of Health more than half a million people in Washington have asthma and approximately 5,000 people are hospitalized every year.

Bronchial thermoplasty is a minimally invasive outpatient procedure in which a thin fiberoptic tube is passed through the mouth of the patient and into the airway. Using the tube doctors are able to deliver precisely controlled heat to the airway wall, which reduces any excess smooth muscle around the airway.

By reducing excess smooth muscle, the ability of the airway to constrict is diminished. This significantly decreases the likelihood of an asthma attack.

“This is a novel approach to the treatment of asthma that does not use medications to control

asthma,” said Dr. Amy Markezich, the associate medical director of the Pulmonary Clinic at Overlake. “The benefits of the treatment persist for years after the procedure, whereas in other asthma treatments the patients have to keep taking their medications to continue having a benefit.” The treatment is separated into three outpatient procedures that are three weeks apart, with each procedure treating a different part of the lungs.

Each of the three procedures takes about an hour and most patients can go home the same day.

“Patients 18 or older who have persistent asthma and who are still getting exacerbations despite using inhaled controller medications are candidates for bronchial thermoplasty,” said Dr. Markezich.

Bronchial thermoplasty has been shown to result in 32 percent fewer

severe asthma attacks, 84 percent fewer emergency room visits and 66 percent fewer lost days from work, school, and other activities due to asthma.

Overlake provides assistance with the insurance approval process for this procedure.

## Tomosynthesis/3D Mammography

Overlake is making a point to assemble a first-rate cancer treatment center on the Eastside.

In early 2013 Overlake announced it was one of the first health care providers in the United States to offer Selenia Dimensions’ 3D digital mammography.

“We think the Eastside deserves a world-class cancer treatment center,” said Dr. Steven Scallon, medical director of the Overlake Breast Health Center. “People shouldn’t have to travel to Seattle to get the care

they need and that’s why we are continually updating the technology we have available here in our breast health center.”

3D mammography, or digital tomosynthesis, is a new mammographic imaging technology that involves taking a series of low dose x-rays of the compressed breast at different angles.

“This new technology allows us to look at individual 1mm slices of the breast, which helps get rid of the problem of overlapping breast tissue,” said Dr. Scallon.

“Overlapping breast tissue is a problem with 2D mammography and can obscure breast cancers, which can lead to false positive screening mammograms. 3D mammography helps alleviate this problem.”

3D mammography is supplementary to standard mammograms and does not replace 2D mammography. The studies are performed as

combination 2D/3D studies and it only takes a few seconds longer to obtain each set of three dimensional images.

Overlake offers 3D mammograms to all women, but they are particularly helpful for women with dense breast tissue.

## Back Pain Made Better: Spine Surgery

Back pain affects nearly 85 percent of people at some point in their life.

Almost 20 percent of lower back pain originates from the SI joint, but is often misdiagnosed resulting in unnecessary back surgery.

To help address the needs of the endless number of patients with back pain who visit Overlake each year, Overlake became the first medical center on the Eastside to offer a new minimally invasive surgical option to treat lower back pain.

In the past, patients diagnosed with SI joint pain have either been treated with periodic injections and told to live with the pain or given the option of open surgery.

The open surgery approach can last several hours, requires a large incision, the removal of tissue from the joint and bone grafts from elsewhere on the body to fuse the joint. In addition, open surgery only has a 40 to 50 percent success rate in alleviating symptoms.

“The minimally invasive approach now available at Overlake means smaller incisions, less blood loss and faster recovery times,” said Dr. Abhineet Chowdhary, director of Overlake Neurosurgery.

During the minimally invasive surgery a small incision is made on the lower back and three titanium rods are inserted across the SI joint to stabilize and fuse the joint. The surgery lasts about one hour and

requires nominal recovery time.

The new surgery is available for patients who have lower back pain and who have subsequently received an SI joint injection and reported relief of the symptoms.

“We finally have a solution to a problem that has plagued us for years with SI joint pain patients getting periodic injections and just living with the pain,” said Dr. Chowdhary. “Now we can allow them to return to a healthy and productive life.”

## Clinical Trials For Leading-Edge Treatments

### *Stroke and Blood Clot Removal*

Dr. Chowdhary is also spearheading a clinical trial for a cutting edge new technology that helps remove blood clots from the brain.

The device being tested is called the Separator 3D and is used to remove blood clots from the large

vessels of the brain that cause serious medical conditions including acute stroke. The device does not damage the blood vessel containing the clot, which is a concern with current methods.

“The Separator 3D combines all the previous technologies into one to maximize clot retrieval and restoration of blood flow,” said Dr. Chowdhary.

Those who can participate in the trial must have experienced a stroke within the last eight hours and will be “invited” to participate in the trial once they have been evaluated.

“Patients will be offered all conventional therapies as well as the option to participate in the trial,” said Dr. Chowdhary. “The aim of the trial is to help patients not have a permanent stroke as well as compare the device versus the current standard of care.”

The trial is expected to last one year and five to

10 Overlake patients are expected to participate.

“Participating in this clinical trial allows Overlake to be a leader in medical excellence and on the forefront of providing world-class healthcare to our patients,” said Dr. Chowdhary.

Overlake was selected as one of only three clinical trial sites in the nation for the Separator 3D device.

### ***Bioresorbable Vascular Scaffolds for Coronary Artery Disease***

Another innovative technology currently being evaluated at Overlake, in partnership with the Hope Heart Institute, is an investigational device called the Absorb Bioresorbable Vascular Scaffold (BVS) for the treatment of coronary artery disease. The evaluation is through participation in the ABSORB III clinical trial sponsored by the healthcare company Abbott, comparing Absorb to a best-in-class medicated metallic heart stent.

Current therapies for coronary artery disease include medicated metallic heart stents, also called a drug eluting stents. These medicated metallic stents are permanent and cannot be removed from the blood vessel even once blood flow is restored to the heart.

Unlike a metallic stent that remains permanently in the body, the Absorb (BVS) being evaluated at Overlake is referred to as a scaffold to indicate that it is a temporary structure. Abbott's Absorb BVS is made of polylactide, a naturally dissolvable material that is commonly used in medical implants such as dissolving sutures

According to the Center for Disease Control, coronary artery disease is one of the leading causes of death in the United States. Patients suffering from the disease can experience chest pain and shortness of breath due to blockages in the vessels that supply blood to the heart. These blockages are caused by the buildup of fat and cholesterol inside the vessel.

The goal of the clinical trial is to evaluate the

potential benefits of Absorb in comparison to a medicated metallic heart stent. The clinical trial will enroll approximately 2,250 patients primarily in the United States.

Dr. James Leggett who is leading the clinical trial for Overlake anticipates about 20 Overlake patients with coronary artery disease will be treated with bioresorbable stents.

“We are very excited to be involved with this important study and it truly makes Overlake a national leader in the advancement of cardiac care,” says Dr. Leggett.

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With the introduction of new medical procedures and clinical trials already planned for the near future, leaders at Overlake Medical Center are confident the hospital will maintain its top market position on the Eastside and for good reason.

“We have the best doctors and staff in the

region. They are constantly thinking about how we can better serve our community and provide a truly unmatched patient experience,” said Overlake Executive Vice President and Chief Operating Officer David Schultz.

“With the team we have here at Overlake, I’m confident we will remain the preferred health care provider on the Eastside for many years to come.”