



LOS ANGELES COUNTY ANNUAL REPORT

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Medical Miracles: Modernizing the County's Healthcare System

Paul Rivera is one of the first three patients at Harbor UCLA's Medical Center to successfully undergo minimally invasive transcatheter aortic valve replacement therapy, known as TAVR.

Paul loves to dance with his wife. But before this life-saving surgery, he thought he might never be able to enjoy dancing with her again. Thanks to the surgery, Paul is feeling good, and expressed gratitude for such a procedure. "I'm glad that it's done and that people will get to know about it, because the doctors will be able to help other people."

Dr. Quang Bui, Director of the Structural Heart Disease Program, Cardiology Division is among a small number of highly-skilled cardiologists who perform this surgery. Dr. Bui consulted with Paul about his surgery.

"Before your heart was working twice as hard because it couldn't pump blood out of your diseased valve; but now that you've got a normal functioning valve there, your body is going to be working at a new baseline because blood flow will be returned to normal."

Dr. Bui accesses the aortic valve using a delivery device that enters through the leg or groin and runs all the way up to the aorta. A balloon dilation catheter inflates to put a stent in place for the replacement valve.

Dr. Bui gave details about the procedure. "The balloon is inflated. What you're left with is the stent that's been basically pushed up against the native aortic valve. You've got a functioning valve inside with three bovine leaflets, and you can see it opening and closing; it functions immediately."

TAVR is performed using only two-dimensional black and white imaging to manipulate the device. Statistics show more than 250,000 patients need transcatheter aortic valve replacement, and more than 50 percent will die within a couple of years if they don't get this life-saving surgery.

"The fact that we can do that with something so cutting edge, and provide that for an underserved population, who is just as sick as any other patient population here in the U.S., I think it's win for this institution and obviously for the patients they cater to," Dr. Bui said.

Harbor UCLA is the only hospital in the Southbay region, and one of only three centers in L.A. County to offer this procedure.