



Wynema Schwarz (center) at 80 years old had a calcified valve and was a candidate for a TAVR procedure in which the team inserts a catheter through the artery near the groin area. It contains a pliable valve that is opened and implanted into the damaged valve. "Age shouldn't keep you from living a better life with your family and grandchildren," said Mrs. Schwarz. Also pictured: Sreeksumar Subramanian, MD, assistant professor of surgery in the Division of Cardiothoracic Surgery (left) and Kapil Lotun, MD.

Until recently, management of congestive heart failure symptoms was the only treatment option for elderly high-risk patients who suffered from heart valve diseases or leaks around surgically replaced valves. Now, non-surgical catheter procedures are available for many of these patients whose conditions are considered too risky or not suitable for open-heart surgery.

In some valvular patients, the aging process causes calcium and scar tissue build up that leads to blockage of the aortic valve. In other cases, congenital heart conditions, can increase risk of

heart failure or stroke.

Open-heart surgery currently is the gold standard for treating such conditions, but in some cases, the patient's health is considered too risky for surviving open-heart surgery. In such cases, recently developed procedures are now available in which an interventional cardiologist inserts a catheter through a small incision in the groin area and feeds it through the arteries to the site of the diseased or leaking valve.

Who is eligible for this procedure? Patients who are high risk for open heart surgery: typically, a person who is

evaluated by two surgeons and whose condition is deemed too risky for open-heart surgery.

Why aren't these procedures offered to all patients needing valve replacement or repair? While the results are very good and appear to be comparable to open-heart surgery for these very high-risk patients, more data need to be gathered before these procedures can be recommended as the standard of care for patients who are candidates for heart-valve replacement. In the TAVR procedure, the valves used may not last for decades and presently are only indicated for elderly patients at very high risk of not surviving open-heart surgery. ♥

### About UAMC's Program

Under the direction of Dr. Lotun, the medical director of TAVR and the director of the Structural Heart Disease Program, and Dr. Robert Poston, the surgical director of TAVR, patients are evaluated for aortic valve disease in the dedicated Valve Clinic. In addition, the University of Arizona Section of Interventional Surgery offers the latest and newest treatment options for patients with coronary artery and structural heart diseases including valve diseases, atrial septal defects and patent foramen ovale, paravalvular leaks, alcohol septal ablation and other complex cardiac diseases.

Meet a few of the highly skilled doctors of The University of Arizona Medical Center; the leaders, the innovators, the surgeons, the researchers. These are our health care pioneers. Their passion to heal within an academic environment provides the science behind the cure, allowing our doctors to deliver advanced medical procedures while they train the next generation of physicians. This is academic medicine at work for you.

## THE HUMAN SIDE OF ACADEMIC MEDICINE.

Meet Dr. Kapil Lotun and Dr. Robert Poston, two of our highly skilled physicians who have teamed up to lead the delivery of some of the most advanced heart treatment options available today. With vision and dedication, our team of renowned cardiologists and cardiothoracic surgeons are able to deliver a treatment program that's most tailored to a patient's specific condition, no matter the severity of the problem. For some patients, this means traditional open heart bypass or valve surgery while others may be candidates for less invasive procedures using robotic or catheter-based techniques.

DEMAND ADVANCED CARE. YOUR HEART DESERVES IT.

Minimally invasive treatments of heart disease offer smaller or no surgical incisions, dramatically reduced down time after surgery and less time in the hospital. In fact, a brand new, non-surgical catheter-based treatment called transcatheter aortic valve replacement (TAVR) is now available. We're the only program in Southern Arizona who can offer it to patients with heart valve diseases who are not candidates for open heart surgery.

By being part of and leading this exceptional heart team, these experts are an inspirational asset to our outstanding academic medicine environment.



Robert S. Poston, MD  
Surgery; Chief, Division of  
Cardiothoracic Surgery

Kapil Lotun, MD  
Cardiology and Vascular Surgery



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