

## **First commercial transcatheter transseptal mitral valve-in-valve replacement at Baylor Dallas**

**Dallas, Texas, July 2017** -- Herman Veselka is an 82-year-old retired engineer who is no stranger to a hospital. In fact, when he arrived at Baylor Jack and Jane Hamilton Heart and Vascular Hospital's Center for Valve Disorders in July, he had already experienced a couple of cardiovascular procedures, including open heart surgery, at other hospitals. He watched from a front row seat how treatment and care evolved for cardiac patients over the course of twenty-five years.

A resident of Arlington, Texas, Veselka's journey in cardiovascular care began in 1993 when he learned he had mitral valve disease. After researching facilities for necessary treatment for his condition, Veselka had his first open heart surgery to repair his mitral valve by a Houston surgical team. Veselka spent months recovering, but ultimately had a successful outcome. Ten years later, Veselka learned he needed his mitral valve replaced. He then sought the cardiac team at a research-based facility where he received his second open heart surgery in 2005. Veselka spent 30 days in the hospital that year. The 2005 surgery led to a trying recovery and mental exhaustion for him, as well as, his family.

Twelve years later, Veselka once again started experiencing symptoms, such as shortness of breath after physical exertion. After visiting his cardiologist, she suggested looking into Baylor Scott & White Health due to the history of innovation, a top priority of Veselka in choosing his care facility.

Veselka was evaluated in the Center for Valve Disorders, a part of Baylor Heart and Vascular Services at Dallas. After a day of comprehensive testing, Veselka felt like the top priority of his medical team. "They spent one-on-one time with each [patient] that day," said Veselka. "You would have thought I was the only patient they had." A multidisciplinary team of interventional cardiologists, cardiac surgeons, and imaging specialists reviewed Veselka's case and recommended a transcatheter transseptal mitral valve-in-valve replacement.

Due to his two prior open heart surgeries and his defibrillator, Veselka was categorized as a high-risk patient in accordance to Society for Thoracic Surgeons standards. "This new approach was designed for high-risk mitral valve patients," said Robert Stoler, MD, FACC, FSCAI, Co-Medical Director of Cardiology and Medical Director of Catheterization Laboratory. "These patients now have a FDA-approved option that is minimally-invasive, decreasing their risk for complications and usually allowing for a quicker recovery."

Veselka had the first commercial transcatheter transseptal mitral valve-in-valve replacement at Baylor Hamilton Heart and Vascular Hospital on July 18, 2017. After the catheter was inserted, an interventional cardiologist on the medical staff at Baylor Hamilton Heart and Vascular Hospital with a history in the transseptal approach made the insertion into the left atrium to allow access to the mitral valve. From there, a team of interventional cardiologists and cardiac surgeons worked together to insert, position, and deploy the valve into the failing valve. An imaging specialist also conducted a TEE intraoperatively. "It truly took an army," said Veselka.

The next morning, Veselka was on his feet walking the hallways and felt as good as new. Before his procedure, Veselka had over 40 percent leakage in his mitral valve, a condition known as mitral regurgitation. After the procedure, there was no sign of leakage.

Veselka was discharged less than 36 hours after his procedure. He looks forward to enjoying his membership with a local golf club and celebrating his 60<sup>th</sup> year of marriage with his wife.

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Mitral regurgitation occurs when the mitral flaps fail to close properly, resulting in blood leakage from the left ventricle backwards into the left atrium. Leakage can increase blood pressure in the left atrium, enlarging the heart. Mitral regurgitation can also lead to increased pressure in the veins leading from the lungs to the heart while severe mitral regurgitation cases may lead to congestion, or fluid build-up, in the lungs.

The most common cause of mitral regurgitation is myxomatous disease, having abnormally stretchy valve flaps. Other causes include coronary artery disease, cardiomyopathy, rheumatic heart disease, and infective endocarditis. Patients may not show symptoms for years. When symptoms develop, most commonly patients experience shortness of breath, fatigue, and irregular heartbeat caused by atrial fibrillation. For patients who present with these symptoms, diagnostic testing may include electrocardiogram (EKG), chest x-ray, echocardiography (ECHO), and cardiac magnetic resonance imaging (MRI).