Angina: Chest pain that occurs when an area of the heart muscle does not receive enough oxygen-rich blood.

Aorta: The largest artery in the body, it receives blood from the heart that has been oxygenated in the lungs, and delivers this blood to the body and brain.

Aortic Stenosis: A progressive disease that affects the aortic valve of the heart.

Aortic valve: The heart valve that regulates the one-way flow of blood from the left ventricle to the aorta.

Arteries: The blood vessels that carry oxygen-rich blood away from the heart and lungs.

Atria: The two upper chambers of the heart that receive blood returning from the body.

Balloon valvuloplasty: A procedure performed to open a narrowed heart valve using a thin tube called a catheter with a small balloon at its tip. The catheter is inserted through a small incision in the groin and then threaded up to the opening of the narrowed heart valve. The balloon is then inflated to stretch the valve open and relieve valve obstruction.

Bi-leaflet: A valve that has two leaflets that regulate the flow of blood. A normal aortic valve has three leaflets.

Calcification: A disease state in which calcium from the blood collects in the body tissues. When this occurs on the leaflets of the heart’s valves, it may cause them to harden and reduce their ability to open and close properly.

Cardiopulmonary bypass: Bypass of the heart and lungs. During this technique, which is often used during heart surgery, a heart-lung machine temporarily takes over the function of the heart and lungs.

Catheterization: A procedure in which a thin tube called a catheter is inserted into the body.

Congestive heart failure: A condition in which the heart cannot pump enough blood to the body’s other organs.

Coronary artery disease: A narrowing of the small blood vessels that supply blood and oxygen to the heart.

Echocardiography: A diagnostic test in which ultrasonic waves are used to produce images of the position and motion of the heart and its internal structures.

Ejection fraction: The percentage of blood pumped out of the right and left ventricles with each heart beat.

Endocarditis: Inflammation of the lining of the heart and valve leaflets.

Femoral artery: A large artery in the thigh that connects to the aorta.

Inoperable: Unsuitable for a surgical procedure.

Mitral valve: The only bi-leaflet valve in the heart, it regulates the flow of blood from the left ventricle to the left atrium.

Myocardial infarction: Otherwise known as a heart attack, this occurs when blood vessels that supply blood to the heart are blocked, preventing enough oxygen from getting to the heart. The heart muscle dies or becomes permanently damaged.

Myocardium: The fibrous muscle tissue of the heart.

Palpitations: Rapid or irregular heartbeat.

Pericardial tissue: The tough, protective sac surrounding the heart.

Pulmonary valve: The valve that regulates the flow of blood from the pulmonary artery to the right ventricle.

Regurgitation: The backwards flow of blood (in the opposite direction than it would normally flow).

Stenosis: The narrowing of an opening.
• Syncopy: A loss of consciousness, or fainting, caused by a temporary lack of oxygen to the brain.
• Transcatheter aortic valve replacement or TAVR (also referred to as TAVI or transcatheter aortic valve implantation): A treatment option for inoperable and high-risk patients that allows doctors to replace a heart valve using a catheter inserted into a small cut in the thigh or between the ribs – avoiding the need for open-heart surgery.
• Transesophageal Echocardiogram (TEE): A type of echo test that provides a close look at the heart’s valves and chambers, without interference from the ribs or lungs. During a TEE, an ultrasound transducer, positioned on an endoscope, is guided down a patient’s throat into the esophagus.
• Tricuspid valve: The heart valve that regulates the flow of blood from the right ventricle to the right atrium.
• Tri-leaflet: A valve with three leaflets. A normal aortic valve is a tri-leaflet valve.
• Valve leaflets: Flaps of tissue that open and close to help regulate the flow of blood in one direction through the valve.
• Veins: The blood vessels that return de-oxygenated blood to the heart and lungs.
• Ventricles: The large, lower blood-pumping chambers of the heart.