



Covenant Structural Heart Disease Program Guide

The Structural Heart Disease Program

3 alternative treatments for inoperable or high-risk heart patients

Do you or a loved one have Structural Heart Disease? [Research](#) shows that an estimated two million people in the U.S. are currently living with this complex heart condition. While most individuals can get surgery to help improve their heart condition, some patients may be considered inoperable or high-risk. As a result, they find themselves living in constant fear and exhaustion because they've been told that there's nothing else they can do.

But now there's new hope for inoperable or high-risk heart patients. With the first and most comprehensive Structural Heart Disease Program in the Great Lakes Bay Region, Covenant Center for the Heart is leading with new, emerging options in minimally invasive treatments. So if you or a loved one have been told that you're inoperable or high-risk, don't lose heart. There are alternative treatment options available to help improve your heart condition and even more, your overall quality of life.

The Structural Heart Program offers three non-invasive procedures for inoperable or high-risk heart patients. This guide will walk you through each alternative treatment, so you can talk with your doctor to determine if an option may be right for you. It's easy to get lost in the medical terminology. We know you're not a multi-syllable diagnosis with a catchy acronym. You're a human being with things to do and a life to live. But knowing the lingo will ultimately help you find the best treatment options.

What is Structural Heart Disease?

Structural Heart Disease refers to a condition in which a patient has a cardiac defect or abnormality, which compromises the integrity of the heart's valves, vessels or chambers. It is most commonly diagnosed at birth (also known as Congenital Heart Disease) or later in life.

CAUSES OF STRUCTURAL HEART DISEASE

Congenital Heart Disease (in children)

- Genetic/chromosome disorder (Down syndrome)
- Medications used during pregnancy
- Alcohol or drug use during pregnancy
- Rubella, a viral infection during the first trimester of pregnancy

Structural Heart Disease (in adults)

- High blood pressure
- High cholesterol
- Smoking
- Diabetes
- Obesity
- Family history of heart disease

If you or a loved one have a family history of any of these symptoms, you may be at risk for Structural Heart Disease. Talk to your doctor about your risks and how you can prevent it. And if you are currently living with a complex heart disease, ask your doctor if any of the following treatment options can help improve your quality of life.

Transcatheter aortic valve replacement (TAVR)

Aortic stenosis is one of the most common valve diseases. This refers to when the aortic valve opening begins to narrow, restricting the blood flow from the left ventricle to the aorta.

Transcatheter aortic valve replacement (TAVR) is a newly FDA-approved alternative for individuals living with aortic stenosis who are considered a high-risk candidate for valve replacement surgery. One-third of individuals living with aortic stenosis are considered inoperable for surgery. However, this minimally invasive procedure does not require open-heart surgery, instead it uses a small opening to operate on the narrowing valve.

Instead of replacing the narrowing valve through surgery, the TAVR repairs the valve by wedging a replacement valve in place through a minimally invasive procedure. The new valve will slowly expand and push the old valve out of the way, which will allow more room for regulated blood flow. Because this procedure is minimally invasive, patients who undergo TAVR will most likely have a faster recovery.

MitraClip

Individuals who have mitral regurgitation, which is caused by a leaky heart valve, need to undergo mitral valve regurgitation surgery. However, patients who are considered inoperable or high-risk may not qualify for surgery. The MitraClip is a non-invasive treatment option that can reduce mitral regurgitation, improve patient symptoms and reduce hospitalization for heart failure.

For patients with severe mitral regurgitation, the MitraClip device is implanted using a catheter. It is inserted through the patient's skin and guided to the area of the heart that needs to be repaired. Whereas the mitral valve leaflets are sutured together during surgery, the MitraClip is put into place and clips together the mitral valve leaflets. Once the clip or clips are securely in place, the catheter is removed.

This procedure can repair the mitral valve without heart surgery, giving hope to those who are inoperable. The MitraClip can improve valve closure and reduce regurgitation, and has also been shown to reduce hospital visits for heart failure by **73 percent**. This allows for the heart to continue pumping blood efficiently, improving a patient's overall quality of life.

Watchman

The Watchman Left Atrial Appendage Closure Device is an FDA-approved alternative for individuals living with non-valvular atrial fibrillation (A-fib). A-fib is an irregular and often rapid heart rate that commonly causes poor blood flow. Over time, this can cause blood clotting and increase the risk for stroke. Most individuals with A-fib take warfarin therapy regularly as a blood thinner to prevent strokes. However, some individuals may be too high-risk for warfarin therapy and need to seek an alternative treatment.

To lower the risk for stroke, the Watchman device is permanently implanted to close the left atrial appendage (LAA), which is the main source for a large majority of stroke-caused blood clots. The Watchman is specifically designed to conform to the anatomy of the LAA and is inserted via a catheter. The procedure will only take about an hour to complete and will require patients to stay in the hospital 1-2 days after for recovery.

The Watchman procedure has proven to decrease a patient's stroke risk by as much as **77 percent** in clinical trials. So for individuals with A-fib who are looking for an alternative to long-term warfarin therapy, Watchman could be the solution to a longer and healthier life.

New hope for inoperable or high-risk patients.

When you have a complex heart condition, it's easy to feel like you're out of options. If you or a loved one are considered inoperable for surgery, don't lose heart. Now there's new hope with the Structural Heart Disease Program at [Covenant Center for the Heart](#). Our program offers life-saving, non-invasive treatment options for inoperable or high-risk heart patients. In addition to the three alternative options discussed, our extraordinary team also provides other services for our heart patients including:

- **Percutaneous Aortic and Mitral Valvuloplasty** – This procedure uses a balloon to expand abnormally narrow heart valves.
- **Patent Foramen Ovale (PFO) procedure** – This is a catheter-based closure of atrial and ventricular wall defects (commonly known as a “hole” in the heart).
- **Atrial Septal Defect (ASD) procedure** – A catheter is threaded through a blood vessel in the body up to the heart. A closure device is threaded through the catheter and placed into the ASD (an abnormal “hole” in the wall that separates the top two chambers of the heart).

Our Structural Heart Disease Program consists of an extraordinary, multidisciplinary team of experts who work together to develop a customized treatment plan for every individual. This includes cardiologists, interventionalists, a cardiac surgeon, anesthesiologists, nurses and technicians (cath and electrophysiology lab, ECHO and surgical). Our new, emerging minimally invasive treatment options might be just right for you, giving you the improved quality of life you didn't know was possible. Contact Covenant Structural Heart Coordinator Deb Best, MSN, RN at 989.583.7171 to learn more about the Structural Heart Disease Program at Covenant Center for the Heart.