

What is a TAVR?

This minimally invasive surgical procedure repairs the valve without removing the old, damaged valve. Instead, it wedges a replacement valve into the aortic valve's place. The surgery may be called a transcatheter aortic valve replacement (TAVR).

Valve-within-valve — How does it work?

Somewhat similar to a stent placed in an artery, the TAVR approach delivers a fully collapsible replacement valve to the valve site through a catheter.

Once the new valve is expanded, it pushes the old valve leaflets out of the way and the tissue in the replacement valve takes over the job of regulating blood flow.

[Watch an animation of TAVR.](#)

How is TAVR or TAVI different from the standard valve replacement?

This procedure is fairly new and is FDA approved for people with symptomatic [aortic stenosis](#) who are considered a high risk patient for standard valve replacement surgery. The differences in the two procedures are significant.



What is involved in a TAVR procedure?

Usually valve replacement requires an open heart procedure with a "sternotomy," in which the chest is surgically separated (open) for the procedure. The TAVR procedures can be done through very small openings that leave all the chest bones in place.

[Watch an animation of TAVR](#)

A TAVR procedure is not without risks, but it provides beneficial treatment options to people who may not have been candidates for them a few years

ago while also providing the added bonus of a faster recovery in most cases. A patient's experience with a TAVR procedure may be comparable to a [balloon treatment](#) or even an [angiogram](#) in terms of down time and recovery, and will likely require a shorter hospital stay (average 3-5 days).

The TAVR procedure is performed using one of several different approaches, allowing the interventional cardiologist or surgeon to choose which one provides the best and safest way to access the valve:

- Entering through the femoral artery (large artery in the groin), called the transfemoral approach, which does not require a surgical incision in the chest
or
- Using a minimally invasive surgical approach with a small incision in the chest and entering through a large artery in the chest or through the tip of the left ventricle (the apex), which is known as the transapical approach.

Who is a good candidate for this type of valve surgery?

At this time the procedure is reserved for those people for whom an open heart procedure is too risky. For that reason, most people who have this procedure are in their 70s or 80 and often have other medical conditions that make them a better candidate for this type of surgery.

Although relatively new, TAVI can be an effective option to improve quality of life in patients who otherwise have limited choices for repair of their aortic valve.

Understanding your heart valve problem: Which solution may be right for you?

Walk through a step-by-step [interactive guide](#) explaining your valve issue and treatment options with helpful videos, text summaries and links along the way.

