Transcatheter Aortic Valve Replacement (TAVR)

This handout explains what a transcatheter aortic valve replacement (TAVR) is and what to expect if you have one.

What is a TAVR?
TAVR is a procedure to place a new valve, inside the aortic valve in your heart without open heart surgery.

Who can have a TAVR?
TAVR is for patients who have a narrow opening in their aortic valve (aortic stenosis). The valve is narrowed due to calcium build-up. When this happens, the valve does not open and close well. This makes the heart work harder and in time decrease its function.

To have a TAVR you must:
- Have severe build-up of calcium on your valve.
- Have a valve size that is not too big or too small.
- Be able to take medicine to thin your blood after the procedure.

How do I know if I can have a TAVR?
To find out if a TAVR is the best option for you if you have a narrow aortic valve there are a few steps.

You meet with a heart surgeon and a heart doctor called an interventional cardiologist. They will talk with you about your options.

You have tests to help us learn more about you. These tests include:
- **Cardiac catheterization.** This test helps your doctor get more details about how your heart is working. You get medicines to help you relax and go to sleep for the test. If a blockage is found, a stent may be placed.
- **Pulmonary function testing.** This is a test that measures how well your lungs work.
- **Cat scan (CT) angiogram of your chest, abdomen and pelvis.** Your doctor may wish to have this test done with or without IV contrast (dye). This test is done to:
  - Look at the size and shape of your blood vessels.
  - Look for any blockage in the large blood vessels from your chest to your legs.
  - Get precise size of your aortic valve.

The Dentist
An infection in your mouth could lead to infection of your new valve. If you have infected, broken, or damaged teeth you need approval from your dentist that your mouth is free from infection and it is ok to have a TAVR.

Once we have the information we need, we discuss it at our weekly team meeting. We decide what we think would be best for you. The nurse coordinator will call you with this plan and schedule any other visits that you may need.

The Day of the Procedure
On the day of your TAVR, you will take the F elevators to the third floor and go to the Cardiac Cath Lab (F6/3). Once there, you will meet your nurse, doctor and other staff. They will answer your questions and make sure you are comfortable.
During the Procedure
1. We will watch you closely. You will have:
   - Patches placed on your chest to show your heart rhythm.
   - A blood pressure cuff on your arm.
   - A plastic clip on your finger to check your heartbeat and oxygen levels.
2. You will get medicine put you to sleep during the procedure.
3. Once you are sleepy, your doctor puts small tubes in multiple arteries. One tube will go up to your heart.
4. A temporary pacemaker wire is placed to help your heart beat correctly during the procedure.
5. A balloon is inflated in your narrow valve to open it. Then the new valve, is enlarged inside your current valve.
6. Your doctor checks to make sure the new valve works.
7. The tubes are taken out and the puncture site (where the tube went in) is closed.

After Your Procedure
You will spend the night at the hospital. We will watch you closely and help control any pain you may have. You will have an IV and heart monitor until you go home. You can go for a walk as soon as your nurse tells you the puncture site is stable.

A team member from cardiac rehab will come see you and help you get set up with rehab close to home. This starts 2-3 weeks after your valve is replaced.

Healthy Eating After a TAVR
Eat a low salt, heart healthy diet.

Going Home
Before you leave the hospital, you learn how to care for yourself when you get home. A family member or friend must drive you home and stay with you for the first day or two. It may help to have them with you the day you go home so they can hear the instructions. You will get prescriptions for medicines. Please bring your insurance card if you plan to fill your prescriptions at the UW Hospital Pharmacy.

Our nurse case manager will help to set you up with other health care needs, such as home therapy or a rehab facility (if needed).

Follow-Up Visits
If you have staples, you will see your primary care provider 10-14 days after the procedure to have them removed.

You will need to have a check-up with the heart doctor both 30 days and one year after your TAVR.

Always tell all your doctors including dentists and eye doctors that you have a new heart valve before any future procedures. If you ever need a MRI (magnetic resonance imaging) test, always tell the doctor or tech that you have a new heart valve. The valve could get damaged if the doctor does not know about it.