This handout explains what to expect after your transcatheter aortic valve replacement (TAVR) and how to care for yourself at home. It includes fluid management, pain management, incision care, exercising safely, emotional issues, and more.

Plan Ahead for Your Return Home

A successful TAVR means that you return home to live a better, longer life. Planning ahead is the most important thing you and your family can do to help make your TAVR a success. Start planning for your return home as soon as you know you will be having TAVR.

- You will need help when you first go home. We suggest that you arrange to have someone stay with you for 1 week after you return home. Plan ahead so you are sure you have the help you need at home.

- It is hard to know how much help you will need or how long you will need it. Coping with aortic stenosis may have affected your overall health. You may need 1 to 2 months to fully recover after a successful TAVR.

- If you are not sure you will have the help and support you need at home, you may need home health care or even a skilled nursing or rehabilitation facility after TAVR. Please ask to talk with one of our social workers for help.

Care Timeline

The First 30 Days after TAVR

The UWMC TAVR team will manage your care for the first 30 days after your surgery. After you go home, our team will monitor you closely to make sure your recovery is going well so that you do not need to be readmitted to the hospital.
• **In the first few days after discharge:** A cardiac surgery nurse will call you to follow up on your symptoms, medicines, and well-being.

• **2 weeks after discharge:** You will have a follow-up visit with your cardiac surgeon.

• **30 days after TAVR:** You will have a follow-up visit with a cardiac surgery nurse practitioner or physician’s assistant. At this visit, you will have an echocardiogram (ultrasound of the heart) to check how well your valve is working. You will also do a walk test and fill out a symptom/quality of life questionnaire.

**6 Weeks after TAVR**

Usually 6 weeks after TAVR, our team will transfer your care back to your primary health care provider and primary cardiologist. When this occurs, follow up with your primary care provider and primary cardiologist.

Keep in mind that you may need to see your usual local health care providers sooner than 6 weeks.

**Every Year after TAVR**

Once a year, you will be scheduled with your UWMC TAVR Team (cardiologist, cardiac surgeon, and nurse practitioner) for a follow-up visit, echocardiogram, a walk test, and a symptom/quality of life questionnaire.

**Research Study Participants**

If you are part of a research study, you may have follow-up appointments more often.

**Aortic Stenosis and Congestive Heart Failure**

People with aortic stenosis often have *congestive heart failure*, which is when your heart does not pump blood as well as it should. This occurs because the heart muscle has to work hard to pump blood through the narrow aortic valve, which makes the muscle thick and stiff.

Some symptoms of congestive heart failure are:

- Ankle and leg swelling
- Shortness of breath
- Fatigue

After TAVR, these changes in your heart muscle will take time to resolve. Your medicines may be changed to help ease symptoms.

**Your Fluid Balance**

Congestive heart failure can cause you to have too much fluid in your body after TAVR. We manage this fluid buildup with medicines called *diuretics* (water pills).
Weight gain is one sign of having too much fluid buildup in your body. At home, you will weigh yourself every day and keep a record of your weight. You received a handout called “Heart Failure Daily Weight Log” to record your weight and vital signs before you left the hospital, and it is also attached to this handout. Please bring this log to your follow-up visits.

If you gain more than 2 pounds over what you weighed when you went home from the hospital, or if you have symptoms of congestive heart failure (see symptoms on page 2 and below), call 206-598-6190 and ask for the Cardiac Surgery Nurse or Nurse Practitioner on call to be paged.

**Symptoms of Congestive Heart Failure and What to Do**

<table>
<thead>
<tr>
<th>OK</th>
<th>I am OK if I can do my normal activities without a problem:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td> No shortness of breath</td>
</tr>
<tr>
<td></td>
<td> Weight is stable</td>
</tr>
<tr>
<td></td>
<td> No new swelling</td>
</tr>
<tr>
<td></td>
<td> Normal appetite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Warning</th>
<th>I need to call my health care provider if my symptoms are getting worse:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td> Gained 3 pounds in 1 day or 5 pounds in 2 days</td>
</tr>
<tr>
<td></td>
<td> New or increased swelling in my legs or ankles</td>
</tr>
<tr>
<td></td>
<td> Harder time breathing, new cough, or I need to use more pillows to breathe while sleeping</td>
</tr>
<tr>
<td></td>
<td> Nausea that will not go away, or I cannot eat</td>
</tr>
<tr>
<td></td>
<td> Fatigue that is getting worse</td>
</tr>
<tr>
<td></td>
<td> Increased heart rate (palpitations)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergency!</th>
<th>I need to call 9-1-1- right away if my symptoms are very bad or get worse quickly:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td> Chest pain that does not go away</td>
</tr>
<tr>
<td></td>
<td> Severe dizzy spells or have fainted</td>
</tr>
<tr>
<td></td>
<td> Severe or sudden shortness of breath</td>
</tr>
<tr>
<td></td>
<td> New confusion or I cannot think clearly</td>
</tr>
</tbody>
</table>
Even though you may have too much fluid in your body, you still must stay hydrated. The right amount of liquid to have each day will vary, but most people need to drink about 1 to 2 liters of liquid a day.

If you are retaining more fluid or having more symptoms, you may be placed on a fluid-restricted diet. We will review this with you in follow-up phone calls and office visits.

**Managing Your Pain and Changes in Sensations**

You can expect to have some aches and pains after TAVR. These are part of the normal healing process and may last up to a month. You may have pain in your back, shoulders, neck, and chest.

There may also be changes in how your body feels heat and cold, how your body regulates your temperature, and how things taste. These symptoms will go away over time.

You may leave the hospital with a prescription for pain medicine. If you are sore or uncomfortable, please take this medicine as directed. If you do not take your pain medicine, you may not be as active as you should be.

If your pain medicine is not working well, call 206-598-6190 and ask for the Cardiac Surgery Nurse or Nurse Practitioner on call to be paged.

**Showering and Bathing**

- You may shower when you get home unless your doctor tells you not to. When you shower:
  - Gently wash your incisions with mild, unscented soap and water.
  - Pat your incisions dry (do not rub them).
- You may take a bath after your incisions heal fully, about 4 weeks after your surgery. Do not soak your incisions for longer than 5 minutes until all the scabs have fallen off and your incisions are completely closed. This will help prevent infection.
- **Do not** take very hot showers or baths or soak in hot tubs. Hot water may lower your blood pressure and make you weak or dizzy. This could cause you to faint. (Please note that fainting may also occur from the medicines you are taking.)

**Incision Care**

- Call 206-598-6190 and ask to speak with the Cardiac Surgery Nurse Practitioner on call **right away** if you have any of these signs of infection:
  - Redness around the incision
  - New drainage
- Warmth or heat at the incision
- Fever of 101ºF (38.5ºC) or higher

- **If your incisions are still draining** when you leave the hospital, your nurse will give you instructions and supplies to care for them at home.

- **If your incisions are not draining**, it is best to leave them open to the air. If your clothing rubs or irritates them, you can cover the area with dry gauze. Remove the gauze at night.

- Do not put any medicine or lotion on your incisions until they are completely healed and the scabs have fallen off, unless your health care team has told you to.

### Leg Swelling

Some people have a lot of swelling in their legs after TAVR surgery. If you do, we may recommend wearing antiembolic hose. These are supportive stockings that lessen swelling and improve blood flow. Wearing them will help keep blood clots from forming in your legs.

Wear the stockings for 3 weeks after your surgery when you are out of bed. Take them off at night. After 3 weeks, keep wearing them only if you still have swelling in your legs. If you get new or increased swelling, see “Warning” section on page 3.

### Activities

After you get home, you can expect to slowly return to a normal lifestyle. But, be careful not to do things that make your heart work too hard.

How active you are and what type of activities you can do after you leave the hospital will depend on:

- Your condition before surgery
- The type of surgery you had
- How your recovery is going

As soon as you wish, you may:

- Shower, shave, and wash your hair.
- Walk on level ground at an easy pace. Remember to slow down when you walk up hills.
- Walk up and down stairs at a normal pace – going up takes more energy. Slow down or stop when you become short of breath.
- Use a stationary bicycle.
- Ride in a car, go out for meals, or visit friends.
- Prepare meals.
- Wash dishes and clothes, following lifting restrictions under “Precautions” below.
- Do light housekeeping, such as dusting. See “Precautions” below.
- Resume sexual activity (see pages 9 and 10).

**Precautions**

- **For 2 weeks after TAVR, do not:**
  - Lift, push, or pull anything heavier than 10 pounds, including pets, groceries, children, garbage, etc. (A gallon of water weighs 8 pounds.)
  - Garden, including lawn mowing and raking.
  - Excessively bear down or strain when having a bowel movement.
  - Drive.

- **For 30 days after TAVR (until you are seen at your 30-day follow-up visit), do not:**
  - Run, jog, swim, or bike.
  - Play sports like golf, tennis, bowling, or softball.

- **For transapical TAVR patients:**
  - Do not reach your arms behind your back or above shoulder level for 2 weeks. This will keep your skin and muscle from stretching, and will help your incision heal faster.

**Driving**

- Do not drive for 2 to 4 weeks after TAVR.

- Your cardiac surgeon will check your progress at your 2-week follow-up visit and tell you if you can resume driving. If your surgeon feels you are not yet ready to drive, your readiness to drive may be reviewed again at your 30-day follow-up visit.

- Some people have other medical reasons to restrict driving. If this is true for you, your primary doctor(s) may need to make the decision about when you can drive.

**Exercise Safely**

Daily exercise is vital to your healing. Regular exercise may help strengthen your heart muscle and allow it to pump blood better. Exercise also improves overall muscle tone and blood flow in your body, helps with
weight loss or maintaining your weight, and may create a general sense of well-being.

When you exercise:

- If your doctor or physical therapist recommends that you use an assistive device such as a cane or walker, **be sure to use the right device needed to keep you safe and prevent falls.** It is important to stay active, but staying safe is more important than walking on your own without a cane or walker.

- Take your pulse to see how hard your heart is working. **Do not let your pulse get higher than 20 to 30 beats per minute over your resting heart rate.** See “How to Take Your Pulse” below.

- Stretch your muscles before and after exercising. This will help you get the most from your exercise and will help prevent injuries.

- Wait 1 hour after eating before you exercise. This includes walking.

- When you are walking long distances, stay on level ground. Going up hills and stairs is OK if you go slowly and keep your heart rate within your safe guidelines.

- Wear comfortable, flat shoes and loose clothing. Any clothes that restrict your movements may affect your breathing.

- Avoid being outside on very hot or very cold days during your recovery. Very high and very low temperatures stress your heart. In the winter, walk in the afternoon or during the warmest part of the day. During the summer, walk in the morning or during the coolest part of the day.

### How to Take Your Pulse

Your best guide to how hard your heart is working is your pulse (also called your heart rate). When you feel your pulse, you are actually feeling your heart pushing blood through your arteries. To take your pulse:

- Use your fingers (**not** your thumb, which has a pulse of its own) to find your pulse on the inner part of your other wrist, just below your thumb. If you cannot find your wrist pulse, gently find the pulse in your neck. (Do not press hard or you could reduce blood flow to your head, making you dizzy or faint.)

- Start with 0, and count your pulse for 1 minute (or count your pulse for 15 seconds and multiply that number by 4).

Check your pulse:

- When you are at rest
- During exercise
- At the end of exercise
• If you have symptoms such as hard or thumping heartbeats, 
  *palpitations* (rapid, fluttering heartbeats), dizziness, or shortness of 
  breath that does not go away when you rest

**Slow-Down Signals**
Your body will tell you if the exercise you are doing is too hard for you. 
Slow down or stop what you are doing, write down what happened, and 
talk with your nurse or doctor if:

• Your heart rate or pulse is more than 20 to 30 beats above your resting 
  heart rate.

• You cannot talk while exercising. Slow down your activity until you 
  have control of your breathing and can keep up a conversation without 
  being breathless.

• Your heart rate or pulse stays high for 10 minutes after you stop 
  exercising.

• You cannot catch your breath for longer than 10 minutes after you stop 
  exercising.

• You are tired for up to 24 hours after exercising.

• You have pain in your joints, shins, or heels.

• You have pain or cramping in your calf muscles.

**When to Stop Exercising**
Stop exercising and talk with your doctor before you start your exercise 
program again if you:

• Have an abnormal heart rhythm, such as:
  – An irregular pulse or palpitations
  – Pulse suddenly gets very slow
  – A sudden burst of rapid heartbeats

• Have new pain, pain that lasts a long time, or pressure in your chest, 
  arms, or throat

• Are dizzy, confused, or lightheaded

• Lose control of your muscles or faint

• Have cold sweats or become pale

• Feel sick to your stomach or are vomiting

Do not exercise if you have:
• A bad cold, flu, or fever
• Extreme tiredness

**Warm-up Exercises**

Warm-up exercises help your body get ready for activity. Do your warm-up exercises twice each day – once in the morning and once in the afternoon. Do them slowly and steadily, and keep breathing slowly (do not hold your breath).

Warm-up exercises include:

• Marching in place
• Leg stretches (if you learned these in physical therapy after TAVR)

Begin by doing each warm-up exercise 5 times. Each time you do an exercise is called a **repetition**. Over time, you can increase the number of repetitions, but do not do more than 20 repetitions at a time.

**Do not** add more repetitions if you have any of the symptoms listed in the “Slow-Down Signals” section on page 8 and “Warning Signs” on page 12.

**Your Walking Program**

How long and how far you walk will depend on how well you are handling the exercise. Remember to use your pulse rate as your guide to tell you how hard your heart is working.

As you get stronger, you will begin to walk a little farther and a little faster. At first, it is best to increase the distance you walk before increasing how fast you walk.

**Resuming Sexual Activity**

It is normal to have some concerns about returning to sexual activity after heart surgery. The best way to deal with your concerns is to talk openly with your partner.

Ask your doctor or nurse any questions you may have. You do not need to be embarrassed. This is a common area of concern.

There is no reason to avoid sexual activity. Increased heart rate and rapid breathing are normal during arousal. During orgasm, the heart rate may increase about the same as briskly climbing 2 flights of stairs.

Sexual intimacy can take many forms, and it can provide important physical and emotional satisfaction. Touching, holding, and caressing without intercourse are ways to share intimacy during the early weeks of recovery if you are afraid or still feel very tired. As your daily activities, exercise, and endurance increase, you can judge for yourself when you are ready to return to full sexual activity.
Here are some tips for resuming sexual activity:

- Resume sexual activity when you are comfortable and ready to do so.
- Sexual activity will be less stressful when both partners are relaxed. If you are upset, tired, or stressed, it is probably best to wait.
- Talking with your partner about any fears or concerns may help you relax and get in touch again.
- Wait 1 hour after eating meals or drinking alcohol before you begin sexual activity. This gives your digestive system and other body processes time to work without competing for blood and oxygen.

**Returning to Work**

When you can return to work will depend on your recovery and what kind of work you do. Talk about your return to work with your health care provider at your 30-day follow-up visit. Most patients are able to return to full-time work within 3 months after surgery, and many return earlier.

**Common Responses to Surgery**

It may take a while for you to feel like yourself again after surgery. Here are some common areas of concern after TAVR:

**Sleep Disturbances**

As you recover after surgery, it is common to:

- Sleep more
- Have a hard time falling asleep
- Wake during the night
- Have nightmares or very intense dreams

These changes are probably due to many things, such as not sleeping well during your hospital stay, anesthesia, and medicines you are taking. As you catch up on your sleep at home and get back to your normal sleep patterns, these problems should go away.

Even if sleep problems make you feel tired and weak, try to get dressed every day and do your normal activities. Go for a walk, have lunch, then take a nap. Rest between your activities.

You will sleep better at night if you are physically active during the day. Try not to sleep all day and then lie awake at night.

**Depression and Mood Swings**

People who are recovering from heart surgery sometimes become depressed. You may find yourself crying for no clear reason, or feeling more emotional or sentimental than normal.
We do not know exactly why this happens. Some people find that being more active and doing things that interest them help ease this depression.

If mood changes occur, it may help you and your loved ones to know that it is common and will not last. If you want to consider medicine to help with depression after cardiac surgery, please talk with your UWMC team at your 30-day follow-up visit.

**Being Restless and Not Able to Concentrate**

After surgery, it is common to be irritable and restless, and you may have a hard time concentrating. You may find that things you thought you would look forward to doing during recovery hold little or no interest. This is common after any major surgery and will not last. As time passes, you should return to your normal interests.

**Short-term Memory Loss**

It is common for people to have a short attention span and poor short-term memory after surgery. Many things may cause this, including anesthesia and medicines you are taking. Over time, your memory should return to normal.

**Decreased Appetite**

You may not feel like eating much after your heart surgery, and food may taste different than it did before your surgery. But, your body needs extra calories for healing. Because of this, we advise that:

- You eat what tastes good to you in the first weeks after surgery so that you get enough calories.
- After 6 to 8 weeks, you may need to make changes in your diet, such as lowering the fat, cholesterol, and salt you may be eating.
- If you have had coronary artery bypass surgery or have a history of coronary artery disease, follow a heart-healthy diet.
- If you have a history of congestive heart failure, keep eating a low-sodium diet (less than 2 grams of sodium a day).

**Becoming More Independent After Surgery**

Before surgery, you may have become more dependent on loved ones as your health got worse. After successful heart surgery, you will start...
becoming more independent and need less help from others. For your safety and well-being, you and your loved ones will have to decide how to balance your independence with having help available when you need it.

**Warning Signs**

These symptoms are warning signs:

- Chest pain when you are active
- Shortness of breath that does not improve with rest
- Palpitations, fluttering in the chest, or a hard, thumping heart beat
- Dizziness, feeling faint or like you may pass out
- Unexpected, sudden changes in your vision, strength, or coordination

If you have any of the warning signs listed above:

- Sit down or lie down and rest.
- Then take your blood pressure and pulse.
- If your symptoms do not improve after a few minutes of rest, call 206-598-6190 and ask for the Cardiac Surgery Nurse or Nurse Practitioner on call to be paged.

If you have any urgent concerns, you may need to call 9-1-1.

**If You Have More Questions**

It is normal to feel anxious about going home after your TAVR surgery. If you have questions or concerns about any issues that come up, please let us know.

---

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns.

**Regional Heart Center Clinic:** Call 206-598-4300 during clinic hours

**After clinic hours or on holidays or weekends:** Call 206-598-6190 and ask for the Cardiac Surgery Clinic RN, Nurse Practitioner, or Cardiac Surgeon on call to be paged

**TAVR Patient Care Coordinator:** Call 206-598-7117