

Patient/Family Material

# A Guide for your TAVI Procedure

You and your family can use this guide to prepare you for your TAVI procedure, your hospital stay and your discharge and recovery at home.

**Please bring this guide with you to St Boniface Hospital.**

**Name:** \_\_\_\_\_

**Name of Procedure:** Transcatheter Aortic Valve Implantation

**Date of Procedure:** \_\_\_\_\_

**Cardiologist:** \_\_\_\_\_

**Cardiac Surgeon:** \_\_\_\_\_

**TAVI Coordinator Nurse: 204-258-1413**



Hôpital St-Boniface Hospital

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## *What is a TAVI?*

TAVI means Transcatheter Aortic Valve Implantation. This is the name of the procedure to replace your heart valve.

'**Transcatheter**' means we use a catheter (a small tube) to place a new valve in your heart. The new valve will push the old valve aside and allow for better blood flow through your heart. The TAVI is done one of two ways:

- **Transfemoral TAVI:** We do this by making a small puncture in the blood vessel in your groin and thread the tube and the new valve into the heart.
- **Transapical TAVI:** A small cut is made in your chest in between your ribs. The tube with the valve is put through your chest wall and into your heart.

## *Why do I need my Aortic valve replaced?*

You have a heart valve disease called **aortic stenosis**. Valves make sure blood flows through your heart in the right direction. When blood leaves the heart, it flows through your **aortic valve**.

**Stenosis** means that your aortic valve opening has become narrow. In older people, the valve becomes stiff and cannot open wide enough to let blood through. This may cause you to feel short of breath, to have chest pain, or to feel faint or very tired.

The common treatment for severe aortic stenosis is open heart surgery. This means the person's chest and the heart itself are opened so the doctor can operate directly on the valve. The doctor removes the diseased valve and puts in a new valve. This is the best option for most people.

Sometimes having open heart surgery may not be the best option for people who:

- are not well enough for major surgery
- have other diseases such as kidney or lung disease
- have had radiation to their chest or
- have had one or more open heart surgeries in your life.

A TAVI is another way to fix your valve. Most patients don't need to have a general anesthetic or a breathing tube during a TAVI. We will give you some medication to make you feel relaxed and pain-free during your TAVI.

### ***Is TAVI the best option for me?***

We will review your case in detail to decide if TAVI is your best option. You will need to attend at least 2 Clinic visits and have some heart tests to help us decide.

#### **What to Expect during the Clinic Visits:**

- We will review what a TAVI is, how a TAVI is done, and what are the risks and benefits for you.
- You answer questions about your everyday life, what you can and cannot do for yourself, your living situation, and your heart symptoms.
- You do a walking test and a memory test.
- Our heart doctors will review your health record. The doctors may wish to examine you further.
- We take a picture of you. This helps us when the team meets after your clinic visit to discuss your options. The picture is kept in your chart.
- We may arrange for you to have some more heart tests.

## Heart Tests to Expect

You will need to have the following tests if the doctors think a TAVI may be an option for you:

- **Echocardiogram:** this is an ultrasound test of your heart. It allows us to look at the valves and how blood flows through your heart. For this test, we slide an ultrasound wand across your chest using a clear gel. This test does not cause any pain and takes about 30 to 60 minutes.
  - You may also have a **Trans Esophageal Echocardiogram:** This is an ultrasound where the wand is passed through your mouth and into your throat. This test gives us a more complete look at your heart and the valves. You will be given some medication to make you sleepy during the test. This test takes about 60 minutes.
- **Coronary Angiogram:** This is a test to check the blood vessels that feed the heart. The heart doctor will insert a plastic tube into a blood vessel in your groin through a small needle. Contrast (X-ray dye) is put in through the tube which allows us to see the blood flow to the heart. This test takes only about one hour but you need to stay in the hospital for about 4 to 6 hours after.
- **CT Scan (Computed Tomography Scan):** This is a special X-Ray that takes many pictures of your heart and blood vessels. The computer takes all these pictures and makes a three-dimensional (3D) view of your heart and blood vessels. You will receive contrast (X-ray dye) into an intravenous during this test. This test takes about 30 minutes.

## *Preparing for the TAVI procedure*

### **How long will I be on the waitlist?**

It depends on how diseased your heart valves are and how healthy you are overall. You may be on the waitlist for one to six months.

### **Who looks after my health while I am waiting?**

Your family doctor will continue to look after you while waiting for your TAVI. You may also be asked to see a heart doctor or other specialists.

### **What if my health changes while I am on the waitlist?**

If your heart symptoms slowly get worse but your overall health does not change too much, your normal doctors will continue to provide your care.

We need to know about **sudden changes** in your health.

- If your health suddenly gets worse:
  - Follow your doctor's instructions
  - Ask a family member to call **Cardiac Pre-Assessment Clinic (CPAC)** at 204-258-1859 if you are admitted to hospital

The coordinator will work with your family doctor and follow your progress. We will let you know if the date of your TAVI needs to be changed.

### **What do I do while I wait?**

**Keep Active:** Stay as active as you can, even if only for short periods of time. Activity is important for your heart and your overall health. Slow down if you get short of breath, have chest pain or feel faint. Talk to your doctor about the best ways for you to be active.

**Driving:** You may keep driving as long as your heart symptoms are not severe. Talk to your family doctor about whether or not it is safe for you to drive during this time.

**Eat Healthy:** Eating a healthy diet will help to keep you healthy for your TAVI. Your doctor may restrict the amount of fluids or salt in your diet.

**Take your Medications:** Continue to take the medications that your doctor has ordered.

**See your Dentist:** It is important to have a dental check-up before having your TAVI. Make an appointment with your dentist if you have not had one in the last 6 months. If you need teeth removed or treatment for gum disease, this must be done before the TAVI procedure.

**See other Health Care Providers:** The TAVI nurse or doctors may ask that you see other health care providers while you are waiting for your TAVI. For example, they may suggest that you see a geriatrician (a doctor who specializes in the care of older adults), a physiotherapist (a therapist who helps people move as well as possible), a dietitian or a psychiatrist.

### **Plan ahead:**

- *Going home plan:* You will need someone to drive you home after your TAVI. You should plan to have someone stay with you for the first week after you leave the hospital.
- *Advanced Care Planning:* Think about your personal and financial affairs. Talk to your family about your wishes. Consider making a health care directive.

### **When your TAVI is booked**

We will phone you and send a letter with your TAVI date. To prepare you for your TAVI, you need to be seen in the CPAC. The clinic will call you to book the date and time. This will be a 3-4 hour visit with a doctor and nurses. This is a good time to ask questions.

## *The day of TAVI*

**\*Do not eat or drink anything after midnight (12:00 AM) the night before your TAVI\***

- Take only the medications you were told by CPAC to take the morning of your TAVI with a sip of water.
- Report to the main desk on the 2nd floor of the Bergen Centre to register.
  - Enter through the Emergency Entrance or the South Entrance of the hospital closest to the South Parking lot. Take the first single elevator up to the 2nd floor. On the second floor, follow the signs to the Cardiac Sciences area. It is located down a short hallway and will take you right to the reception desk where you will sign in. If you become lost, please ask someone to direct you to the Y2 area.
- After you register, you will wait in the waiting room until called by a nurse to prepare for your TAVI.

### **What to bring to the hospital**

Bring items you may need during your hospital stay such as:

- Toothbrush and toothpaste
- Comb or brush
- Slippers (with non-slip soles)
- Glasses/Hearing Aids
- Reading material
- Your walking aid, such as cane or walker
- **\*Do not bring cash or valuables\***



## **What happens in the Pre/Post Procedure area?**

- You will change into a hospital gown. We suggest you give your belongings to your family to hold onto until after your TAVI.
- Your family will be allowed to visit with you before your TAVI.
- The nurse will ask you a few questions and help you onto a stretcher.
- An intravenous will be started.
- We will shave and wash your groin area.
- We will give you special mouth wash to prevent infection.
- Before the TAVI, the doctor will review both the benefits and risks of having the TAVI. We will ask you to read the consent form and sign that you agree to have the TAVI today.

## **What happens in the TAVI room?**

- The Anesthesiologist will give you medications to keep you relaxed and pain-free. Some patients need a general anesthetic and a breathing tube. We will tell you if you will need either of these before we start your TAVI.
- A TAVI can take between 2 and 3 hours to perform, but can be shorter or longer.
- During the TAVI your family is welcome to wait in the Y2 waiting room. The doctor will come to speak to your family when the TAVI is complete.

## **What happens after the TAVI is done?**

You will be taken to Intensive Care Cardiac Surgery (ICCS) or the Acute Cardiac Care Unit (ACCU). ICCS is found on the 5th floor of the Asper Centre. ACCU is found on the 5th floor of A block of the main hospital.

## ***Recovering in intensive care***

We will monitor you closely right after your TAVI. We will care for you in ICCS or ACCU for at least the first night or longer if needed. There is a family lounge on each unit and visiting hours are flexible. We ask that one family member act as the contact person.

- For the first four hours after the TAVI the nurse will be checking your insertion site in your groin often and the head of your bed must be kept flat.
- You must keep your leg straight for the first four hours after the TAVI to prevent bleeding.
- The nurse will check you often. Let the nurse know if you are having pain or something does not feel right.
- When it is safe to do so, we will help you to move around. You will start off sitting on the bed, to getting into a chair, and then walking in the hall.
- You will be given clear fluids at first. When you are drinking well you will be slowly increased to your normal diet.
- We will remove the special monitoring equipment when you are ready to be transferred to the ward.

## ***Recovering on the ward***

When you are ready, you will be transferred to Cardiology on the A block, 5th floor of the main hospital, or to the Cardiac Surgery Inpatient Unit (CSIU) on the 4th floor of the Asper Centre.

- We will help you to become stronger and more active each day.
- Do not lift, push or pull anything that weighs more than 5 pounds for the first five days.
- Do not bend at the hips or sit for long periods of time or strain (including bowel movements).
- You will wear a heart monitor for 5 days or until you are discharged home.

- Blood tests, chest X-rays, and other heart tests will be done as needed.
- The nurse will check your insertion sites often. We will teach you what you need to watch for while your sites heal and we will teach you how to care for your sites at home.

**Notify your nurse or doctor if you notice:**

- Bleeding from the site.
- A lump that is getting bigger.
- Any area of redness and warmth that does not get better.
- Yellow drainage from the insertion site.
- Numbness in your leg.
- Severe pain at the insertion site.
- Confusion, blurry vision, or weakness that is not normal for you

## *Going home*

You and your family must start planning for your return home before your TAVI. Most people who have a TAVI take one to three months to fully recover. If you were very ill before the TAVI it may take even longer.

Your care team will assess your health daily and discuss your progress with you and your family. You will be discharged home when you and the team decide you are ready. For example, if you lived independently and were able to walk to the bathroom on your own, we will ensure that you are able to do so prior to discharge. Most people stay in hospital for 7-10 days after a TAVI.

As soon as you know your planned date for discharge, tell the people who are going to drive you home and stay with you.

### **What to watch for**

Check your insertion site every day. The chart on the next page tells you what is normal and what is a warning sign. If you notice any warning signs, see your family doctor immediately or call the Cardiac Sciences Discharge Clinic (CSDC) at 204-258-1859 from 0730-1545 Monday to Friday.

<b>What is normal</b>	<b>What are WARNING SIGNS</b>
<ul style="list-style-type: none"> <li>• Slightly red, swollen and tender at the insertion site</li> <li>• A bit lumpy or bumpy at the insertion site</li> <li>• Pain that slowly gets better</li> <li>• Bruising at the site</li> </ul>	<ul style="list-style-type: none"> <li>• An area of redness or swelling that does not get better</li> <li>• A lump that gets bigger</li> <li>• Drainage from your incision(s)</li> <li>• Pain that does not get better or is severe</li> <li>• A temperature of 38°C (101 °F) or higher</li> </ul>

**Call your family doctor or the CSDC at 204-258-1859 from 0730-1545 Monday to Friday.**

### **Physical activity**

Before your TAVI, you may have not had enough strength to be as active as you may have liked. After your TAVI you will need to go slowly and build up the strength and confidence with periods of activity and rest.

Walking is very important. Start with walking around your home or taking a short walk. Each day walk a little longer each day if you feel able.

### **Practical tips to balance rest and activity**

- Plan ahead to take fewer trips up and down stairs.
- Double a recipe to have leftovers or freeze for another day.
- Get extra rest the day before a big event, like a birthday party.
- Get extra rest during times of emotional stress or illness.
- Use a weekly schedule to plan ahead.
- Choose to do tasks you need to do yourself and think about what tasks you can ask someone else to do.
- Plan to do the things that take more energy when you are feeling your best.
- Pace yourself and break down big jobs into smaller tasks and take breaks when you become tired.

**Cardiac Rehabilitation Programs** offer education and support to people who have heart disease. You will get information about your nearest cardiac rehab site program and the services that you can use to help improve your heart health before you leave hospital or within the first few weeks after you are home.

Local programs include:

Reh-Fit Centre in Winnipeg.....	204-488-8023
Wellness Institute in Winnipeg.....	204-632-3907
Brandon Heart Program.....	204-578-4202
The Pas.....	204-627-6418
Rehabilitation and Health Lifestyle Program Thunder Bay.....	807-684-6780

## **Medications**

Before you go home, you will have a new prescription written for all of your medications. Some will be the same as what you took before and some will be new. The pharmacist will meet with you before you go home to explain your medications and how to take them. Please pick up your prescription on your way home or have someone pick it up for you. You will need them all for your first day home.

**Take Acetylsalicylic Acid** (Aspirin®/Entrophen®/Novasen®/ASA) as your doctor, nurse or pharmacist has asked you to. Do NOT stop this pill unless told to by your heart doctor. This pill stops blood clots from forming on your new valve.

If you have been started on an **anti-platelet pill** such as Clopidogrel (Plavix®) or Ticagrelor (Brillinta®) take it the **WHOLE TIME** that you are told to. These pills also prevent blood clots from forming on your new valve.

**Do not stop any ANTI-PLATELET pills after your TAVI unless you are told to by your heart doctor.**

## WARNING

**\*\*If you are ever asked to stop your anti-platelet pill by another doctor, even for a short time, MAKE SURE THE DOCTOR HAS TALKED WITH YOUR HEART DOCTOR BEFORE YOU STOP. The doctor should call the heart doctor who did your TAVI during the day, Monday to Friday or the CSDC at 204-258-1859 before you stop taking these pills.\*\***

### *Living with your new aortic valve*

#### **Driving**

Do not drive for one week after your TAVI. Talk to your doctor if you are unsure if you are safe to drive.

#### **Travelling**

Talk to your heart doctor before you plan on flying or taking a long trip.

#### **Sexual Activity**

When you are able to do the everyday things you were able to do before your TAVI it is safe to resume sex. The strain on your heart is the same as climbing 20 stairs.

#### **Preventing complications from dental work**

Bacteria from your mouth can enter your blood stream through your gums and infect your new heart valve.

- Keep your teeth and gums clean and healthy by flossing and brushing regularly.
- Tell the dentist that you have had a heart valve replaced.
- You will have to take antibiotics before any dental cleanings or treatments to prevent infection. Your dentist or family doctor will give you a prescription before your appointment.

## **Keep your health care team informed**

From now on, tell your doctors, dentist, pharmacist, physiotherapist or anyone who you see to keep healthy about your new heart valve. You received 3 copies of the heart valve wallet card. We suggest that you keep one in your wallet, put one on your fridge door and give one to a family member or a close friend.

If you go to an emergency room or are admitted to hospital in the first month after your TAVI, give the doctor or nurse your wallet card and ask them to call CSDC at 204-258-1859.

## **Medic-Alert bracelet**

You will receive a Medic-Alert form when you are discharged. Please wear this bracelet to alert the health care team that you have an artificial valve.

## **Diet**

Eating well will help you to heal. Some people find they have a poor appetite for about 2-4 weeks after their TAVI. Try to eat healthy foods every day.

If you had to restrict the amount of fluids you could drink before your TAVI you must continue to do so until you speak with your family doctor or your heart doctor.

You should be able to go back to your normal diet once you go home unless your doctor has told you not to. If you are constipated try to eat bran, drink prune juice or take a stool softener.

## Follow Up

We will give you an CSCD appointment to see the Cardiac Sciences TAVI Nurse Practitioner clinic within one week of discharge. More appointments with the TAVI team will occur at:

- 1 month \_\_\_\_\_
- 3-6 months \_\_\_\_\_
- 1 year \_\_\_\_\_
- And yearly going forward

You will need to see your family doctor in the first 1-2 weeks after you go home.

## Quit Smoking

By quitting smoking NOW, your health will start to improve right away. Ask your doctor or nurse for a referral or refer yourself to the Smoker's Helpline (1-877-513-5333). For a list of resources to help you quit smoking go to [http://](http://www.wrha.mb.ca/healthinfo/preventill/tobacco/resources.php)

[www.wrha.mb.ca/healthinfo/preventill/tobacco/resources.php](http://www.wrha.mb.ca/healthinfo/preventill/tobacco/resources.php)

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