



# Patient Pathway through Open Heart Surgery

Patients and family members play a very important role in the open heart surgery healing process. The pathway explains what you can expect before and after your surgery to help you prepare. The times in this guide may be different for each patient.

## What You and Your Family Can Expect and How You Can Help:

- You will need to arrange for someone to stay with you at home for the first 1-2 weeks after you leave the hospital. It is very important that you have someone with you at home 24/7 for the first 1-2 weeks after surgery.
- You will need somebody to be available during your hospital stay to learn how to care for you after discharge.

**Open Heart Surgeon's Office: 269-341-7333, Fax: 269-341-7371**

## Before Surgery

<b>Tests / Units</b>	<ul style="list-style-type: none"> <li>• If you are already in the hospital with surgery scheduled, testing will be done before surgery. If you are going home to wait for surgery, some of your testing may be done before you leave the hospital or you may have to return for some testing.</li> <li>• If your surgery is scheduled while you are at the office, you will get instructions for testing that may be needed.</li> <li>• You will get a phone call from a preadmission nurse. This nurse will review your medical history and medicines. You will need to have these items available:             <ul style="list-style-type: none"> <li>○ Your medicine list including over-the-counter and herbal medicines</li> <li>○ Your health history</li> <li>○ Your surgical history</li> </ul> </li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>• Shower using the betasept soap from the neck down in the morning the day before surgery, the night before surgery, and again the morning of surgery.</li> <li>• Wash your hair with shampoo for 2 days before surgery.</li> <li>• Trim and clean your nails. Remove any polish.</li> </ul>
<b>Medicine</b>	<ul style="list-style-type: none"> <li>• The surgeon’s office and preadmission nurse will tell you which medicines you should continue and which ones to stop before surgery.</li> </ul>
<b>Breathing Exercises</b>	<ul style="list-style-type: none"> <li>• STOP SMOKING.</li> <li>• You may be shown how to breathe deeply using an incentive spirometer (IS). Practice using this before surgery to expand your lungs.</li> <li>• Coughing and deep breathing is vital to help keep the lungs clear. Practice the breathing exercises before surgery to help when you do them after surgery.</li> </ul>
<b>Activity</b>	<ul style="list-style-type: none"> <li>• Continue your normal daily activity unless otherwise instructed.</li> <li>• Movement helps keep the muscles strong.</li> <li>• Avoid strenuous activity and emotional upsets.</li> </ul>
<b>Diet</b>	<ul style="list-style-type: none"> <li>• Eat whatever you like for dinner the evening before surgery but not a large amount. Do not eat or drink anything after midnight. This includes water, ice chips, gum, candy and mints.</li> <li>• Do not use tobacco or nicotine products.</li> </ul>
<b>Learning</b>	<ul style="list-style-type: none"> <li>• You will get specific instructions for the day of surgery.</li> <li>• You will get the “As You Recover from Open Heart Surgery” handbook after your surgery.</li> </ul>
<b>Discharge Planning</b>	<ul style="list-style-type: none"> <li>• Plan to have someone stay with you for the first 1-2 weeks after you leave the hospital.</li> <li>• The person who will stay with you will need to learn how to care for you after your surgery. We will be talking about your care both before and after your surgery with you and your caregiver.</li> </ul>

## Day of Surgery

<b>Tests / Units</b>	<ul style="list-style-type: none"> <li>You will report to the Surgery “B” Waiting Room on the 2nd Floor of the West Pavilion.</li> <li>Anesthesia will meet with you in pre-op before surgery.</li> <li>After surgery, you will be moved to the Cardiac Surgical Unit (CSU) on the same floor.</li> </ul>
<b>Preparation</b>	<p>You may have:</p> <ul style="list-style-type: none"> <li>A tube to help you breathe. This tube is connected to a ventilator. It will be removed once you are awake and strong enough to breathe on your own, this could be in the operating room or in the CSU.</li> <li>IV tubes in your arm and neck.</li> <li>A catheter in your bladder.</li> <li>Chest drainage tubes that exit below your breastbone.</li> <li>A heart monitor.</li> <li>Temporary pacemaker wires.</li> </ul>
<b>Medicine</b>	<ul style="list-style-type: none"> <li>Take only the medicine you were told to take with a sip of water the morning of surgery.</li> <li>You will have medicine to help you relax and control your pain. Your nurse will check often to make sure you are comfortable.</li> </ul>
<b>Breathing Exercises</b>	<ul style="list-style-type: none"> <li>Once the breathing tube is out, you will be put on a high pressure mask for a few hours and then again that night. It is important that you take deep breaths. Use the incentive spirometer (IS) 10 times every hour when you are awake.</li> <li>You will be given a firm pillow to hold over your chest when you cough. This supports your incision and breastbone.</li> </ul>
<b>Activity</b>	<ul style="list-style-type: none"> <li>You will be taught how to move to protect your healing breastbone and incisions.</li> <li>You may sit up in the chair the same day of your surgery.</li> <li>You may walk in the hall the same day of your surgery. Someone will walk with you and monitor your blood pressure and pulse.</li> <li>Cardiac rehab will begin as soon as you are able to participate.</li> </ul>
<b>Diet</b>	<ul style="list-style-type: none"> <li>You may have sips of water to take medicine the morning of surgery.</li> <li>You may have ice chips and sips of water once the breathing tube is removed.</li> </ul>
<b>Learning</b>	<ul style="list-style-type: none"> <li>We welcome a limited number of visitors after surgery.</li> <li>Young children are not allowed in the CSU.</li> </ul>
<b>Discharge Planning</b>	<ul style="list-style-type: none"> <li>A case manager will work with you and your caregiver throughout your hospital stay.</li> <li>Ask any questions you and your caregivers have about discharge.</li> </ul>

## After Surgery

<b>Tests / Units</b>	<ul style="list-style-type: none"> <li>• When you are stable and ready to leave the CSU, you may be moved to the Cardiology Unit on the 4<sup>th</sup> floor of the East Pavilion.</li> <li>• Lab tests are done as needed.</li> <li>• A chest x-ray may be done as needed.</li> <li>• Blood sugar is checked before meals.</li> <li>• Other tests are done as needed.</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>• If you have temporary pacemaker wires they will be removed before you go home.</li> <li>• Your heart rhythm will be monitored 24 hours a day while you are in the hospital. Oxygen is given as needed.</li> </ul>
<b>Medicine</b>	<ul style="list-style-type: none"> <li>• Tell your nurse when you are in pain and if the pain medicine is working.</li> <li>• Tell your nurse if you were taking any medicine at home before surgery and you think you should be taking it after the surgery.</li> <li>• Insulin may be given to control your blood sugar levels even if you do not have diabetes.</li> </ul>
<b>Breathing Exercises</b>	<ul style="list-style-type: none"> <li>• Continue to use the incentive spirometer (IS) 10 times every hour. Cough and deep breathe while you are awake.</li> <li>• If you watch TV, use the IS, cough and deep breathe during commercial breaks.</li> <li>• If you have sleep apnea, you will wear CPAP while you are sleeping.</li> </ul>
<b>Activity</b>	<ul style="list-style-type: none"> <li>• Walk with help at least 4 times each day.</li> <li>• Someone will walk with you and monitor your blood pressure and pulse.</li> <li>• Do not let anyone pull your arms to help you out of bed or up from a chair.</li> <li>• You will work with cardiac rehab.</li> </ul>
<b>Diet</b>	<ul style="list-style-type: none"> <li>• Eat foods that are low in salt and fat.</li> <li>• Limit caffeine to 1-2 cups daily.</li> <li>• If you have diabetes, do not eat foods or drink beverages high in sugar or carbohydrates.</li> <li>• It is not unusual to have a poor appetite. Food may not taste good to you for a while.</li> <li>• Your family may be able to bring food from home. Talk with your nurse.</li> <li>• A dietician will meet with you after surgery.</li> </ul>
<b>Learning</b>	<ul style="list-style-type: none"> <li>• Learn how to care for your incisions.</li> <li>• Ask questions about your diet and medicines.</li> <li>• If you smoke, do not start again after you go home. Consider using smoking cessation resources.</li> </ul>

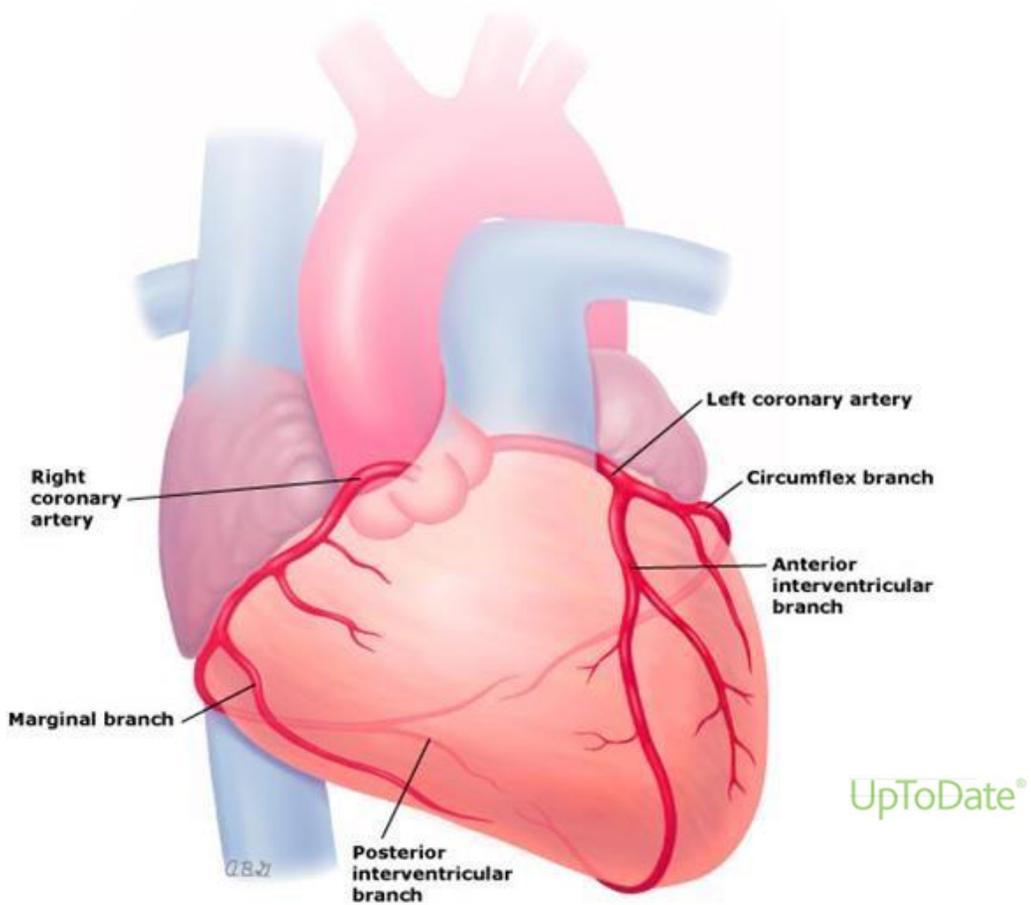
## Discharge Planning

- Our rehab team will evaluate you after surgery for the care you will need.
- A case manager will meet with you to plan the care you will need when you leave the hospital.
- You will need to arrange for someone (caregiver) to stay with you at home for the first 1-2 weeks after you leave the hospital. It is very important that you have someone with you at home 24/7 for the first 1-2 weeks after surgery.
- Most patients go home with their caregiver and home care nurse visits. On average the home healthcare nurse will visit up to 2 times a week for about a month.
- A medical social worker can talk with you regarding any worries about money or paying bills.

## After Hospital Care

<b>Tests / Units</b>	<ul style="list-style-type: none"> <li>You may go home 3 to 5 days after surgery. When you go home depends on how well you are recovering.</li> <li>You may have lab work done after discharge. The office will only call if you have abnormal results that need to be addressed.</li> <li>If you have diabetes, you will need to check your blood sugar 2-4 times a day.</li> <li>Record the results in a logbook and report them to the surgeon's office as directed.</li> </ul>
<b>Preparation</b>	<ul style="list-style-type: none"> <li>You will receive a "red reminder wristband" with the surgeon's office phone number before you leave the hospital.</li> <li>If a blood vessel was used from your arm ("radial harvest") do not take blood pressures or have blood drawn from that arm for 4 weeks.</li> </ul>
<b>Medicine</b>	<ul style="list-style-type: none"> <li>Take only the medicine on the list when you leave the hospital.</li> <li>You will have a prescription for pain medicine. It is expected that you are off of this by 1 month after surgery.</li> <li>Review the list of medicines with your nurse.</li> <li>Make sure you know the reason you are taking the medicine, the dose, and how often you should take each medicine.</li> <li>Do not take any other prescription medicines, over-the-counter or herbal medicines without checking with the surgeon's office.</li> </ul>
<b>Breathing Exercises</b>	<ul style="list-style-type: none"> <li>Take the IS home with you. Continue to use it every 1 to 2 hours at home for the next 3 weeks.</li> <li>You may need oxygen at home. The case manager can arrange this for you.</li> </ul>
<b>Activity</b>	<ul style="list-style-type: none"> <li>Walk with a family member or a friend to get stronger faster.</li> <li>Continue to increase your activity.</li> <li>Start outpatient cardiac rehabilitation in about 4 weeks. You will get a call from the cardiac rehab office. You can call (269) 544-3220 with questions about a rehab program. Your first educational visit is FREE at Bronson Outpatient Cardiac Rehab.</li> </ul>
<b>Diet</b>	<ul style="list-style-type: none"> <li>Follow a diet that is low in salt and fat. Do not add salt to food.</li> <li>Drink about 6 to 8 cups (1.5-2 liters) of liquid each day unless your provider tells you to limit your liquids and caffeine.</li> <li>Eat several small meals that are high in protein.</li> </ul>
<b>Learning</b>	<ul style="list-style-type: none"> <li>After surgery, you will have two appointments with the APP (Advanced Practice Provider).</li> <li>After surgery, you will need to call to make appointments with your cardiologist and primary care provider to be seen in 4-6 weeks.</li> </ul>
<b>Discharge Planning</b>	<ul style="list-style-type: none"> <li>If you are discharged home, a home health care nurse will call or visit you within the first week after discharge. This nurse will check your heart, lungs, and incisions. The nurse will decide if you need more visits.</li> </ul>

# Coronary Arteries of the Heart



## Notes

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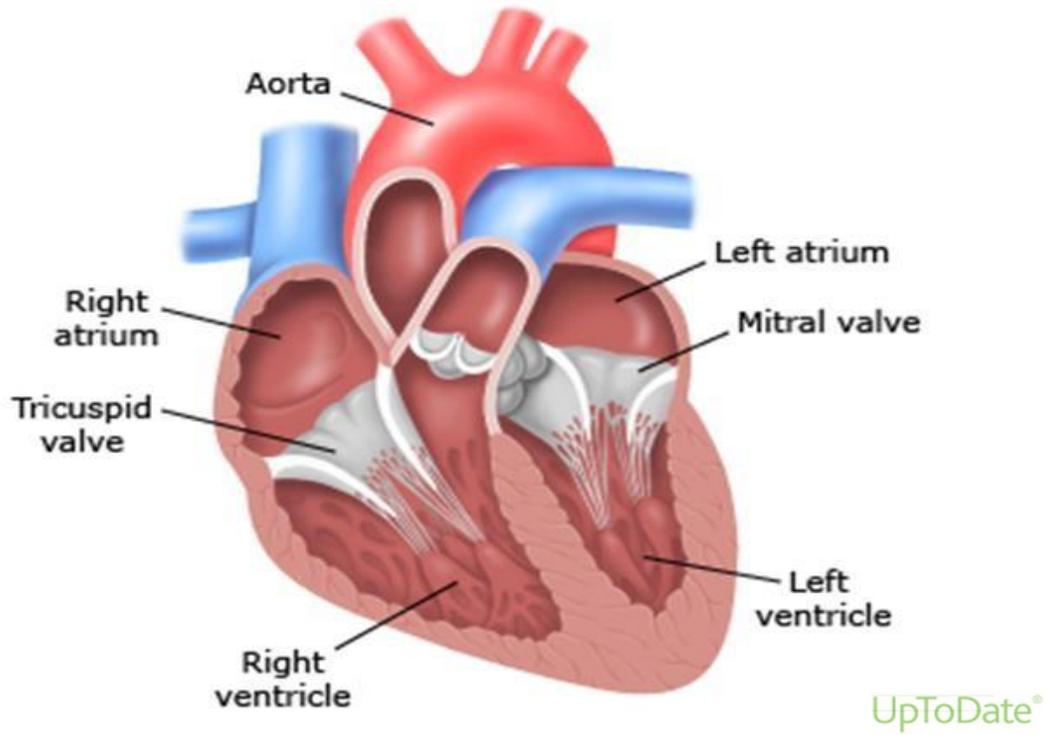
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## *Valves of the Heart*



### Notes

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## Restrictions After Open Heart Surgery

Following the restrictions below helps protect your breastbone from injury and prevents infection of your incisions. You will receive more details before you leave the hospital. If not listed below, ask your surgeon or APP when you can start other activities and sports.

### Lifting Limits

- 5 pounds for 4 weeks.
- 10 pounds for 5-8 weeks.
- 15 pounds for 9-12 weeks.
- No restrictions after 12 weeks/3 months unless your surgeon or advanced practice practitioner (APP) gives you restrictions.

### Driving

- Ok to resume driving after 4 weeks. The APP will tell you when you are okay to drive.

### Sleep/Sexual Activity

- Lie on your side after 1 month.
- Sex after 1 month.
- When you resume do not put pressure on your chest incision.
- Do not use erectile dysfunction medicine for 1 month.

### Bathing and Swimming

- Soaking tub baths after 2 months.
- Hot tubs after 3 months.
- Swimming after 3 months.

### Housework

- Vacuuming after 2 months.
- Changing sheets after 2 months.

### Yardwork

- Snow shoveling/blowing after 3 months.
- Riding mower after 2 months.
- Power mower after 3 months.
- Non-power mower after 4 months.

### Golfing

- Putting after 1 month.
- Chipping after 2 months.
- Driving after 3 months.

### Boating and Fishing

- Boating after 3 months.
- Casting after 6 weeks.

### Shooting

- Pistols or small caliber after 2 months.
- Shotguns or large caliber after 3 months.
- Archery after 3 months.

### Seat Belt Use

- Michigan law requires that you wear a seat belt if you are a front seat passenger. Injuries from an accident could be worse than the damage to your breastbone or incision from wearing a seat belt. Seat belt pads are available at most stores. You may try using a pillow under the shoulder strap.