

Getting Ready for Heart Surgery and Your Hospital Stay

Knowing what to expect is a big part of getting ready for surgery. This booklet helps you to learn about:

- Your pre-op clinic visit,
- Getting ready for surgery,
- What to expect after surgery,
- Caring for yourself at home,
- Who and when to call.

Date of Surgery: _____

Your Surgery: _____

Surgeon: _____

Your Care Team

There are many people who help care for you when you have heart surgery. Each member of your health care team has a special role in your care. Their main focus is **you** – the patient.

Your **surgeon** is the doctor that does your surgery. They direct your care and lead your health care team so that your needs are met.

Nurses are the main team members who will care for you while you are in the hospital. A few of their main jobs are to:

- give medicine(s),
- educate you and your family,
- assess you and watch closely for any changes or concerns, and
- work closely with the other members of your health care team.

Nursing assistants help with cares such as eating, walking, and bathing.

The **advanced practice provider team** is made up of nurse practitioners (NPs) and physician's assistants (PAs). They work closely with your surgeon and you from the time of your first work-up visit through your last follow-up visit.

A **case manager or social worker** helps you with any special needs you may have as you prepare to go home. These needs may include lab draws, home health, or rehab placement.

Physical therapists (PT) and occupational therapists (OT) make sure patients stay active and can move around safely after open heart surgery. They will help you to gain muscle strength back so that you are safe when you leave.

Cardiac rehab works with you after your surgery to help you start your cardiac rehab program. You will learn about safe activities you may do after surgery and lifestyle changes. You may be referred to a cardiac rehab program near your home so you can continue rehab after discharge.

Fellows and residents are doctors who work in cardiac surgery as part of their training. Fellows are surgeons who are done with their general surgery training and are now training to cardiac surgery. Residents are doctors who are doing their general surgery training.

Pharmacists have special training in medicines. There are pharmacists on the cardiac surgery unit who make sure your medicines are correct, safe, and work as they should.

Your Pre-Op Clinic Visit

Before you have surgery, you will meet with the team to confirm that surgery is still a safe option. At this visit, you will learn more about the surgery. You can also expect to:

- Have a complete history and physical,
- Have blood tests drawn and a chest x-ray done,
- Review medicines and discuss plans for taking them,
- Talk about what to expect during surgery,
- Meet with a nurse to learn more about the surgery you are having,
- Sign a consent for surgery.

After these steps and once you and your provider decide that cardiac surgery is the best option for you, we will call you to schedule surgery. If you have any questions about the date or time after you leave, you can call our clinic at **(608) 263-1560**.

Honoring Your Wishes

We ask all of our patients if they would like to complete an advance directive. These are legal forms that allow adults to state their healthcare wishes. There are two kinds of these forms - the Power of Attorney for Health Care (POA) and a living will. If you have an advance directive, provide a copy to staff before surgery. If you wish to complete these forms, please ask your nurse or social worker for help. For more information, read Health Facts for You "Honoring a Patient's Advance Directives at UW Health."

Spiritual Care Services

You may wish to have a member of Spiritual Care Services visit while you are in the hospital. We can arrange it for you, or you can call **(608) 263-8574**.

Getting Ready for Surgery

The time of your surgery will be set the day before. A nurse will call you the day before your surgery (or on the Friday before a Monday surgery). We will tell you when to arrive, where to go, and answer questions. **If you do not hear from us by 1:00 pm, please call (608) 265-8857.**

If you have a cold, fever greater than 100°F, or other illness the day before surgery, please call First Day Surgery between 8 am-4:30 pm, Monday-Friday at **(608) 265-8857**. If it is after hours or the weekend, please call **(608) 262-0486**. This will connect you with the hospital operator. Ask to speak with the cardiac surgery physician assistant (PA) or nurse practitioner on call. Leave your name and number, and they will call you back.

Before Surgery

1. Changes with Your Medicines

Tell your surgeon or nurse if you take any blood thinners, over-the-counter and prescription medicines, vitamins, herbs, and diet supplements. You may need to stop taking these before surgery.



Your surgeon's office will tell you when to stop taking all anti-platelet medicine such as aspirin and Plavix®.

You should stop taking Coumadin® five (5) days **before** your surgery. Do not restart this medicine until told to do so by your doctor.

You should stop taking non-steroidal anti-inflammatory drugs (NSAIDs) for **seven (7) days before and seven (7) days after** your surgery. This includes ibuprofen, Advil®, Motrin®,

Nuprin[®], Orudis[®], and Aleve[®]. You can use Tylenol[®] (acetaminophen).

If you take other medicines, we will tell you during your clinic visit whether you should take them the day of surgery or not. If you take them, swallow with just a sip of water.

If you have **diabetes**, you will get details about your insulin or oral pills at your clinic visit.

2. Changes with Eating

The night before surgery, eat a light supper with small amounts of low-fat foods.

Do not eat or drink anything for 8 hours before surgery.

For example, if your surgery is at 8 am, you should not eat or drink anything after midnight. This includes water, black coffee and tea (no creamer), and apple or white grape juice.

Do not chew gum, tobacco, or have candy for 4 hours before surgery.



3. Do **not** drink alcohol after 8:00 pm the night before surgery. If mixed with anesthesia, it can cause problems.



4. Try to stop smoking or cut back. It takes at least 3 days to rid your body of carbon monoxide from cigarettes. If present in your body, it will delay wound healing. It can also increase the risks from anesthesia. If you would like help quitting, you can call



the Quit Line at 1-800-QUITNOW (784-8669).

5. See Health Facts for You “Getting Your Skin Ready for Surgery-Adult” for skin prep instructions. **You must follow these instructions for your shower the night before and the morning of the procedure.**

6. Do not wear make-up. Please remove nail polish from at least one finger.

7. Try to have a restful night before surgery. If you are coming from out of town, you may wish to stay in Madison. Call the **housing desk, (608) 263-0315**, to arrange for your stay at a nearby hotel for a discount rate.



8. The morning of surgery, brush your teeth and rinse, but **do not swallow water.**



9. **What to Bring and Not Bring**
Please leave all items of value at home. Bring a calling card or your cell phone if you wish to make long distance calls. You may bring in your laptop; all rooms have patient internet access.

Bring along inhalers, CPAP, glucose meter, eyeglasses, eye drops, hearing aids, dentures, prostheses, and other special equipment that you will need. Be sure these items are labeled.

Please do **not** bring bottles of pills with you the morning of surgery unless you have been told to do so. You will be asked to leave your glasses, teeth, and hearing aids with your family before you go to surgery.

Please bring non-skid slippers or slip-on shoes and a few personal items. You do not need to bring pajamas or a robe. You may want to bring a book or something to do. There is a TV in every room

Please have your family member leave your belongings in the trunk of your car the day you check in (please bring in your CPAP and inhalers). Once your room is ready, they can bring your things to you. The hospital is not responsible for theft of personal items.

10. You will be asked to remove all jewelry. Please remove all body piercings.

The Day of Surgery

You will check in at Patient Registration located on the main floor of the hospital. They will direct you to the **F elevators**. You will take these to the **3rd floor to get to First Day Surgery (FDS)**.

Once you are settled in, you will meet with staff who will answer any questions you may have. After surgery you will go to the recovery room to wake up. After that you will be moved to the cardiac surgery unit. Your family and/or friends may wait in the waiting room during surgery. A surgery team member will keep them updated and make sure they get to the cardiac surgery unit.

In the Operating Room (OR)

Once you are in the OR, your nurse will answer questions and make sure you are comfortable.



The staff wear masks, gowns, and hats. They will help you move onto a narrow, firm bed. The nurse will place a safety belt, like a seat belt, across your legs. They will place ECG (electrocardiogram) patches on your chest, a blood pressure cuff on your arm, and a plastic clip on your finger to check your heartbeat and oxygen level. You will be asked to breathe oxygen through a soft plastic mask and medicine will be given to you through your IV. After you are asleep, a breathing tube (ET tube) will be placed in your windpipe to breathe for you. Other IVs and monitors will be added after you are asleep.

A Note to Families

The amount of time your loved one spends in the OR depends on the type of surgery. You can either wait in the surgical waiting room on the 3rd floor near First Day Surgery or on the second floor between B and D elevators. If you have support people with you, they will get a pager. They may want to bring along a book or something to do. Time may seem to pass slowly. Sometime during the day, they should take their parking pass to the main hospital information desk on the 2nd floor to have it stamped. There, they can also get one pass to be used during your stay. When the surgery is close to being done, you will be asked to come up to B45, the cardiac surgery inpatient unit. After surgery, the doctor will come and update you in the B45 waiting room.

What to Expect After Surgery

After surgery, you will go directly to the cardiac surgery unit on B45. Once you are settled in your room, your support people may join you. You will have your own room with your own bathroom. The nurses will check you often.

When you first arrive on the unit, you may have a few tubes, drains and other equipment. This might include:

- A **breathing tube** in your mouth. You are not able to speak with this in. We will take it out as soon as you are awake enough to breathe on your own. Once it is removed, you will be able to talk.
- An **IV (intravenous line)** in your hand or arm to give you fluids and medicine until you can drink fluids.
- You will have a catheter in your bladder to help you urinate.
- A **plastic clip** on your finger to check your oxygen level.
- **Leg wraps** that inflate and deflate to improve blood flow in your legs.

A nurse will help you understand how these items work and how long they will be in place. You will hear noises such as the beep of the monitor and IV pump. These are normal. You can bring ear plugs and let your family know you prefer to wear them. You may have wrist restraints when you first wake up. They limit movement of your hands. This is to protect you from hurting yourself while you wake up from anesthesia.

Many patients who have had heart surgery tell us that they recall little of the first hours after surgery. This is normal. When you first wake up, the breathing tube may startle you and make you feel anxious. The nurses will help you relax and be more comfortable while the tube is in place. The important thing is to let the breathing machine

(ventilator) work for you. It will give you puffs of air until you are able to breathe on your own. Since it is in your mouth and windpipe, you are not able to talk; but you can nod, squeeze your hand, or write on a notepad. Nurses are nearby to help you.

Once you are awake enough to breathe well on your own, the breathing tube is removed. Most patients have the breathing tube removed 4-8 hours after surgery. When it is removed, you may talk and begin taking ice chips and fluids. Your throat may be sore and your voice hoarse for a while.

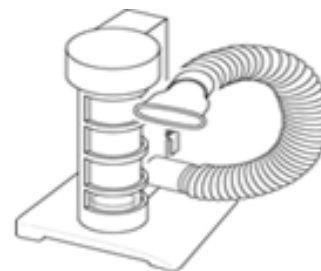
When the breathing tube is out, nurses ask you to breathe deeply, cough, and use a breathing tool called an incentive spirometer. (See below for tips.) Good breathing helps you to get rid of the anesthesia and prevent pneumonia.

Tips for Coughing and Deep Breathing

1. Place a pillow over your chest to lessen the pain when you cough.
2. Breathe in deeply and slowly through your nose. Hold it.
3. Exhale slowly through the mouth.
4. Repeat twice more.
5. Breathe in again; hold it, and then cough.

Tips for Using an Incentive Spirometer

1. Exhale and place your lips tightly around the mouthpiece.
2. Take a deep breath. Slowly raise the Flow Rate Guide between the arrows.



3. Hold it. Continue to inhale, keeping the guide as high as you can for as long as you can, or as directed by your nurse or respiratory therapist.
4. Exhale and relax. Remove the mouthpiece and breathe out as usual.
5. Slowly, repeat 10-15 times each hour while you are awake.

Eating After Surgery

You may not be able to eat right after surgery. At first, you may get only ice chips. As your body allows, your diet will progress from clear liquids (juice and broth) to full liquids (milk or ice cream) to normal foods.

Nausea and vomiting can happen. If you have nausea, tell your nurse. We have medicine which may help.

The Day After Surgery (Post-Op Day #1)

The cardiac team will see you daily in the hospital. This is called rounding. The time of day they see you may vary. Several members of the cardiac team may be present. They will come into your room to update you and your family on your progress and answer questions.

Other common things that may occur the day after surgery include:

- The tubes and lines will start to be removed based on how you are doing.
- Your doctor will decide how soon and what you are able to eat.
- Physical therapy (PT) and occupational therapy (OT) may meet with you. They will help you get up and move to the chair and walk.
- You will learn about sternal precautions to prevent problems with your incision.
- You will get out of bed to sit in a chair in the morning. The goal is for you to get out of bed and sit in a

chair at least 3 times per day. A good time to sit in a chair is when you eat.

- You will start to walk in the halls. The goal is for you to walk in the halls at least 4 times per day.
- A case manager helps you with any discharge needs like a rehab stay or home health.
- People from other services meet with you based on your needs.

Post-Op Day #2 Until Day of Discharge

The cardiac surgery team will continue to see you daily. Most often all tubes and lines are removed except your IV and telemetry patches. **Note:** There may be some exceptions to this. You will keep building your strength by walking, sitting in a chair and helping with your daily cares. Staff from PT/OT will see you as needed. You will keep doing breathing exercises. As you progress, we will talk with you about discharge. Someone from the cardiac rehab team will see you.

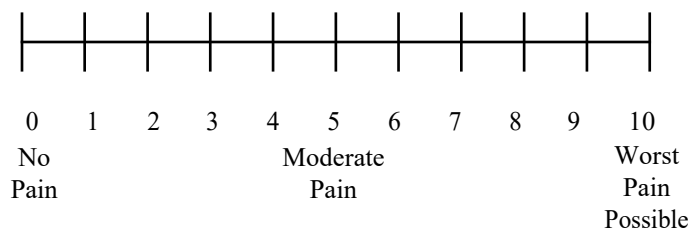
Managing Pain

Staff will work with you to prevent or relieve pain and keep you comfortable. When your pain is under control, it helps you to:

1. Heal faster.
2. Start walking, breathing and gaining strength faster.
3. Leave the hospital sooner.
4. Prevent problems.

Take (or ask for) pain medicine when pain **first begins**. Do not wait. Pain pills take 20-30 minutes to work.

We will ask you to rate your pain using the scale below. Your pain should be at a level that will allow you to deep breathe, eat, walk, and sleep. We need you to rate your pain so that we know how well your pain medicine is working.



Tell us about pain that will not go away. Pain can sometimes be a sign of problems.

Pain medicine may cause you to become drowsy, dizzy, or lightheaded. Do **not** drive, use machines, or drink alcohol while taking pain medicine.

Preventing Constipation

Opioid pain medicine can cause constipation. In the hospital and at home, you will need a plan to avoid this problem. Stick to the plan as long as you take opioid pain medicine. Review your plan with your doctor or nurse. Here are some things to include in your plan:

- Eat foods that have helped you to relieve constipation in the past.

- Eat foods high in fiber or roughage. This includes foods such as uncooked fruits, raw vegetables, and whole grain breads and cereals.
- Drink plenty of liquids. Eight to ten 8-ounce glasses of fluid each day will help keep your stools soft. (Do follow any fluid restrictions you may have.) Warm liquids often help your bowels to move. Have a warm drink about half an hour before your planned time for a bowel movement.
- Move as much as you are able each day or at least every other day. Increase the amount you walk. Check with your doctor or nurse about the exercises that are best for you.
- Plan your bowel movements for the same time each day, if you can. Set aside time for sitting on the toilet or commode. The best time is after a meal.
- Do **not** stop taking your pain medicine without talking with your team.

Stool Softeners and Laxatives

You may need a stool softener. This alone may not work. You may need to add a gentle laxative. Check with your doctor or nurse before taking any of these. Your doctor or nurse may suggest taking a laxative on a regular schedule rather than waiting until you are constipated. There are many types and brands of laxatives, and most need no prescription. Talk to your doctor about which may work best for you, and at the best price.

Discharge Day: Going Home

You should plan for a discharge time around 11 am. You must have someone drive you home, and if needed stay with you for the night. Before you can go home, there are some things that you must do. These include:

- Your doctor needs to talk to you and examine you before leaving.
- Any equipment you need will be ordered before you leave, if possible.
- Other follow-up care, such as labs, will be set up for you as needed.
- A pharmacist will review your medicine with you. You should plan to pick up your medicines at the pharmacy of your choice before you get home.
- A nurse will review your discharge instructions with you and make sure you understand how to care for yourself. This will include a review of your activity restrictions. (See next page.)

Your First Follow-Up Visit

A follow-up visit will be scheduled with your primary care provider 2 weeks after you go home from the hospital. You will meet with your heart surgery doctor within 4 weeks after discharge. Please bring a list of any questions that you may have.

Caring for Yourself at Home

Incision Care

While you are in the hospital, your incisions are covered to avoid irritation from the telemetry leads or heart monitor. After discharge, a dressing is only needed if drainage is present. Small amounts of a thin, light red fluid may drain from the chest tube sites. This is normal. Cover the chest tube sites with dry gauze. Change the gauze daily until the drainage stops.

At first, the incisions may be red and swollen. The redness and swelling will decrease as they heal. Signs that an incision has become infected include increasing redness, warmth, soreness, thick yellow drainage, and fever. If the drainage appears infected (may be thick yellow with a bad smell), please call your surgeon's office right away. Also call the office if you have any drainage from your chest or leg incision (if you have one). Drainage from these sites is not common. Please call the surgeon's office if you have any of these signs.

Keep incisions clean and dry. **Do not** put ointments, powders, or lotions on them. Shower daily with your back to the stream of water. Use a mild, fragrance-free soap. When washing, avoid rubbing your incision. Pat the incision dry. **Do not** take hot showers or baths.

Tub baths, hot tubs, and swimming pools are not allowed for 30 days or until your incisions are fully healed. Any staples or stitches will be removed at your first follow-up visit.

Things to Check at Home

- Weigh yourself daily.
- Measure your blood pressure and heart rate daily if you have a blood pressure cuff.
- Write down your weight, blood pressure, and heart rate (pulse) daily on the **Daily Vital Signs Record** on the back of this booklet. Bring this to your first follow-up visit.

All patients retain water after heart surgery. You will be on a fluid restriction and low salt diet for a few weeks after surgery to help your body get rid of the extra water. You will likely be on a water pill (diuretic) when you go home as well to get rid of the extra water. This helps your breathing. You

may have more changes to your diet (low fat or low cholesterol) based on your heart condition.

Activity

As you heal you will slowly feel stronger and more independent. This may take weeks to months. Be patient. Give yourself time. Each day find a balance between increasing your activity and getting enough rest and sleep.

Deep breathing helps your lungs recover. Use your incentive spirometer at home for 3 weeks to help your lungs heal.

Walking is a good, safe way to exercise after heart surgery. Be as active as you feel you can be. Please see below for activity restrictions after heart surgery. Your therapy team including occupational therapy (OT), physical therapy (PT) and an exercise physiologist will review this with you.

Activity Restrictions After Surgery

All patients have restrictions after heart surgery. Your breastbone (sternum) is a broken bone that cannot have a cast on it. It takes a long time for a broken bone to heal. You will be taught about sternal precautions as follows.

For 8 weeks after surgery:

- **Do not lift more than 10 pounds.**
This is about the weight of a gallon of milk.
- Do not flex or extend your shoulders over 90 degrees.
- Do not push or pull with your arms when moving in bed and getting out of bed.
- Avoid reaching too far across your body.
- Do not hold your breath during activity.

- Brace your chest when coughing or sneezing for the first 2 weeks and as needed.
- No over the shoulder activity.
- If you feel any pulling or stretching in your chest, stop what you are doing. Do not repeat the motion that caused this feeling.
- Report any clicking or popping noises around your breastbone to your surgeon right away.
- Do not lay on either side.

Also, during the 8 weeks after surgery, avoid activities that involve twisting motions or heavy lifting. This includes but is not limited to these activities:

- Snow shoveling
- Lawn mowing
- Golf
- Tennis
- Hunting
- Fishing
- Running (walking is safe and encouraged)
- Bike riding
- Motorcycle riding
- Contact sports (soccer, football)
- Weight-lifting
- Bowling
- Vacuuming
- Sweeping
- Laundry
- Cleaning

Family may want to adjust things at home to help in your recovery. Move commonly used items in the kitchen/bathroom/closet to a counter height so they are easy to reach.

Do not drive for the first 4 weeks after surgery and until you are no longer taking opioid pain medicine.

When 8 weeks have passed since surgery, you may resume your normal activities. Call your surgeon's office if you have questions.

There are many things you can do while you are healing and getting stronger. Do as much as you can based on how you feel and your weight and arm restrictions.

Special Precautions If You Have Had a Heart Valve Replaced

- **Do not** schedule any non-emergent dental care during the first 6 months after surgery.
- Take antibiotics **before** any dental work (cleaning), surgery, or major tests. Your dentist or doctor can order these for you. Always take them **before** your visit.
- Watch for signs of infection. It is possible to have an infection around your heart valve (bacterial endocarditis). If you notice any signs of infection, call your local doctor right away. Signs and symptoms may include:
 - Chills, then heavy sweating.
 - Temperature greater than 101°F.
 - Lack of hunger and weight loss.
 - Fatigue and weakness.
 - Joint pain.

Dental Hygiene

Dental hygiene is important for overall health. This includes:

- brushing teeth with toothpaste and a soft bristle brush for 2 minutes two times every day.
- flossing daily.
- visiting a dentist 2 times per year for a teeth cleaning and x-rays.
- If you have had heart bypass (CABG) surgery, **do not** schedule

any non-emergent dental care during the first 6 weeks after surgery.

Common Experiences After Heart Surgery

Heart surgery is a stress on the body. It takes time to recover. There are some common experiences that many heart surgery patients have after surgery. You may have none, some, or all of these.

Many patients have shortness of breath. This can be from extra water in your body, anemia, or the stress from surgery. Having shortness of breath with effort is common. Call your surgeon's office if it gets worse.

Another common experience after heart surgery is decreased appetite or food tasting different. Patients sometimes have a metallic taste when they eat. There is no known reason for this. It may be from medicines used during the surgery such as anesthesia or the body's response to stress. Eating small meals throughout the day may help. Eat whatever you can, but keep in mind your fluid restriction and low salt diet. Protein is needed for healing. It is helpful to eat high protein meals for a few weeks after surgery. If your appetite decreases or your sense of taste changes, you can expect it to return to normal several weeks after surgery.

Patients often have sleeping problems. They may have trouble falling asleep or staying asleep. Patients sometimes have strange or vivid dreams. There is no known reason for any of these. Most patients find that their sleeping problems go away in a few weeks. A sleep aid may be helpful for a short time. Please talk with your surgery team about medicines, if you are having trouble sleeping.

Changes in mood, such as depression or feeling very emotional, are common for

people who have just had heart surgery. This seems to be due to the stress of the surgery. It is best to share your thoughts and feelings with someone. Patients with strong emotional support tend to recover more quickly. If you are having problems coping or need support, please talk with your doctor or nurse. People most often feel better and more like themselves within several weeks after surgery.

Here are some ideas to help you heal and feel more positive about yourself and your recovery:

- Do things that you enjoy and are within your limits.
- Take it day by day based on how you feel.
- Get together with family and friends.
- Talk about your feelings.

Returning to Work

Everyone recovers from heart surgery at their own pace. When you can return to work will depend on how you feel and the kind of job you have. Many patients start to feel ready to return to work between 4-6 weeks after surgery. You may find it helpful to start back to work part time or on a reduced schedule until you are fully recovered. If your job requires heavy lifting (greater than 20 pounds), you have two choices. You do other work at your job that does not require heavy lifting, or you wait to go back to work until you are able to do heavy lifting. Most often weight restrictions are lifted at 12 weeks after surgery. If you need paperwork filed for your job, please bring it with you for your surgeon to complete.

When and Who to Call for Help

Call 911 if you:

- Have chest pain that is different than your incisional pain or seems like angina.
- Have severe shortness of breath.
- Are fainting or feel like you are going to faint.
- Have a fast, irregular heartbeat while at rest for 10 minutes (feel your heart racing).
- Are unconscious.

Call your surgeon's office during the first 4 weeks after discharge if:

- You feel short of breath.
- Your legs or feet are swollen.
- Your heart rate (pulse) is less than 55 or greater than 120.
- Your weight goes up or down by 2 pounds during 1 day.
- Your weight goes up or down by 5 pounds during 1 week (7 days).
- You have any of these signs of infection:
 - Pus (may be thick yellow drainage with a bad smell).
 - Warmth.
 - Pain or soreness.
 - Redness.
 - Temperature higher than 100.5° F.

Phone Numbers

Admissions (To start paperwork, speak with a financial counselor, or confirm insurance)
(608) 263-8770

Heart and Vascular Clinic
(608) 263-1530

Cardiothoracic Surgery Clinic Nurse
(608) 890-9934

Hospital Paging Operator
(608) 262-0486

Housing Accommodations
(608) 263-0315

Outpatient Pharmacy (E5/236)
(608) 263-1280

Patient Information (for room number)
(608) 263-8590

Spiritual Care Services
(608) 263-8574

Toll-Free Number
1-800-323-8942

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 3/2020 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#8134

Daily Vital Sign Record

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