



Health Facts for You



Your ventricular assist
device (VAD) implant
evaluation

UWHealth

Welcome to UW Health for your Ventricular Assist Device (VAD) implant evaluation. Our team takes pride in building a care plan tailored to your needs. We are committed to working with you and your support person to understand if VAD implant surgery is right for you.

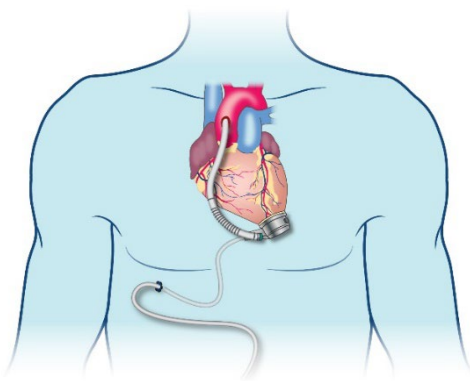
This document will help you understand what surgery for VAD implant would be like.

What is heart failure?

Heart failure means that your heart muscle is weak. It does not pump blood as it should. This does not mean that your heart has stopped or is about to stop. It means that your heart does not pump as well as it once did.

About Ventricular Assist Devices (VADs)

VADs are mechanical pumps that can be surgically implanted into your heart to help push blood to your body.



The most common type of VAD is a left ventricular assist device (LVAD). This device supports your heart's biggest chamber, the left ventricle. The LVAD is a small pump placed into the left ventricle to help pump blood to the rest of your body. The internal pump is connected with a cord through your skin to equipment and power sources outside of your body.

These devices can be used as either a short-term therapy while waiting for a heart transplant evaluation or as a permanent long-term option to extend your life and help you feel better.

For more details, refer to the specific device manufacturer information given to you.

After Your Evaluation Testing

When your evaluation testing is done, the heart failure team meets to review results. There are 3 possible decisions:

1. You are approved to have the VAD implant surgery. Or,
2. The team feels the VAD implant surgery is not the best option for you. Or,
3. The team needs more testing or information to make a decision.

You will be notified of the decision and next steps.

If VAD surgery is decided, here are some resources to help you prepare.

Caring for Yourself While Planning Your Implant Surgery

Taking care of your health is very important while waiting. It is expected that you will take all medicines as directed by your doctor and attend all appointments. You must also follow your plan for diet and exercise. Continue to follow the instructions from your heart failure team. Contact them with any concerns or symptoms.

Nutrition

Eating well and exercising before surgery may help you recover faster. After surgery, your body needs enough nutrition to promote healing, fight and prevent infection, and gain back weight you may have lost. In the long-term, good nutrition plays a key role in keeping you healthy.

Frailty

You may be frail if you have lost weight and muscle without trying, feel weak or tire easily, walk more slowly, or need help for daily activities. This could include bathing, dressing, eating, getting out of bed and moving around on your own.

Causes of frailty include aging, being less active, chronic diseases, not eating well, and malnutrition. People who have surgery when they are frail stay longer in the hospital. They are less likely to go home from the hospital and more likely to need to go to a rehab facility before going home.

Improve Your Strength with Exercises

You may need cardiac rehab both before and after surgery. You may need to work with physical therapy if you are unable to go from sitting to standing without using your arms.

Admission for Surgery

It may take several days to weeks to schedule your implant surgery and require an admission a few days before surgery. It is important to be in the best health possible. You may need labs or tests like a heart catheterization to prepare you for surgery. Surgery could be postponed from the original date if the team feels that you are not healthy enough.

What to Bring to the Hospital

Be prepared that your surgery could be scheduled anytime.

Plan to bring these items:

- Advance Directive (Durable Power of Attorney for Health Care or Living Will)
- **All** medicine bottles **and** list of medicines
- Local primary care provider contact information (establish one if not already in place)
- Local pharmacy name
- Electric company name and account number
- Local hospital name
- Loose clothing (sweatpants or something with elastic or drawstring waist bands), T-shirts, socks and supportive shoes for walking and physical therapy
- If you use them, please bring your glasses, hearing aides, dentures, CPAP machines/mask, diabetes supplies
- Personal comfort items (electronic devices, phone, chargers, and blanket or pillow)
- You will need a form of payment for medicines at discharge.
- Cell phone on and ready to call in case of delay or questions (**608-263-6400** or **1-800-323-8942**)

Please do not bring jewelry, large amounts of cash, credit cards, or valuable items.

Surgery

When you are taken to surgery, your support persons may stay in the surgical waiting area. The staff will provide updates to your family.

Once you are in the operating room (OR), you will meet your nurse who will answer questions, make sure you are comfortable, and explain what is happening. There will be ECG (electrocardiogram) patches on your chest to watch your heart rhythm, a blood pressure cuff on your arm, and a plastic clip on your finger to check your heart rate and oxygen levels. The anesthesiologist will ask you to breathe oxygen through a soft plastic mask. Medicines will be given through your IV. After you are asleep, a breathing tube will be placed to breathe for you. Other lines and monitors will be added after you are asleep.

The surgery takes about 5-8 hours.



After Surgery

You will go back to the Cardiothoracic Surgery Unit (B4/5). Family may visit after a recovery period (1-2 hours).



You and your family will hear several noises, such as the beep of the monitor and equipment. The noises you hear are normal. Many patients who have had heart surgery tell us that they recall little of the first hours after surgery. This is normal.

You may need tubes, lines and monitors after surgery. Tubes remove fluid from your body. Lines give you fluid and medicine. Monitors tell us how your heart and lungs are doing. Removal of tubes and lines is based on your progress. This is a list of common tubes, lines, and monitors:

- Ventricular assist device (VAD) driveline
- Intravenous catheter (IV)
- Chest tube
- Endotracheal tube (ET tube)
- Foley catheter
- Pulse oximeter (pulse ox)
- Safety equipment and restraints
- Sequential stockings
- Telemetry
- Temporary pacemaker

Recovering After Surgery

Multiple doctors will visit you every day. The time of day may vary. They assess your recovery progress. They will update you and your family and answer any questions. You will usually be in the hospital for 2-3 weeks after surgery.

The nurses and therapy teams will help you get out of bed as soon as you are able. The goal is to have you moving soon after your breathing tube is removed.



Education After Surgery

You must learn about the care of your new VAD. Education sessions are **required** with **you and your primary support person** in order to be discharged. This may start any time based on how your recovery is going. You may have education sessions with your coordinator, pharmacist, dietitian, physical and occupational therapists (PT and OT), and diabetes care and education specialists.

Your **primary support person must be involved** in your education in order to help you once you return home.

Your primary support person should plan on being at the hospital for education when scheduled with the coordinators. Support person presence is important during the recovery process and for entire duration of VAD therapy. However, each learner is different, and some may require more sessions.

Commitment to Follow-Up Care

Your care after a VAD implant surgery is for your entire lifetime. This long-term care includes:

- Echocardiograms
- VAD device and equipment evaluations in clinic
- General device maintenance
- Labs, at least weekly
- Frequent clinic visits at UW Health in Madison, WI
- Daily to twice-weekly dressing changes
- Taking medicines

Keeping the Commitment

For VAD implant surgery to be a success, you need to commit to these things:

- Follow the treatment plan.
- Follow the patient and support expectations.
- Call about any new problems or symptoms related to your heart failure or your VAD or about any new medicines or tests you have.
- Take all prescription medicines as directed.
- Follow the diet and exercise plan advised by your doctor.
- Go to your clinic visits.
- Get your lab drawn.
- Continue to live a healthy lifestyle by avoiding alcohol, smoking, and nonprescription drugs.
- Follow up primary care doctor for routine health maintenance.
- **Stay near UW Health for a minimum of 3-5 days after discharge from the hospital with your support person.**
- Plan to have a support person with you 24/7 for **at least 2 weeks** after discharge from the hospital.

Follow Up Appointments

The follow-up schedule is intense for the first few months. You may need to see you urgently or with little notice to get information about your device or alarms. VAD clinic follow-up will depend on your healing process.



Clinic visits happen:

- 3-5 days after discharge
- 2 weeks after discharge
- Monthly, for several months, with more frequent labs locally
- Every 6 weeks, with more frequent labs locally

Local Doctor Follow-up

You must have a local doctor to follow your care. Plan to see your local doctor shortly after your VAD surgery. We rely on the local doctor to address routine health issues. This might include diabetes, minor infections and illnesses, and regular health care needs. We will work closely with your doctor to give you the best care. The VAD team manages your heart failure medicines and your device. Follow the advice of your local doctor and the VAD team for diet, exercise, and other health needs. We want you to live a healthy life after surgery.

Types of Medicine After Surgery

The VAD is used as a support for your heart, not as a cure for your heart failure. You will continue to take heart failure medicines after surgery and a blood thinner. The blood thinner will prevent clots from forming in your VAD.

You will need to know what medicines you are taking, why you are taking them, and the dose prescribed for you. Some of your medicines may need to be taken at the same time every day. Not taking your medicines correctly can lead to device malfunction, infection, and other health problems.

Health Concerns After Surgery

Complications and problems are possible for any procedure. We cannot predict all complications that could occur. There are risks that could be temporary (short-term) or permanent (forever). These risks may include, but are not limited to:

- Use of general anesthesia
- Bleeding and may require blood transfusion(s)
- Infection of the drive line or exit wound
- Stroke
- Blood clots
- Multiorgan failure
- Death
- Mental health risks could include, but are not limited to depression, anxiety, and dependency on others

Activity

Over time, most patients can go back to their normal activity with minor changes. It takes time to gain strength and endurance. Keeping up with an exercise routine is the best way to manage your weight and improve your well-being.

You will need to restrict your activity for the first 8-12 weeks after surgery.

Restrictions



Do not drive for if you are taking opioid pain pills. Avoid driving for 2 weeks. Always wear a seatbelt.



10+ pounds

Do not lift, push, or pull more than 10 pounds (like a milk jug) for 8-12 weeks.



You must also protect your pump from water.

Going Back to Work

We encourage patients to return to work after having this surgery. You may not be able to do the same duties as before your surgery. It depends on the type of work you do, but that doesn't mean you can't work. Your heart failure and VAD team will talk with you about returning to work. They will help you with paperwork or questions you may have.

Coping After Surgery

During the process, it is common to feel anxious, depressed, or frustrated. Stress can cause these feelings and so can your medicines. Talk with someone about your feelings. The VAD team can help you cope with these emotions and find a mental health provider close to home to help you during this stressful time. Sharing your feelings with your loved ones and others may also be helpful.

Guided Imagery

<https://www.healthjourneys.com/>

The use of relaxation and meditation can be used to improve mood and physical well-being.

Mindfulness Meditation

<https://www.mindfulnesscds.com/>

Mindful meditation may reduce reactions to stress.

Other Tips After Surgery

Keep support people updated. You are expected to have a support person as a primary contact. This person can update other family members and friends about your status. Make sure the VAD team has that person's contact information.

Make sure your VAD team knows how to reach you. Contact your VAD coordinator if contact numbers change for you or your support person(s).



Have your support person(s) in place.

This is often a family member or close friend. Choose one or more people you feel close with who have the time, health and flexibility to be your caregiver. Your support person must be an adult. Contact your VAD coordinator or social worker with any changes in your support plan.



Make a plan before surgery. Having a plan in advance will make it easier for someone to take over for you at any time. This includes managing mail and bills, home maintenance, and child and pet care. This is important for both you and your support person.



Arrange for your transportation needs to and from appointments and testing.



Learn about VAD surgery and what to expect. As you learn about what to expect you will feel more comfortable with the process.

- Review your VAD evaluation materials.
- Join a VAD support group in person or online.
- If you have questions, contact your VAD coordinator.

Take time each day to get exercise.

Find an activity that you enjoy doing. Fresh air is good for the mind, body and soul. It can be hard to make yourself walk or be active when you do not feel good. But the more you use your muscles before surgery, the quicker you will recover.



Helpful Resources

The resources below may be helpful for heart failure and VAD patients and their families.

HeartMate3 Education

We encourage you and your support person to keep learning outside the scheduled sessions with you VAD team. The company that made your VAD offers resources including:

- **Videos:** This series of short videos match topics that you will learn about throughout your VAD education. They are best viewed on your smart phone, tablet, or computer. Access by using this QR code or website address:

<http://abbott.com/understandheartmate3>



- **Daily text messages:** The QR code below lets you send a text message of “HOPE” using your phone. This enrolls you in interactive lessons during your evaluation period. This is best used on a cell phone. You can send a “STOP” message at any time to unenroll.



Caring Bridge

Free on-line resource to update your family and friends.

<http://www.caringbridge.org>

VAD Forum and Support Group

<http://mylvad.com>

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 © 1/2024 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing HF8320