Mechanical Circulatory Support (MCS) Surgery: LVAD, RVAD, BiVAD, Total Artificial Heart

Your follow-up care

This handout explains follow-up care after your mechanical circulatory support (MCS) surgery. It includes information about clinic visits, when to call your MCS team and how to reach them, as well as diet, activity, and home care.

Patient: ___________________________________________

Device type:_________________________________________

Implant date: ________________________________________

Follow-up visit: ______________________________________

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Your Follow-up Visits

You will have follow-up visits with a nurse practitioner (ARNP), your surgeon, your cardiologist, and your primary care provider (PCP).

With Your MCS Care Team

You will have follow-up visits in the clinic with members of the MCS care team: MCS nurses, nurse practitioners, your heart failure doctor, and your surgeon. You will see one of these team members within 1 week after you are discharged from the hospital.

At this first clinic visit, we will most likely remove your stitches. Your appointment for this visit will be made before you leave the hospital after your implant surgery.

Most patients have follow-up visits in the MCS clinic every week for about 4 to 6 weeks. After that, you will start to come in less often. Our goal is for you to have follow-up visits once a month.

If you need to change your appointment, please call 206.598.6190 and ask for the MCS or VAD (ventricular assist device) Coordinator on call to be paged.
For each clinic visit:

- Go to the lab for a blood draw before your clinic visit. The lab will already have your paperwork.
- Bring your MCS device numbers flow sheet with you.
- Bring your medicines or a list of your current medicines. Include your doses of each one.

**With Your Primary Care Provider**

A primary care provider (PCP) is the healthcare provider you see for your general healthcare needs. Try to see your PCP within 2 weeks after you leave the hospital. Your PCP will check on health issues that you had before your heart surgery. This person will also check any new issues that may have developed since your surgery.

The MCS Team will monitor your heart medicines while you have an MCS device. We will also monitor your other medicines for 1 to 2 months after surgery, or until you see your PCP, whichever is sooner.

It is important for you to stay in touch with your PCP, or to start ongoing care with a PCP. If you do not already have a PCP, we can suggest a clinic for you to call. If your PCP has questions about caring for you while you have an MCS device, please have them call 206.598.6190 and ask for the MCS or VAD Coordinator on call to be paged.

**Tests and Procedures to Expect**

- If you have a VAD, you will have an **echocardiogram** (painless test that uses sound waves to create moving pictures of the heart):
  - Before leaving the hospital after surgery to implant the MCS device
  - 3, 6, and 9 months after implant surgery
  - Twice a year after your test at 9 months
  - As needed to diagnose any problems, based on your health

- If you have a VAD, you will also have a **computed tomography (CT) scan**:
  - 6 weeks after your MCS device implant surgery
  - After that as needed

- If you have a VAD, you will have a **right heart catheterization** to measure pressures in the right side of your heart:
  - 1, 6 and 12 months after implant surgery
  - Once a year after your test at 12 months
  - As needed to diagnose any problems, based on your health
Ask for our handout, “Right Heart Catheterization,” to learn more about this test.

**When to Call Your MCS Team**

An MCS Coordinator is on call 24 hours a day, 7 days a week. To reach the MCS Coordinator, call 206.598.6190 and ask for the MCS or VAD Coordinator on call to be paged. Please use these guidelines to know what time of day or night to call:

- Call any time of day or night if you have urgent needs or an emergency (see “Urgent Needs” below).
- Call between 8 a.m. and 5 p.m. if you:
  - Have routine (non-emergency) questions about your symptoms or your health (see “Routine Needs,” below and on the next page).
  - Need to change or cancel an MCS clinic appointment, or need a prescription refill.

**Urgent Needs**

Urgent or emergency needs may be things like:

- A temperature that is 1°F (0.5°C) higher than your normal temperature
- Increased redness, swelling, tenderness, pain, or drainage around your incision or driveline (the cord that goes through the skin on your abdomen)
- Red heart alarm or other hazard alarm
- Return of heart failure symptoms you had before surgery, such as tiredness that will not go away or dizziness
- Changes in breathing, or a hard time breathing
- Not able to take your medicines
- Any time you go to the emergency room or call 911

**Routine Needs**

Routine needs may include:

- Weight gain of 3 pounds or more over a 5-day period
- Increased swelling in your feet or ankles
- Feeling sick to your stomach or vomiting
- Any other non-urgent symptoms or concerns
- Questions about your appointments, or to change an appointment
- Medicine refills and questions
Your Diet After Heart Surgery

If You Are on a Regular Diet
• Be sure to include good sources of protein in your diet. Protein helps with wound healing.
• Eat a diet that is low in saturated fat, cholesterol, and trans-fatty acid.
• Ask for a referral to see a registered dietitian (RD) if you are not sure what to eat.
• Eat about the same amount of foods that are high in vitamin K from one day to the next. Some of these are leafy green vegetables, vegetable juices, and green tea. They can affect the dose of Coumadin you need.

If You Have Diabetes or High Blood Sugars
• Eat an American Diabetes Association (ADA) diet, unless your provider tells you not to.
• Keep a log of your blood sugar test results before meals and at bedtime.
• Try to keep your blood sugars as close to normal as possible after surgery. This will help your driveline and incision heal. It will also lower your risk for infection.

If You Are on a Special Diet
• Talk with your dietitian if you have any questions.
• Stay on the special diet that has been prescribed for you.

Activity

Activity Restrictions with an MCS Device
• **Do not drive for 3 months.** After 3 months, your MCS team will tell you if it is OK for you to start driving again.
• **Do not take a bath, go swimming, sit in a hot tub or wet sauna, or do other water activities.** These are dangerous. Your MCS device runs on batteries that water will damage.
• **Walking:**
  - If you are able, walk as much as possible. Walk at least once a day. Increase the distance of your walks every day, with a goal of walking 20 minutes a day.
  - Walking helps prevent pneumonia, strengthens muscles, helps with healing, and regulates blood sugar.
  - It is OK to walk up and down stairs, as you are able.
Sternal Precautions

Carefully protect your sternum (breast bone) while you have an MCS device:

- Do NOT lift, pull, or push anything that weighs more than 10 pounds for 6 weeks after your surgery. A gallon of water weighs about 8 pounds.
- Do NOT do any activities that may stress or twist your sternum for 12 weeks after surgery. For example, do not reach for something on a high shelf or reach across or behind your body.
- When you ride in a car, sit in a seat that does NOT have an airbag for 3 months after you leave the hospital.
- Call the MCS or VAD Coordinator on call if you feel any “popping” or “clicking” in your sternum.

Sexual Relations

- You may resume sexual relations when you feel comfortable doing so.
- Take care to protect your incision and follow your sternal precautions.

Home Care with an MCS Device

Trained care partner:

- You will need a care partner to be with you 24 hours a day, 7 days a week for at least 3 months after surgery. This person will help you manage your MCS device.
- When you leave the hospital, you must have at least 1 trained care partner. You and your care partners will have 2 or more training sessions with the MCS or VAD Coordinator. You must schedule these sessions. You can have as many trained care partners as you need to always have a trained person with you for 3 months after surgery.

Power outlets:

- Your Power Module must be plugged into a grounded outlet that does not have anything else plugged into it.
- Do not plug your Power Module into a power strip or extension cord.

Home safety:

- We want your home to be as safe as possible. Please remove rugs or carpets that could cause you to trip or fall.
- With your consent, we will:
  - Tell your electric company that you have a life-sustaining device and ask them to follow their policy for this.
- Tell emergency medical personnel who respond to 911 calls in your area that you use an MCS device and make sure they know how to care for you in an emergency.

**Keep track of these 5 items every day:**

Please write down these items every day on your MCS device numbers flow sheet:

- Your temperature
- Your weight
- Your MCS device values
- That you changed your exit site dressing
- That you checked your System Controller and Power Module

**What to carry with you at ALL times:**

It is important to always have these things with you:

- Backup system controller set at the correct speed
- Charged batteries
- Phone number for the MCS or VAD Coordinator on call

**Dressing supplies:**

- When you leave the hospital, you may get a referral to a wound care supply company where you can buy supplies for your driveline. Or, you may be able to receive your wound care supplies from the clinic. We will let you know when you leave the hospital. If you buy your own supplies, the supply company will mail your supplies to you. Your insurance will be billed, if it covers these supplies.

- You will need to order more supplies before you run out, just as you refill your prescriptions for medicines before you run out. Keep track of your dressing supplies and know when to order more.

- Please call the MCS or VAD Coordinator on call if you have problems getting your supplies.

**Managing your driveline:**

- Please keep your driveline clean and dry.
- Change the dressing the way you were shown.
- Keep the driveline stable at all times.

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Questions?

Your questions are important. If you have questions or concerns any time of day or night:

Call 206.598.6190. Say you are a Mechanical Circulatory Support patient. An MCS or VAD Coordinator will call you back, assess your problem, and help you.