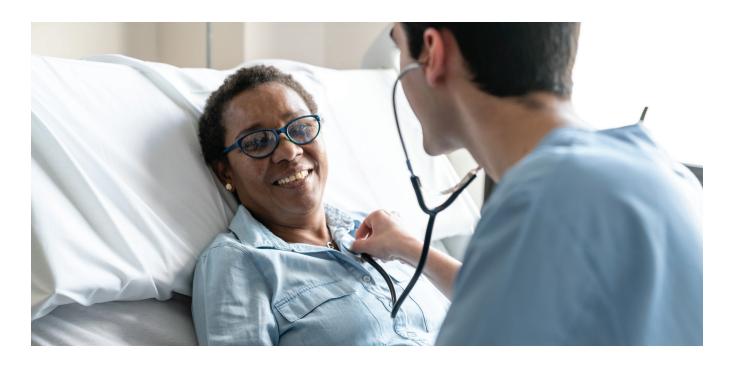


### Going Home After Cardiac Surgery



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### Welcome

The staff of the Hoffman Heart and Vascular Institute are pleased that you are in the recovery phase of your hospitalization. This informational booklet was written to assist you and your family with questions that may arise when you return home. We hope this information will aid you in practicing a heart-healthy lifestyle.

If you have any questions, please contact your health care team.

### Our Cardiac Surgeon's Offices

- Joseph DeSimone, M. D.
- Joseph E. Flack, III, M.D.

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- Robert Gallagher, M.D.

1000 Asylum Avenue, Suite 3201A Hartford, CT 06105

860-714-1094

### **Entering From Floor 2 of the Collins Garage:**

#### IF YOU CAN WALK A GOOD DISTANCE:

Go through the 1st set of double glass doors and take an immediate left. This is the connector to the Gengras Medical Office Building (1000 Asylum Avenue). Follow the hallway to the lobby and take the Gray elevator to the 3rd floor.

#### IF YOU HAVE DIFFICULTY WALKING:

Proceed directly to the security guard desk and request a mini cab (golf cart). The driver will escort you to the Gengras Medical Office Building lobby. Take the Gray elevator to the 3rd floor.

Take a left off the elevator, then another left. We are past the Dental Center on the right; Suite 3201A.

### **Entering From the Saint Francis Lobby:**

Take the Blue elevator to the 2nd floor and proceed directly to the information desk for assistance. There, you can request specific walking directions or a mini cab.

### Going Home After Cardiac Surgery

### **Care of Your Incisions:**

- Shower every day but no tub baths until incisions are healed
- Use warm water and soap
- Wash, rinse, and pat dry all incisions
- Keep incisions clean and dry
- No lotions, powders, creams, or deodorant on incisions until healed
- Chair may be placed next to or in shower on a non skid surface as needed for sitting

## Check Your Incisions Daily and Notify Your Surgeon for Any of These Symptoms:

- Redness, swelling, or increased tenderness or warmth to the incision
- Temperature greater than 100 101° F orally
- New drainage from incision or change in color or consistency in drainage

### **Sternal (Breastbone) Precautions:**

- Incisions and chest wall discomfort may occur for several weeks
- You may have numbness in the left or right side of your chest if the internal mammary artery was used for one of your bypass grafts
- The sternum (breastbone) takes 8-10 weeks to heal
- Support your chest with your hands or a pillow when coughing or sneezing
- Wear a supportive bra (without underwire)
- Wear your seatbelt/shoulder harness while riding in the car
- You may ride in the front seat, despite airbags
- No driving for 3-6 weeks following surgery. Check with your surgeon at post operative appointment
- You may do light housework, cook light meals

### Activities to Avoid for 4-8 Weeks During the Healing Process:

- Lifting anything heavier than 10lbs including children, pets, or groceries
- Check with your physician about activities like yard work, raking, mowing, gardening, and shoveling snow
- Housework such as vacuuming, washing floors, windows, or carrying trash
- Opening jars, windows, or doors, that may be stuck

#### And, Remember To:

- Elevate your legs above level of heart when lying down or sitting in a recliner
- Notify your physician if leg swelling increases or becomes uncomfortable
- Weigh yourself daily first thing in the morning after urinating and before you eat and record (daily weight diary on page 31).
- Notify physician if weight gain greater than 2 pounds per day or 5 pounds per week
- Check with your physician before dental procedures especially if you had valve surgery (please see Bacterial Endocarditis Precaution information highlighted in purple below)
- Check with your doctor about shoveling snow
- Do not smoke. Stay away from smoke. This includes cigars, cigarettes, pipes and second hand smoke.
- Do not use recreational or illegal drugs of any kind

### **Swelling in Your Legs**

You may have swelling in your legs, ankles, and feet especially if you had a leg incision to remove veins for bypass grafts.

This swelling may last for several months.

#### **Bacterial Endocarditis Precautions:**

- You are at risk for infective (bacterial) endocarditis because of your heart valve surgery.
- It may be recommended to take antibiotics prior to some types of procedures including dental work. Please discuss with your cardiologist before doing so.
- It is your responsibility to tell all your physicians and your dentist about your valve surgery.

- Your physician and dentist may consult your cardiologist for detailed information.
- Always carry your valve identification card and show it to your physician and dentist.
- Good oral hygiene is very important to help prevent an infection that can grow on your new heart valve.
- See your dentist regularly and follow their recommendations closely.

### When to Call Your Doctor

### **Call Your Cardiologist:**

- If you have fever, incisional redness, increased tenderness or warmth and/or drainage
- If you have unrelieved or increased incisional pain
- If you have difficulty breathing, increase swelling
- If you notice that your angina occurs more frequently, is more uncomfortable, lasts longer than usual or occurs at rest
- If you gain 2lbs in one day and/or 5lbs in one week (weight diary can be found on page XX)
- If you have unusual fatigue
- Fast or irregular heart beat
- Persistent cough or trouble breathing when you lay down at night

- Swelling of feet or legs
- If you are experiencing side effects from the medications
- To have prescriptions filled or re-filled
- If you run out of renewable prescriptions
- To schedule a follow-up appointment with your doctor(s) within 1-2 weeks of your discharge
- Your doctor will clear you to return to work.
   Call if you need documentation.
- If you are thinking about or planning to become pregnant
- If you feel depressed

**Call 911** if your angina/chest pain is associated with any of the following symptoms: nausea, shortness of breath not relieved with rest, vomiting, cold sweats, palpitations.



### Cardiac Rehabilitation Program

Before beginning any exercise program, it is important that you speak with your cardiologist. He/she may have specific guidelines for you to follow based on your current health status.

Getting involved in Cardiac Rehabilitation is an essential part of your treatment plan. We will help you with a referral to a program. The goal of Hoffman Heart's Cardiac Rehabilitation program is to provide guidelines for exercise and lifestyle changes that can reduce your risk of another cardiac event. Our team will teach you how to start an exercise program. You will also learn how to stop smoking, eat heart healthy, control your weight, and manage stress. Not only do you get expert monitoring during an exercise session from medically trained staff, you get the support from others that have similar heart problems.

Cardiac rehabilitation is recommended for people with heart disease, or with coronary risk factors such as:

- Smoking
- Hypertension (high blood pressure)
- Dyslipidemia (abnormal blood fats)
- Diabetes

- Overweight
- Family history of heart disease
- Lack of exercise
- Stressful lifestyle

Cardiac Rehabilitation is covered by most insurance plans. However, it is insurance specific along with the types of heart procedures.

The cardiac rehabilitation staff will assist you in the program to restore and promote an active, healthy way of life. If you have any further questions, please call us at 860-714-4538.

### Exercise

Exercise that is most beneficial to the heart involves movement of the whole body such as walking, swimming, rowing, biking, etc. These exercises use large muscle groups and should eventually be performed 20-30 minutes daily for optimal benefits.

Please speak with your cardiologist before starting an exercise program.

### **Regular Exercise:**

- Helps the heart pump better.
- Helps control weight and blood pressure.
- Helps control blood sugar.
- Helps handle stress better.
- Helps manage cholesterol levels.

### **Exercise Considerations/Precautions:**

- Wear comfortable clothing and walking shoes.
- Never hold your breath.
- **DO NOT** exercise in extreme temperatures. Use an indoor facility instead.
- You should be able to carry on a conversation while walking, without feeling breathless.
- Remember to warm-up and cool-down for 3-5 minutes at a slower walking pace before and after exercise to prevent injury.
- Walk on level surfaces and avoid treadmills until you begin your Cardiac Rehabilitation Program.

- If at any time you feel any discomfort in neck, chest, jaw, back or arms or if you feel lightheaded or dizzy, STOP and REST. Discontinue exercise and report your symptoms to your cardiologist.
- Cool down completely before taking a warm shower.
- Avoid hot showers.

For questions, please contact the Cardiac Rehabilitation Program at 860-714-4538.

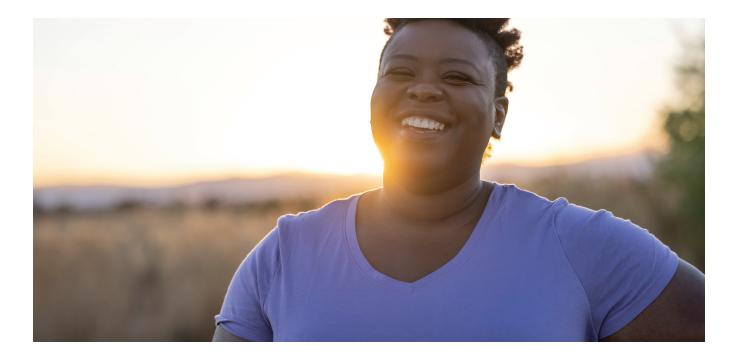
### Stairs:

When you first get home, do not climb stairs for the purpose of exercise. When you do, take them at a slow pace. Stop and rest if you tire. When using the handrail, do not pull yourself up with your arms. Use your legs.

#### FOR CARDIAC SURGERY PATIENTS:

If you have an incision on one of your legs, climb stairs by first stepping up with the leg without the incision, followed by the other leg with the incision. When going down the stairs, start with the leg with the incision.

Remember: "Up with the good, down with the bad."



### Walking:

Always walk at your own normal pace and do what is comfortable for you. Increase only duration over the next month, not speed, until you have your follow up with your cardiologist. The following guidelines may help you get started.

SAMPLE WALKING PROGRAM								
Week	Frequency	Duration	Intensity					
1	1-2	5-10 min.	Low Level					
2	1-2	20 min.	Low Level					
3	1	30 min.	Low Level					
4	1	30-40 min.	Low Level					

Helpful Reminder: Exercise at a low level. Report any problems to your cardiologist.



### Eat MyPlate Way

Make every bite count, small changes matter! Eating healthy is important at every stage of life. The food and beverages that people consume have a profound impact on their lives. Limit foods and beverages higher in added sugars, salt, cholesterol, and saturated fats.

Avoid caffeine and alcohol for the first few weeks following cardiac surgery or a cardiac event. Clear consumption of alcohol and caffeine drinks with your cardiologist.

#### Whole Fruits:

- Vary your fruits by adding color when choosing fruits.
- Focus on whole fruits.
- Eat a variety of fruits.
- Choose fresh first, then frozen, canned (packed in water), or dried fruits.
- Limit fruit juices because they can be high in added sugars.
- When choosing, make sure it is 100% fruit juice.

### **Vegetables:**

- Vary your vegetables by adding color when choosing vegetables.
- Choose more dark green vegetables (Important for patients on coumadin see page 25).
- Try to consume more dry beans and peas.

### **Grains:**

- Make sure at least half of your grains are whole grains.
- Limit refined grains.
- Eat at least 3 ounces of whole grain bread, cereal, rice, or pasta every day. Instead of white bread, try a whole-grain pita, naan, or other whole-grain flatbread.

### Dairy:

- Choose calcium-rich foods.
- Select low-fat or fat-free when choosing dairy products.
- If you are lactose intolerant, choose products such as lactose-free yogurt or milk products, or consider other calcium sources.

### **Protein (Meats and Beans):**

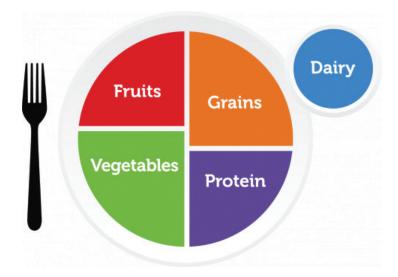
- Select lean options when choosing protein.
- Choose low-fat or lean meats and poultry.
- Bake it, broil it, or grill it.
- Vary your choices of protein with more fish, beans, peas, nuts, and seeds.

#### Oils:

- Know your fats. Choose unsaturated fats (poly & Mono), limit saturated fats, and do not consume trans-fat, hydrogenated and tropical oils.
- Make the most of your fat sources from fish, nuts, and vegetable oils.
- Limit solid fats such as butter, stick margarine, shortening.

#### **Additional Resources:**

- The American Heart Association (Healthy Eating)
   www.heart.org/en/healthy-living/healthy-eating
- My Plate U.S. Department of Agriculture www.myplate.gov





## Smoking and the Effects on Your Heart and Vascular System

The chemicals in tobacco harm nearly every organ in the body including the heart, lungs, and blood vessels. Smoking is a major risk factor for heart and vascular disease.

Any amount of smoking, even light smoking or occasional smoking, damages the heart and blood vessels. If you smoke and already have heart disease, quitting smoking will reduce your risk of heart attack and death.

Quitting smoking is possible, but it can be hard. Millions of people have quit smoking successfully and remained nonsmokers. A variety of strategies, programs, and medicines are available to help you to quit smoking. These programs can help you recognize events, feelings or activities that increase your desire to smoke and help identify and build your coping skills to effectively stop smoking. Talk to your cardiologist about these options.

You can get support from hotlines and websites such as the Connecticut Quitline. To learn more, visit www.committoguitct.com or call 1-800-QUIT-NOW (1-800-784-8669).

### The Benefits of Quitting Tobacco Use:

- After one month you improve your circulation, cough less, are less likely to be short of breath and fatigued.
- After one year your risk of heart disease is half that of someone who does smoke.
- After five to fifteen years, your risk of stroke decreases to that of a non-smoker, and your risk of lung disease and cancer decreases significantly.



## Sexual Activity after Heart Disease or Heart Surgery

Since every individual has different circumstances, please ask your cardiologist or cardiothoracic surgeon when you can safely resume sexual activity.

We understand that sexual activity is an important part of your and your partner's lives. Studies (in young adults) have shown that sexual activity takes about the same amount of energy as it takes to climb two flights of stairs or walk briskly for a short duration. Therefore, it is essential that each patient talk to their doctor about their individual plan.

With physician approval, both men and women may typically resume sex within several weeks after a cardiac event. Patients should be mindful to avoid sexual positions that may cause discomfort or put undue stress on a cardiac catheterization site or surgical site.

Some medications including blood pressure medications, water pills, narcotics, antidepressants, and medications used for chest pain, irregular heartbeat, or other conditions can affect sexual drive and function. If you experience any of these symptoms, do not stop taking your medication and reach out to your cardiologist.

Medications, such as, Avanafil (Stendra), Sildenafil (Viagra), Tadalafil (Cialis) and Vardenafil (Levitra) are used to treat erectile dysfunctions. People with heart disease or after cardiac surgery should talk to their cardiologist about the benefits and risks of using these medications. The use of anti-anginals, such as nitrates, and erectile dysfunction medications should be avoided. The combination of these two drugs may cause abnormally low blood pressure that may be life threatening. Please talk to your cardiologist.

Heart disease and having cardiac surgery affects you and your partner. Please include your partner when discussing the resumption of sexual activity. Caring, understanding, and communication are keys to recovery.

### **Helpful Hints:**

- Be patient with yourself and avoid rushing into sex.
- Choose a time when you are both rested and free from stress.
- Don't expect too much at first.
- Wait two or three hours after eating a full meal before having sex.
- Avoid consuming alcohol prior to sexual activity.
- Initially you may find that engaging in sex in the morning when you are fully rested in best. As you get stronger, you may choose any time of the day.
- If you are thinking about or planning to become pregnant, be sure to consult your cardiologist.

For more information on sexual activity and heart disease, visit the American Heart Association's website www.heart.org and search sexual activity and heart disease.

### Your Emotions

After your cardiac event you may experience many different emotions. You may feel angry, irritable, frightened, discouraged, and/or depressed. It is normal to have ups and downs.

After a cardiac event you need to take care of yourself physically and emotionally. There are some things you can do to help you cope.

Having a positive attitude helps with recovery. Spend time with family and friends. Share your feelings. Strong support is important at this time. Talking to family and friends can be of great comfort.

Get back into your routines as soon as you can.

Join a cardiac rehabilitation program. These programs not only offer exercise, but emotional support from staff and other patients. The program addresses stress and anger management. It provides social interaction.

Ask for help if you need it. You may have some degree of depression after a cardiac event. If you still feel depressed, talk with your cardiologist or primary care physician. By participating in counseling sessions and/or taking medications you can reduce your symptoms of depression.

A cardiac event is a life-altering experience. Your emotional health needs to be restored as much as your heart needs to heal.

For more information on depression and heart disease, visit the American Heart Association's website www.heart.org and search depression.

### Medication Guidelines

Before you leave the hospital, your hospital provider will prescribe medications for you to take at home. The nurse will give you a list of these medications, information about how they work and their side effects.

Take your medications as directed. This is one of the most important things you can do to improve and maintain your health. Fill your prescriptions promptly, and be careful not to miss a dose.

Talk with your cardiologist before taking other prescriptions, over-the-counter medications, vitamin supplements, herbal remedies, erectile dysfunction medications and non-steroidal anti-inflammatory drugs (NSAIDs). Some common NSAID medications include: ibuprofen (Advil, Motrin), naproxen (Aleve, Anaprox DS, Naprosyn) and celecoxib (Celebrex).

Talk with your cardiologist if you are thinking about or planning to become pregnant.



### For Safe and Effective Use of Your Medications Remember the Following Guidelines:

- Take medication as directed.
- If you were prescribed an antiplatelet such as aspirin, clopidogrel (Plavix), ticagrelor (Brilinta), prasugrel (Effient), do not stop taking unless directed by your cardiologist.
- Keep medications in separate labeled containers.
- Take your pills at approximately the same time each day according to your schedule.
- If you forget to take a pill, do not take two the next time. If you are unsure of what to do, call your cardiologist.
- Carry a current list of your medications at all times.

- If you begin having new problems or think something unusual is related to your medication, call your cardiologist. Do not change the dosage or stop taking your pills without your cardiologist's advice. They may be able to switch you to a different medication which achieves the same effect.
- Avoid drinking grapefruit juice as it may interfere with your medications.
- Use our Meds to Go program. The program will see that your prescriptions are filled at the Saint Francis Hospital Pharmacy prior to discharge.

### MyMEDS: Patient Medication Guide

This guide offers information about your medications, why you're taking them, and the most common side effects to look for. If you have any questions, feel free ask your nurse or doctor for help.

MYMEDS: PATIENT MEDICATION GUIDE								
Medication Name Generic (Brand)	Reason for Medication	Most Common Side Effects						
ACE Inhibitor  Captopril (Capoten®)  Enalapril (Vasotec®)  Lisinopril (Prinivil®, Zestril®)  Ramipril (Altace®)  ARB  Losartan (Cozaar®)  Olmesartan (Benicar®)  Valsartan (Diovan®)  ARNI  Neprilysin inhibitor and angiotensin II receptor blocker combo pill  Sacubitril/valsartan (Entresto®)	<ul> <li>Lowers blood pressure</li> <li>Treats heart failure</li> <li>Improves survival after a heart attack</li> </ul>	<ul> <li>Dizziness</li> <li>Lightheadedness</li> <li>Dry cough</li> <li>Loss of taste</li> <li>Headache</li> <li>Increased potassium (labs ordered by cardiologist or PCP to monitor)</li> </ul>						
Acid Reducer  Esomeprazole (Nexium®)  Famotidine (Pepcid®)  Lansoprazole (Prevacid®)  Omeprazole (Prilosec®)  Pantoprazole (Protonix®)  Ranitidine (Zantac®)	<ul> <li>Treats heartburn or acid reflux</li> <li>Protects from and allows healing from stomach ulcers</li> </ul>	<ul><li>Headache</li><li>Constipation</li><li>Diarrhea</li></ul>						
<ul> <li>Anti-anginal</li> <li>Isosorbide dinitrate (Isordil)</li> <li>Isosorbide mononitrate (Monoket, Imdur)</li> <li>Nitroglycerin (Rectiv, Nitro-Time, Nitrostat)</li> <li>Ranolazine (Ranexa)</li> </ul>	Relieves or prevents chest pain (angina) caused by heart disease	<ul><li>Dizziness</li><li>Headache</li><li>Nausea</li><li>Speak to your doctor about drug interactions</li></ul>						

MYMEDS: PATIENT MEDICATION GUIDE							
Medication Name Generic (Brand)	Reason for Medication	Most Common Side Effects					
Antiarrhythmic  • Amiodarone (Cordarone®, Pacerone®)  • Sotalol (Betapace®)  • Flecainide (Tambocor®)  • Tikosyn (Dofetilide®)  • Multaq (Dronedarone®)	Prevents and controls irregular heart rhythms	<ul> <li>Stomach upset</li> <li>Headache</li> <li>Sensitivity to the sun</li> <li>Consider avoiding grapefruit (ask your cardiologist)</li> <li>Call 911 or your cardiologist if you have fainting or a fast or pounding heartbeat</li> </ul>					
Anticoagulant  • Apixaban (Eliquis®)  • Dabigatran (Pradaxa®)  • Enoxaparin (Lovenox®)  • Rivaroxaban (Xarelto®)  • Warfarin (Coumadin®)	<ul> <li>Helps keep harmful blood clots from forming or growing larger in blood vessels throughout the body including the heart, brain, lungs and legs</li> </ul>	<ul> <li>Bruising</li> <li>Bleeding</li> <li>Watch for dark or bright red stool or urine, coughing or vomiting up material that looks like coffee grounds</li> </ul>					
Anti-platelet  • Aspirin  • Clopidogrel (Plavix®)  • Prasugrel (Effient®)  • Ticagrelor (Brilinta®)	<ul> <li>Helps prevent harmful blood clots from forming that could cause a heart attack or stroke</li> <li>Helps keep arteries, stents and grafts open</li> </ul>	<ul> <li>Upset Stomach</li> <li>Bruising</li> <li>Risk of bleeding</li> <li>Watch for black or bright red stool</li> </ul>					
Beta Blocker  • Atenolol (Tenormin®)  • Bisoprolol (Zebeta®)  • Carvedilol (Coreg®)  • Labetalol (Trandate®)  • Metoprolol (Lopressor®, Toprol XL®)  • Nebivolol (Bystolic®)	<ul> <li>Lowers blood pressure and heart rate</li> <li>Improves survival after a heart attack</li> <li>Helps treat heart failure</li> </ul>	<ul><li>Tired</li><li>Dizziness</li><li>Lightheaded</li><li>Weakness</li></ul>					
Calcium Channel Blocker  Amlodipine (Norvasc®)  Diltiazem (Cardizem®)  Nifedipine (Procardia®)  Verapamil (Calan®)	<ul> <li>Lowers blood pressure</li> <li>Helps reduce chest pain</li> <li>Increases blood supply to the heart</li> <li>Diltiazem and Verapamil can help prevent and control irregular heartbeats</li> </ul>	<ul> <li>Swelling of the hands, feet, ankles or lower legs</li> <li>Dizziness or lightheadedness</li> <li>Stomach upset</li> </ul>					

MYMEDS: PATIENT MEDICATION GUIDE								
Medication Name Generic (Brand)	Reason for Medication	Most Common Side Effects						
<ul> <li>Diuretic</li> <li>Bumetanide (Bumex®)</li> <li>Furosemide (Lasix®)</li> <li>Hydrochlorothiazide (Microzide®)</li> <li>Metolazone (Zaroxolyn®)</li> <li>Spironolactone (Aldactone®)</li> <li>Torsemide (Demadex®)</li> </ul>	<ul> <li>Lowers blood pressure</li> <li>Gets rid of extra body fluid</li> </ul>	<ul> <li>Thirst</li> <li>Dry mouth</li> <li>Increased urination</li> <li>Muscle cramps</li> <li>Decreased potassium (labs ordered by cardiologist or PCP to monitor)</li> </ul>						
<ul> <li>Electrolytes</li> <li>Magnesium Sulfate</li> <li>Potassium Chloride (K-Dur<sup>®</sup>, Klor-Con<sup>®</sup>)</li> </ul>	Electrolytes support function of the heart, kidneys, muscles, nerves, and digestive system	<ul><li>Abdominal discomfort</li><li>Nausea/vomiting</li><li>Diarrhea</li></ul>						
Sodium-Glucose Cotransporter-2 (SGLT-2)  Bexagliflozin (Brenzavvy®)  Canagliflozin (Invokana®)  Dapagliflozin (Farxiga®)  Empagliflozin (Jardiance®)  Ertugliflozin (Steglatro®)  Sotagliflozin (Inpefa®)	<ul> <li>Treats type 2 diabetes</li> <li>Reduces the risk of heart failure, hospitalization and death from heart-related causes</li> <li>Reduces the risk of worsening kidney disease</li> </ul>	<ul> <li>Urinary or genital tract infections</li> <li>Increased urination</li> <li>Back pain</li> <li>Nausea</li> </ul>						
Statin  Atorvastatin (Lipitor®)  Pravastatin (Pravachol®)  Rosuvastatin (Crestor®)  Simvastatin (Zocor®)  PCSK9 Inhibitors (Injectables)  Alirocumab (Praluent®)  Evolocumab (Repatha®)  SiRNA Agent (Injectables)	<ul> <li>Lowers bad cholesterol</li> <li>Increases good cholesterol</li> <li>Reduces the risk of heart attack and stroke</li> </ul>	<ul> <li>Abdominal discomfort</li> <li>Muscle cramps</li> <li>Redness, itching, swelling, pain or tenderness at the injection site</li> </ul>						

MYMEDS: PATIENT MEDICATION GUIDE								
Medication Name Generic (Brand)	Reason for Medication	Most Common Side Effects						
Pain  Oxycodone/ Acetaminophen (Percocet®)  Hydrocodone/ Acetaminophen (Vicodin®)  Tramadol (Ultram®)  Hydromorphone (Dilaudid®)  Oxycodone I.R. (Roxicodone®)  Oxycodone ER (Oxycontin®)  Morphine (MSContin®)	• Pain relief	<ul> <li>Nausea/Vomiting</li> <li>Constipation</li> <li>Drowsiness</li> <li>Dizziness</li> </ul>						
<ul> <li>Anti-Nausea</li> <li>Ondansetron (Zofran®)</li> <li>Promethazine (Phenergan®)</li> <li>Prochlorperazine (Compazine®)</li> <li>Metoclopramide (Reglan®)</li> <li>Scopolamine Patch (Transderm Scop®)</li> </ul>	• Nausea relief	<ul><li>Headache</li><li>Constipation</li><li>Drowsiness</li><li>Dizziness</li></ul>						

### Tips to Follow When Taking Warfarin (Coumadin):

- Take the medication at the same time each day, preferably at night
- Go for blood test (INR) as directed, the results will determine your dose
- Many medications can interact with Warfarin, including antibiotics. Please let the doctor who manages your Warfarin know that you are taking antibiotics
- Do not take any other medications without checking with your cardiologist. This includes aspirin, vitamins, herbal supplements, dietary supplements and NSAIDs
- Tell your doctor, dentist and all healthcare providers that you take warfarin. It is also a good idea to carry a medical ID card or wear a medical-alert bracelet
- Use a soft toothbrush and an electric razor
- Keep your diet consistent

Vitamin K helps your blood clot. Eating foods that contain vitamin K can affect the way Warfarin works. You do not need to avoid foods that contain vitamin K but you do need to keep the amount you eat steady (about the same day-to-day).

Examples of foods high in vitamin K are asparagus, avocado, broccoli, cabbage, kale, spinach, and some other leafy green vegetables. Oils, such as soybean, canola, and olive oils, are also high in vitamin K.

Below are some other foods and drinks that can affect the way Warfarin works in your body:

- Grapefruit, grapefruit juice, cranberries, cranberry juice, fish oil supplements, garlic, ginger, licorice, and tumeric and other herbal supplements
- Herbs used in herbal teas
- Avoid alcohol. Alcohol can increase the effect of Warfarin in your body

For more information regarding anticoagulants see page XX.

### **Nitroglycerin (Fast Acting):**

Nitroglycerin is a medication used specifically for the treatment of angina/chest pain. Nitroglycerin helps relieve angina by improving the balance between the oxygen needed and the oxygen delivered in the bloodstream to your heart.

You should keep these small pills in the brown glass bottle. Carry this bottle with you at all times, whether you are experiencing angina or not.

If stored properly in the original brown glass bottle (away from heat, sunlight, and moisture) the medication is good for 6 months from opening. If they have never been opened, they are good until the expiration date.

At the first sign of angina, make sure you have access to a phone and your nitroglycerin pills. Stop what you are doing and sit or lie down. Medication may make you dizzy. Place one pill under your tongue, or between your lip and gum. Don't swallow or chew the tablet. It may produce a tingling or burning sensation while it dissolves. Do not eat, drink or smoke while the tablet is dissolving.

If the angina is not relieved after five minutes, call 911. You may repeat the dose two more times, five minutes apart.

Nitroglycerin is also available in an aerosol spray which is taken as a metered dose under your tongue.

Common side effects listed below. Call your cardiologist with questions:

- Headaches
- Dizziness
- Nausea
- Flushing

### Risk Factors for Coronary Artery Disease

Risk factors are something that increase your chance of getting a disease. Below, you will find risk factors for coronary artery disease divided into two categories: non-modifiable (factors you cannot change) and modifiable (factors you can change).

A cardiac rehabilitation program is recommended for people with heart disease and with the following risk factors:

#### Non-Modifiable:

- Increasing age
- Family history of coronary artery disease
- Gender (male sex)
- Heredity

### **Modifiable:**

- Tobacco use
- High blood pressure
- High blood cholesterol
- Obesity/Overweight
- Inactive lifestyle

- Poor diet and nutrition
- Diabetes
- Stress
- Metabolic syndrome

The good news is, the Hoffman Heart Cardiac Rehabilitation team can help you manage your health and well-being in order to reduce your risk factors for coronary artery disease.

For more information, please call 860-714-4538.

For more information on risk factors, visit the American Heart Association's website www.heart.org and search coronary artery disease risk factors.

### Angina

Angina is the symptom or discomfort that occurs when a certain area of your heart temporarily does not receive enough oxygenated blood.

Usually angina happens with increased stress or activity when the heart must work harder and needs more blood supply for energy. Partial blockages in the coronary arteries may cause decreased blood flow and oxygen to the heart. When the heart needs more oxygen than it receives, you may feel angina. This acts as a warning signal that tells you to stop what you are doing and rest. When the workload on your heart decreases, your angina may go away.

If you begin to experience angina at rest, or you have an increase in the intensity or frequency of angina episodes, call your cardiologist. Often a person's angina will feel the same each time and be brought on by the same level of activity.

Even if you have had coronary bypass surgery, or angioplasty, it is still possible to experience angina.

### **What Does Angina Feel Like?**

The locations and severity of discomfort differ among individuals. The most common sensations experienced as angina are as follow:

- Burning; squeezing; heaviness; pain; pressure fullness or tightness in the chest, upper abdomen or throat
- Shortness of breath
- Indigestion
- Numbness; heaviness; tingling; aches or pains in the arms, shoulders, elbows or fingers, especially on the left side
- Choking sensation in the throat
- Pain in the jaw, gums, teeth or throat

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- Pain between the shoulders
- Extreme fatigue

Angina is not a heart attack and causes no permanent damage to the heart muscle. Symptoms usually will resolve with rest and/or nitroglycerin. However, if the character of your symptom changes and you are unsure what to do, contact your cardiologist.

Some patient's symptoms may also include pain or aching in the jaw, ear, shoulder, back, or abdomen.

**Call 911** if your angina is associated with any of the following symptoms: nausea, shortness of breath not relieved with rest, vomiting, cold sweats, palpitations.

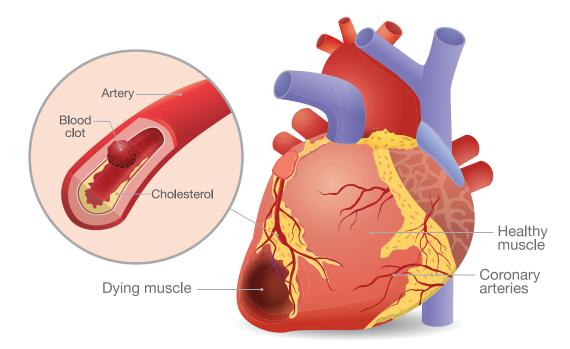
### Heart Attack

A heart attack occurs when there is a severe blockage in an artery that carries oxygenenriched blood to the heart muscle. The sudden lack of blood flow and oxygen supply to the heart muscle can cause permanent damage. Having a heart attack may increase your risk for developing heart failure (see pages XX-XX).

#### What Causes a Heart Attack?

- Plaque buildup inside the artery wall.
- A blood clot: Blood cells that stick to the plaque inside the artery wall.
- **Spasm:** A coronary artery that temporarily constricts.
- **Stress cardiomyopathy:** Reversible left ventricular apical ballooning of heart (broken heart syndrome) caused by medical illness or something unknown.

When your heart muscle does not get enough blood and oxygen, damage to the heart muscle can quickly happen. It is very important to get medical help as soon as you have signs of a heart attack. Treatment may decrease the amount of damage, but works best if given soon after symptoms occur.



Anatomy of a heart attack.

### **Symptoms of a Heart Attack**

#### **WARNING SIGNS:**

- Burning, squeezing, heaviness, pain, pressure, fullness or tightness in the upper chest, upper abdomen, or throat
- Shortness of breath
- Indigestion
- Numbness; heaviness; tingling; aches or pains in the arms, shoulders, elbows or fingers, especially on the left side
- Choking sensation in the throat

- Pain in the jaw, gums, teeth or throat
- Pain between the shoulders
- Extreme fatigue
- Sweating (may be a cold, clammy sweat)
- Dizziness or fainting
- Rapid or irregular heartbeat
- Pale or gray-looking skin

#### SOME PATIENTS TEND TO PRESENT DIFFERENTLY:

- Shortness of breath
- Cold sweats
- Weakness or unusual fatigue

 Pain high in the abdomen or chest, or in the back, neck, jaw

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In weeks leading up to heart attack, some patients may have symptoms of unusual fatigue, shortness of breath, anxiety, insomnia, and indigestion.

If you have symptoms of a heart attack - call 911.



### Atrial Fibrillation

Atrial fibrillation (A Fib) is when the upper chambers of the heart beat erratically and cause an irregular heartbeat.

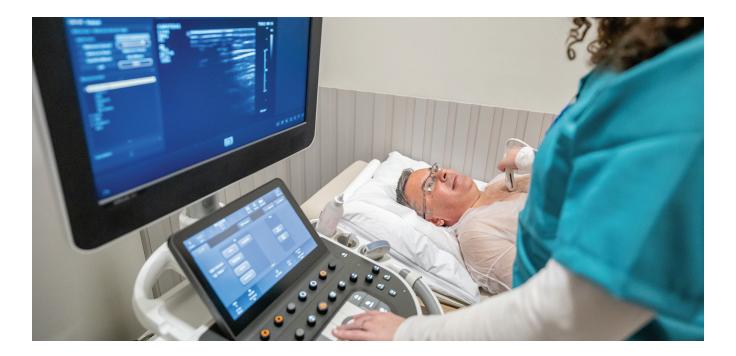
The upper chambers of your heart do not pump blood into the lower chambers efficiently. The blood left in the upper chambers tends to pool and may form clots. These clots can move to any part of your body. If the clot goes to your brain, it can block the flow of oxygen to part of your brain. When this happens, some of your brain cells may die. This is called a stroke. Having A Fib makes you five times more likely to have a stroke.

### **Symptoms**

Some people with A Fib have no symptoms. Others may have heart palpitations, shortness of breath, chest pain and more. A Fib can occur every day or only a few times a year.

#### **Stroke Prevention**

Medication prescribed by your doctor can reduce the risk of stroke with A Fib. Anticoagulants known as blood thinners help prevent clots from forming. It is important to stay on medication as prescribed.



# What is Heart Failure and How is it Diagnosed?

Heart Failure (HF) is a long-term condition in which the heart is not able to pump blood throughout the body due to being weak or stiff. This can cause shortness of breath (especially when lying down), fatigue (feeling tired), swelling in the feet/legs/stomach, dizziness/lightheadedness, weight gain, and more...

Your doctor will examine you, review your medical history, and have you go for various tests to determine if you have heart failure. The results of these tests will help your doctor determine what medications and treatments are best for you.

**Chest X-ray** is a radiology test that creates a picture of the structures inside your chest, such as the heart and lungs. An enlarged heart or fluid in and around your heart can be signs of heart failure.

**Electrocardiogram (ECG or EKG)** is a simple, painless test that records the heart's electrical activity through placing stickers (leads) on the outside of your body.

**Echocardiogram**, also called an "Echo", uses sound waves to show images of the heart. Your provider will be able to learn about the size, shape, and movement of your heart as well as how well your heart valves are working. During the echo, your heart's ejection fraction (EF) is measured. This is the amount of blood that is pumped out of your heart with each heartbeat.

**Blood tests** will be ordered by your provider to check how well your kidneys, liver, and thyroid gland are working. B-type natriuretic peptide (BNP) is a blood test often used to diagnosis heart failure.

**Right heart catheterization** may be ordered to check pressures in the heart, measure blood and oxygen the heart pumps with each heartbeat, and the amount of oxygen in your blood.

### **Heart Failure and Your Ejection Fraction**

Ejection Fraction is a comparative number that looks at the amount of blood inside of the heart to the amount of blood that the heart pumps out. This percentage or fraction describes the heart's ability to pump blood to the rest of the body.

With the right treatment and care, individuals can improve their ejection fraction and maintain a great quality of life.

What are the different ranges of Ejection Fraction and what do these mean?

#### **NORMAL EJECTION FRACTION:**

50-70% of your blood is pumped out of the heart each time it beats. This means that you are usually comfortable during any type of activity.

#### **BORDERLINE EJECTION FRACTION:**

41-49% of your blood is pumped out of the heart each time it beats. You may have some symptoms during activity like shortness of breath or fatigue.

#### **REDUCED EJECTION FRACTION:**

≤40% of your blood is pumped out of the heart each time it beats. You may have symptoms at rest.

### Signs and Symptoms of Heart Failure:

- Feeling tired and weak
- Cough
- Shortness of breath
- Swollen ankles, belly, lower back, feet, and fingers
- Swelling around the eyes
- Trouble remembering or concentrating
- Weight Gain

#### **Causes of Heart Failure:**

- High Blood Pressure
- Coronary Artery Disease
- Atrial Fibrillation
- Sleep Apnea
- Diabetes
- Obesity
- Drug and Alcohol Use
- ...and more

### Will It Go Away?

Heart failure does not go away, but there are things you can do to feel well and stay out of the hospital, and in some cases improve how well your heart pumps.

### What can I do to help manage my symptoms?

#### TAKE YOUR MEDICATIONS EVERY DAY

- Ask your pharmacy for refills 1 week before you run out
- Keep an updated list of your medications
- Use medication boxes or timers to help you remember when to take your medications
- Bring your medications or list to every appointment
- Tell your heart doctor of any medication changes another doctor or provider makes
- Talk to your doctor about what to do if you accidentally skip a dose
- Continue to take your medicine even if you feel better

#### LIMIT SALT AND FLUID INTAKE

- Avoid fast-food
- Avoid canned and processed food
- Don't add salt to your meals
- Limit total salt intake to 2,000 mg daily
- Limit fluid intake to 2 liters (64-67 ounces) per day

#### LIMIT ALCOHOL INTAKE

- Restricting your alcohol intake will help reduce strain on your heart
- It will prevent heart muscle damage that may be caused by more than moderate or excessive alcohol intake
- If your heart failure was caused by alcohol, stay away from it completely

#### **WEIGH YOURSELF DAILY**

- Weigh yourself at the same time every day, and write it down in your provided chart
- A great way to remember is to check your weight in the morning after you urinate and before you eat breakfast...when you're the lightest
- Let your cardiologist know right away if you gain 3lbs or more in one day or 5lbs or more in one week
- Bring your weight and blood pressure chart to every doctor appointment
- These charts are on pages 33-34

### Daily Weight Diary

	Admission Weight:	Date:
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Following your Cardiac Medical Admission, you are at risk of developing congestive heart failure. Weighing yourself and tracking your symptoms is a great way to monitor this. Here are some things to remember:

- Weigh yourself on the same scale every morning. This should be done before breakfast, after urinating, and without clothes.
- Be sure your scale is on a hard surface (not on a rug).
- Call your cardiologist if your weight increases three pounds in a day, five pounds in a week, or if you are in the Yellow Zone.
- Call 911 if you are in the Red Zone.

### **GREEN ZONE: GREAT JOB! KEEP IT UP!**

- No weight gain
- No shortness of breath
- No swelling in feet, ankles, legs, or stomach
- No chest pain
- Normal activity level
- No redness, swelling, or drainage from incisions

### YELLOW ZONE: CALL YOUR CARDIOLOGIST

- Weight gain of three or more pounds in one day or five or more pounds in one week
- New or worsening shortness of breath with activity or at night
- New or worsening swelling in feet, ankles, legs, or stomach
- Increased dry cough
- Dizziness
- Feeling more tired, no energy, decrease in appetite
- Unable to take medications as prescribed
- Fever
- Redness, swelling, or drainage from incisions

### **RED ZONE: CALL 911!**

- Struggling to breathe
- Chest pain at rest
- Feeling confused or can't think clearly

Day	Weight	Z	Zone	Day	Weight	Zone		Day	Weight	2	Zone		
1				26					51				
2				27					52				
3				28					53				
4				29					54				
5				30					55				
6				31					56				
7				32					57				
8				33					58				
9				34					59				
10				35					60				
11				36					61				
12				37					62				
13				38					63				
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15				40					65				
16				41					66				
17				42					67				
18				43					68				
19				44					69				
20				45					70				
21				46					71				
22				47					72				
23				48					73				
24				49					74				
25				50					75				

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## Educational and Patient & Family Resources

Educational resources can be found at www.TrinityHealthOfNE.org.

Patient and family information at Saint Francis Hospital can be found at https://bit.ly/42iAMTL or by scanning the QR code below.





### **Other Educational Resources:**

The American Heart Association www.americanheart.org

National Heart, Lung and Blood Institute www.nhibi.nih.gov/health

Mended Hearts www.mendedhearts.org

The Society of Thoracic Surgeons www.sts.org

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Hoffman Heart and Vascular Institute

114 Woodland Street, Hartford, CT 06105 TrinityHealthOfNE.org