

PATIENT EDUCATION HANDBOOK

Coronary Artery
Bypass Grafting (CABG)
**Cardiac Rehab
Phase 1**



RIVERSIDE

HEART & VASCULAR INSTITUTE

Thank you for choosing Riverside Medical Center for your heart procedure. We are here to assist you in your recovery and address any questions you may have before going home.

Dear _____,

We want to give you the best care possible to improve your heart health. Like most people with heart disease, you probably have many questions. It is important for us to know what you are most interested in learning while you are in the hospital. To help us address what information you need, please check all the topics that interest you.

- Treatments and related equipment
- Heart and arteries, structure and function
- Activity progression during hospital stay
- What to do for chest pain
- Emergency planning for home
- Heart attack and healing
- Your risk factors
- How to take your pulse
- High blood pressure
- High blood cholesterol
- Your medications
- Fitness and health

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- Eating for a healthy heart
- Sexual activity and your heart
- Emotional changes after heart problems
- Development of heart disease
- Stress and your heart
- Smoking and your heart
- Alcohol and your heart
- Guidelines for activity/exercise at home
- Activity/exercise precautions
- Heart catheter procedure
- Bypass graft surgery
- Heart balloon procedure
- Stent placement procedure
- Valve repair/replacement procedure
- Heart failure
- Internal cardiac defibrillator
- Cardiac Rehab Phase II program
- Effects of heart problems on families
- Return-to-work questions
- Heart rhythms
- Development of heart disease

Day 1

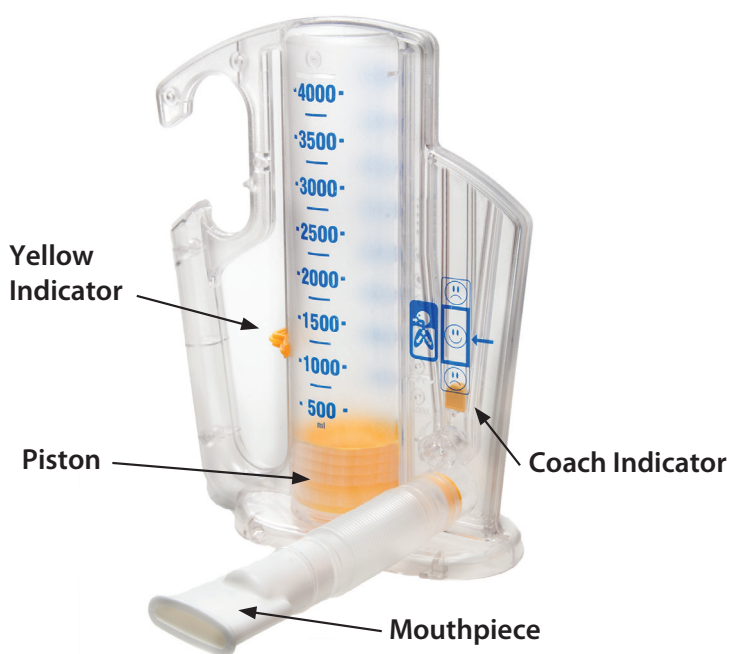
Some key things to remember are:

- 1. Sternal Precautions.** To help the breast bone heal and keep your pain manageable don't use your arms to pull or push yourself. You may only pick up 5-10lbs (about the same as a gallon of milk). Only raise one arm over your head at a time and behind your back. Your nurse, physical therapist or the Cardiac Rehab staff will instruct you concerning getting in and out of bed and chairs without using your arms.
After Discharge. No heavy lifting (greater than 10lbs) for 6 weeks after your surgery. You may increase to 15lbs for the next 6 weeks. After that you may gradually increase the weight you lift. Restrict your driving the first 4-6 weeks, and ride in the back seat when possible. Avoid heavy one-armed activities for 3 months after surgery.
- 2. Elevate your legs.** To help promote drainage of fluids around the incisions whenever possible keep your legs elevated. Remember to do the post operative exercises whenever you do the breathing exercises which should be about once an hour until you are back to somewhat normal activity. See page 5 for exercises you can do on your own while in the hospital.
- 3. Support your incision.** Whenever you cough or deep breathe use a folded blanket or your heart pillow to support your incision and decrease your pain. Women can also wear a bra to help support the incision. If you do not have your pillow on hand, instead "bear hug" your chest for support. When able to shower, face away from water spray.
- 4. Complete learning assessment.** Please take time to complete the assessment for us to better assist you.

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How to use an Incentive Spirometer

1. Sit on the side of the bed or in an upright chair.
2. Hold the spirometer level in front of you.
3. Place the mouth piece in your mouth and seal your lips tightly around it.
4. Breathe in slowly and deeply raising the yellow piston toward the top of the column. The yellow coach should be in the outlined area.
5. Hold your breath for at least 5 seconds, exhale and allow the piston to fall to the bottom of the column.
6. Rest for a few seconds and repeat steps at least 10 times an hour while your awake.
7. You can also position the yellow indicator on the left side to show your best effort. Use this as a goal to work towards during each repetition.
8. When you have finished, cough to clear your lungs, being careful to support your incision with a pillow or blanket.

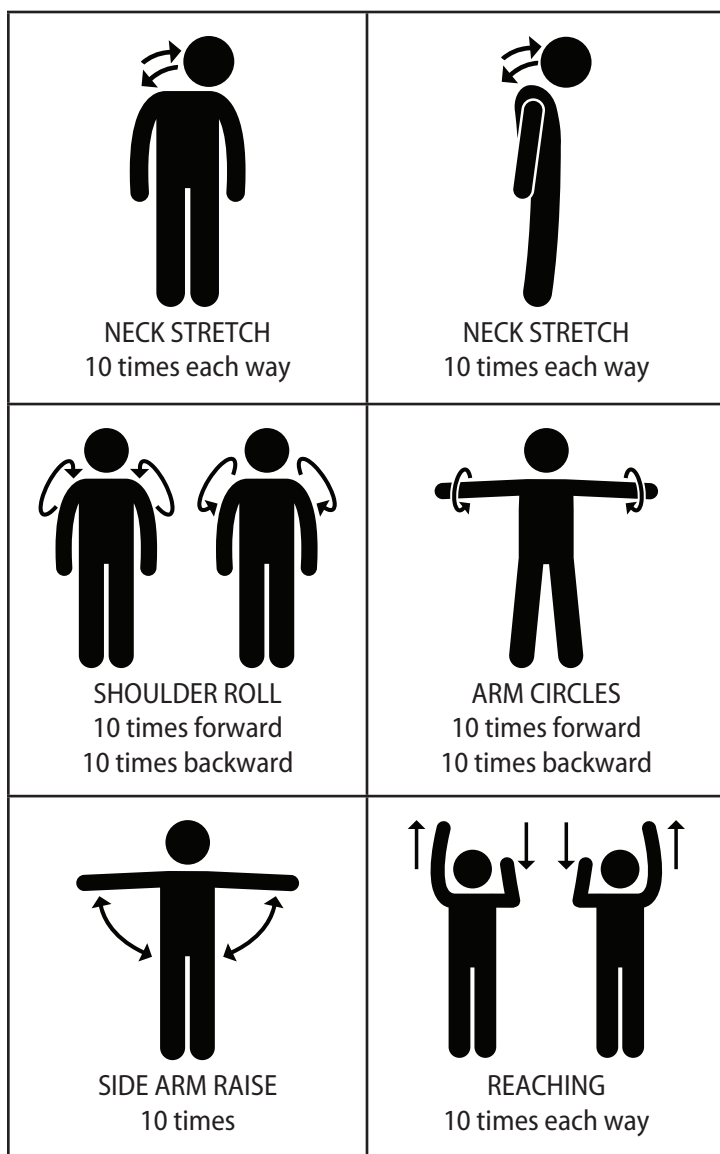


Post-Operative Exercises

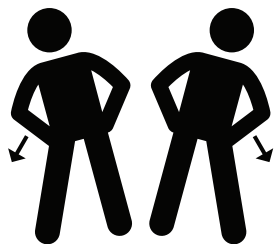
These exercises promote good circulation and help to decrease complications after surgery. They are the most important thing you can do independently to help aid your recovery. Depending on your energy levels, you can choose one of the following exercise options:

- A.** You can pick 3 to do each time you use your incentive spirometer; alternating between upper and lower body
- B.** You can complete all exercises 4 times a day.

When doing the arm exercises please remember to use only one arm at a time and never over reach or strain. Sternal precautions may continue up to 8 weeks after surgery.



CARDIAC REHAB PHASE 1



SIDE BENDS
Hold 10 seconds
each side



FOOT CIRCLES
10 times each foot



ANKLE STRETCH
10 times each foot



KNEE BEND
10 times each leg



MARCHING
10 times each leg



SIDE KICKS
10 times each leg



CALF STRETCH
Hold 20 seconds each leg

**SPECIAL
INSTRUCTIONS...**

Day 2

Risk factors for coronary artery disease are divided into two categories.

Unchangeable:

1. Age
2. Gender
3. Heredity

Changeable:

1. Tobacco/Nicotine. Nicotine increases your heart rate and increases your hearts need for oxygen. It stiffens the artery wall, allowing less blood to flow. It increases your risk of abnormal heart beats. It decreases HDL cholesterol (*good*) and helps LDL cholesterol (*bad*) thrive. Inhaled byproducts of smoking damage the blood vessel wall and reduces the amount of oxygen your blood cells can carry. Within 2 years of stopping tobacco/nicotine use, the risk of having a heart attack decreases by 50%. Cardiac Rehab staff will work with you to create a quit plan.

2. Abnormal Lipids. Cholesterol is a fat like substance (lipid) produced by your body. It travels in the blood and aids in digestion of food. Your cholesterol levels are affected by your genetics, the food you eat (proteins, fats), and the level of your physical activity. The doctor monitors your cholesterol levels and looks at the different lipids in your blood. When your cholesterol is “high” it means you have too many lipids in your blood that help form plaque. To protect your heart, you want your lipids to be controlled: LDL <70mg/dL, HDL >40mg/dL and total cholesterol (TC) <200mg/dL. Talk to your provider on how you can improve your numbers. Triglycerides are a lipid with fatty acids and are found in fried and starchy foods. Some things you can do now are to take your cholesterol medication as prescribed, increase your physical activity levels, and start making heart healthy eating choices.

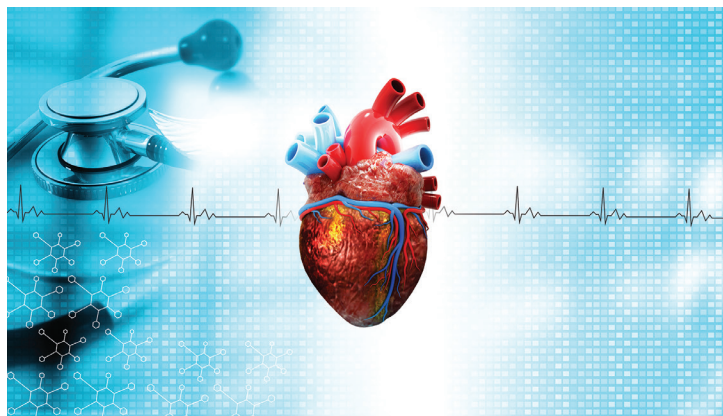
3. High blood pressure. High blood pressure, also called hypertension, is considered anything greater than 130/80. High blood pressure or hypertension is more common in men, African Americans, and people with history of heart attack, stroke, or heart failure. Ways to control high blood pressure include weight loss, eating a lower sodium diet such as the DASH diet, limiting added salt to foods to less than 2,300mg or 1tsp a day, increasing physical activity, and moderation of alcohol consumption. Men should limit consumption to no more than two drinks per day and women no more than one.

CARDIAC REHAB PHASE 1

4. Lack of Physical Activity. Set a goal for your daily physical activity. Lack of physical activity increases your risk for hypertension, obesity, high cholesterol and diabetes. It puts you at increased risk for musculoskeletal injury and surgery related complications. A recommended exercise regimen for every adult is at least 30 minutes of aerobic exercise most days of the week. Aim for 3-5 days a week. It is important to also remain flexible and strengthen your muscles. Use the exercises provided in this booklet every day. Aerobic exercise can be as basic as going for a walk. If you are limited in walking, your goal is to move more and sit less.

5. Obesity. For adults, being overweight is defined as body mass index (BMI) of 25 to 29.9. Obesity is a BMI of 30 or greater. The higher your BMI the greater risk you have for heart disease. Patients with heart disease should follow a low fat diet with a goal of reduction in calorie intake balanced with increased physical activity. Duration of exercise with the goal of weight loss should gradually increase to 45-60 minutes 5-7 days a week. The Cardiac Rehab phase II program will help you establish a safe, independent exercise routine.

6. Stress, Anxiety, Depression. Stress increases the risk of heart disease due to the effect it has on your personal habits. Patients who are under a lot of stress tend to cope with poor eating habits and substance use (i.e. tobacco, alcohol). Stress and anxiety elevate the heart rate and blood pressure. Depression is not uncommon in patients after being diagnosed with heart disease due to the increased doctor appointments and potential tests or procedures, financial burden, and required changes in lifestyle for a healthier heart. Some ways to reduce stress and anxiety are: breathing exercises, meditation, prayer, getting enough rest, and spending time with others. Exercise may help boost your mood and alleviate some



symptoms of depression. Talk to your nurse or doctor if you have any concerns on how to cope with stress or symptoms of depression.

7. Diabetes. Diabetes is a complex metabolic disorder characterized by impaired glucose uptake and insufficient insulin production. There are two main types of diabetes: Type 1 and Type 2. Diabetes is an independent risk factor for heart disease. Diabetes when not controlled, hyperglycemia, is a contributor to blindness, kidney disease, nerve disease, poor wound healing, stroke, high blood pressure, and peripheral vascular disease. Precautions for patients with diabetes during exercise are management of low blood sugars. Always carry a 15–30g carbohydrate snack, avoid exercise at peak insulin times, hydrate adequately, and check blood sugars frequently when starting a new exercise program. Exercise helps to stabilize blood sugar and use up glucose stores in the body. Glucose control lasts up to 24-48 hours after a workout. Patients with diabetes should be doing daily foot care. They should be checking for blisters cuts, and scratches. Wear proper fitting socks and shoes. Never walk barefoot especially on hot surfaces. A good goal for the diabetic patient is to have an A1C level of <7 in order to reduce further risk of vascular disease.

Use this space for any questions to discuss with your provider:

CARDIAC REHAB PHASE 1



Day 3–5

Eating for healing

Your body is working hard to heal after surgery. It is important to give it plenty of protein and calories for the needed energy.

Choose fat calories wisely

- Limit total fat grams by serving a bare minimum of saturated fats and trans-fatty fats, butter, salad dressings and sweets.
- Serve a variety of protein foods. Commonly eaten protein foods (meat & dairy products) are among the foods highest in cholesterol. Reduce the nutritional risk by balancing animal, fish, and vegetable sources of protein.
- When you do use fat use fats high in monounsaturated (MUFA) or polyunsaturated fat (PUFA).
 - MUFA: peanuts, hazelnuts, nut butters and oils, avocados, sunflower oil, EVOO, chocolate
 - PUFA: navy & kidney beans, ground flax seed, salmon, tuna, walnuts, pecans, corn oil, margarine spread, green leafy vegetables
- **No or low appetite**
 - Eat smaller meals more often, five to six per day
 - Keep nutritious snacks handy
 - Make mealtime pleasant
 - Make every calorie count, pick nutrient dense foods
 - Do not fill up on water, choose healthy unsweetened or low sugar fluids
 - Limit fluids at meals to prevent feeling “full”
 - Eat when you are hungry
 - Vary the colors and shapes of your foods

Talk to our registered dietitians if you have any nutrition needs or questions.

Common Medications After a Heart Procedure

You may be prescribed some or all of these types of medications. These medications will help strengthen your heart and arteries as well as improve blood flow after surgery.

Beta-blocker – helps keep arteries of heart open, reduces angina, improves chances of survival, improves heart function, and lowers blood pressure

Calcium Channel Blocker – lowers blood pressure, reduces workload of the heart, and keeps arteries open

Anticoagulant – helps reduce the risk of forming a clot, reduces the risk of stroke with irregular heart rhythm

Antiplatelet – helps keep the arteries of the heart open, improves chances of survival, reduces risk of heart attack

ACE-Inhibitors/Angiotensin receptor blockers (ARBs) – helps keep the arteries of the heart open, lowers blood pressure, improves heart function

Nitrates – Reduces angina symptoms, relaxes the artery walls

Statin -- lowers and helps correct cholesterol levels, keeps the arteries of the heart open

It is very important to take all your medications as prescribed. Even if you do not have any symptoms. If there is some reason you are unable to take your medications, call your doctor.

Cardiac Rehabilitation – Phase II

WHO?

Riverside Medical Center's Outpatient Cardiac Rehabilitation program is a comprehensive program that specializes in the rehabilitation of adults recovering from coronary artery bypass, valve surgery, heart attack, angioplasty or stent placement, combined heart-lung transplant and those individuals who have stable angina. Patients with a reduced ejection fraction from congestive heart failure may also be eligible for cardiac rehab.

The program is designed to not only increase the heart's efficiency and aerobic (oxygen) capacity but to also provide positive lifestyle changes through education and promotion of heart healthy habits that reduce the risk of future problems.

WHAT?

Individuals who attend cardiac rehabilitation receive an initial evaluation prior to starting the exercise program. The program consists of exercise sessions on Mondays, Wednesdays and Fridays for approximately 1 hour, along with additional time allotted for education about healthy lifestyle behaviors.

WHERE?

The facilities are located on the 4th floor of the 500 N. Wall Street building, attached to Riverside Medical Center. Treadmills, stationary, recumbent bicycles, arm ergometers, nu-steps rowers, hand weights and an elliptical machine are used for the exercise portion of the program.

STAFF:

The Cardiac Rehabilitation Department is staffed by specially trained cardiac nurses and technicians who are ACLS (Advanced Cardiac Life Support) certified. The professional team works with your cardiologist to keep them informed of your progress during the program.

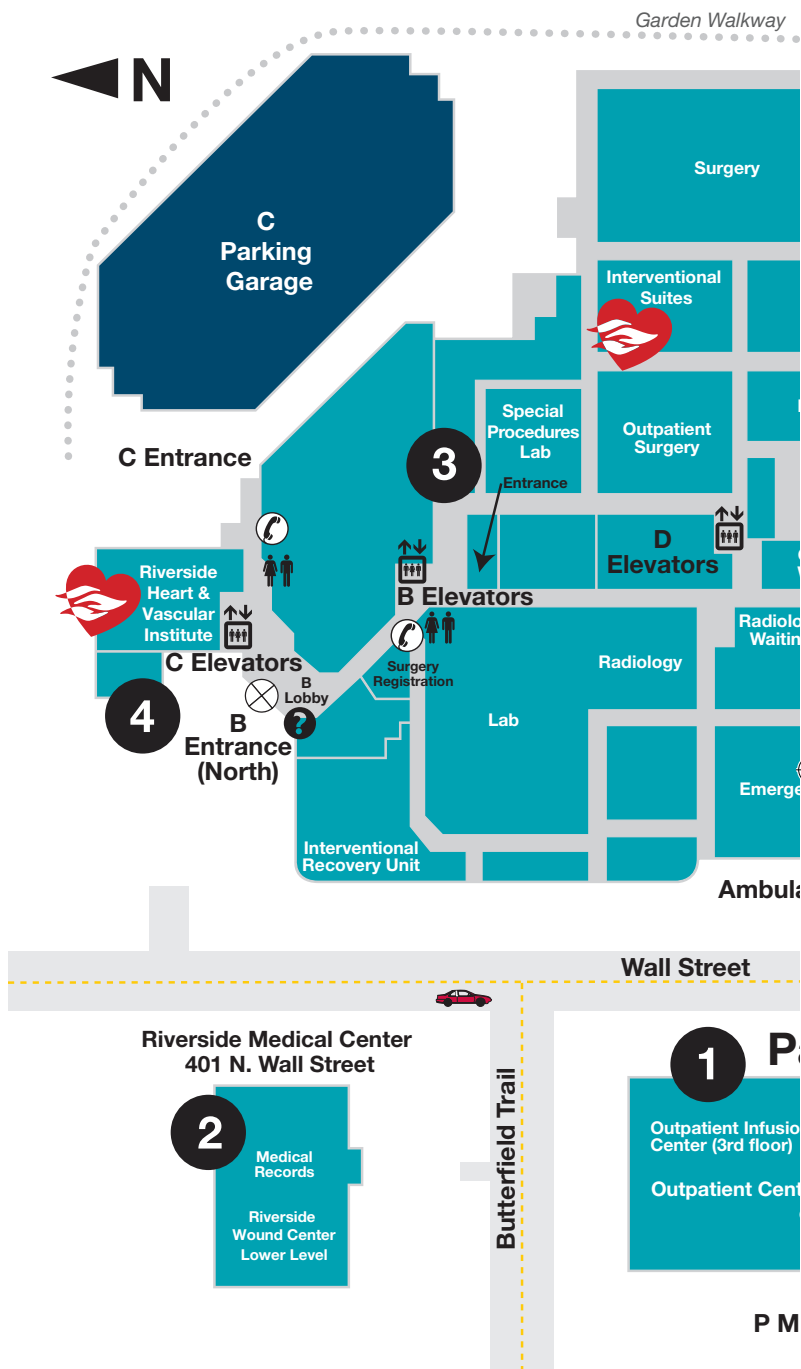
HOW?

The program must be ordered by your cardiologist and is covered by Medicare and most insurance companies. Please contact your physician if you are interested in attending, or contact our department at **(815) 935-3271**. We look forward to serving you.

Appointment Date _____

Time _____

RIVERSIDE MEDICAL CENTER

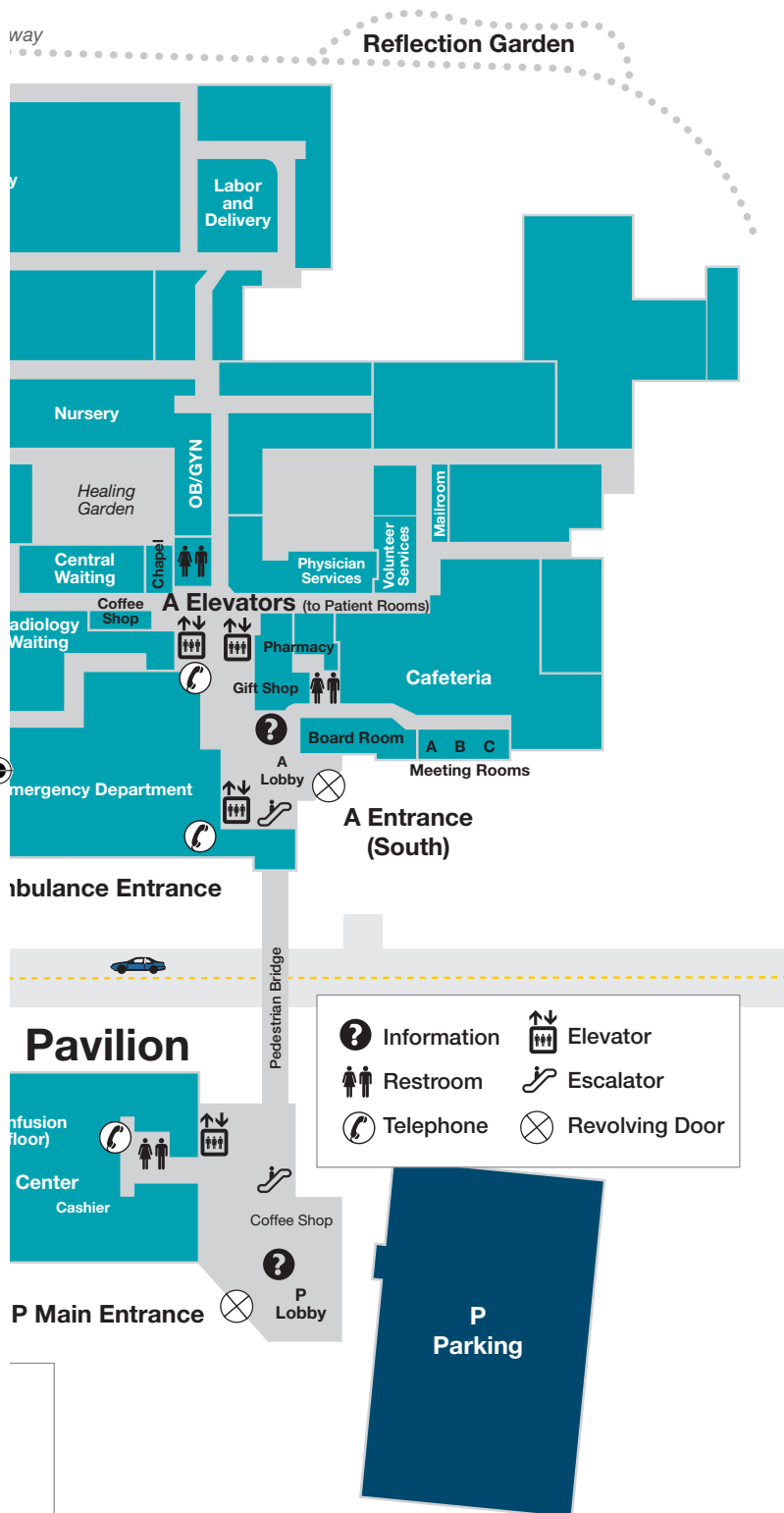


- 1** Pavilion (375 N. Wall Street)
- 2** Westwood Arts Building (401 N. Wall Street)
- 3** Medical Center B Wing (400 N. Wall Street)
- 4** Medical Center C Wing (500 N. Wall Street)

Map updated March 2020

CARDIAC REHAB PHASE 1

GROUND FLOOR



*Your Heart's
in the Right Place*



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riversidehealthcare.org/heart

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