Questions or concerns

If you have any questions or concerns about any symptoms you have or your medicines, talk with your health care provider immediately. For non-urgent questions, call your Post-Acute Coordinator, _________ at ________.
More about Atrial Fibrillation

Atrial fibrillation is a heart problem. Instead of beating in a steady rhythm, the upper parts (the atria) of the heart quiver or fibrillate. This upsets the normal beating of the rest of the heart. Atrial fibrillation is dangerous because it greatly increases the risk of stroke. When the heart’s upper chambers don’t beat normally, all of the blood in them is not pushed out into the arteries. The blood that stays may make a clot. If the clot breaks loose, it can move to other parts of the body and cause problems. If it moves to an artery in the brain and blocks it, this causes a stroke. About 15% of the people who have a stroke have atrial fibrillation.

Treating atrial fibrillation is important to avoid weakening the heart muscle. A weak heart muscle increases the risk of developing heart failure or a heart attack. Treatment is also important to keep you from having another stroke.

What causes atrial fibrillation (AF)?
Things that strain the heart (high blood pressure, coronary artery disease, heart attack, heart failure and heart valve problems) can cause AF. Thyroid disorders (such as hyperthyroidism) or serious infections such as pneumonia can also cause it. Heart surgery can set off atrial fibrillation. In people who are older than 65, any type of surgery may set it off. When atrial fibrillation happens after surgery, it increases the risk of other complications. Fortunately, this type of AF usually lasts only a short time.

Risk factors for atrial fibrillation that people cannot control are age, sex and family history. Other risk factors are things that people can change such as:

- use of stimulants (including some illegal drugs)
- excessive use of nicotine or caffeine
- drinking excessive amounts of alcohol

How do I know I have atrial fibrillation (AF)?
The easiest way to check for AF is an electrocardiogram (EKG, ECG). An electrocardiogram is a recording of the electrical activity of your heart. This test is painless and is usually part of a regular medical checkup. The EKG often finds atrial fibrillation for the first time because it has not caused symptoms. During your checkup, your doctor will take your blood pressure to see if you have high blood pressure. Your doctor will also listen to your heart to see if you have a heart murmur.

Some symptoms of atrial fibrillation need urgent medical evaluation. Call 911 immediately if you have severe chest pain, any signs of a stroke or feel faint and have an uneven heartbeat.

Call your doctor as soon as possible if you:

- Have an irregular heart rate (uneven pulse) or heart palpitations (when your heart seems to shiver, tremble, race, or pound)
- Have unexplained lightheadedness, dizziness, or confusion
- Faint or come close to fainting for no apparent reason
• Have shortness of breath that gets worse with exercise

**What is the course of atrial fibrillation (AF)?**
Atrial fibrillation is common, especially in older adults. When AF first develops, it may come and go. The irregular heart rhythm may last from a few seconds to a few weeks before going back to normal. Some people notice an uneven pulse but do not have other symptoms. Others have mild symptoms right away. If the reason for the atrial fibrillation is a thyroid problem, pneumonia or other treatable illness, it usually goes away once the cause is treated.

After a while, atrial fibrillation may become lasting and the rhythm stays uneven. More serious problems may develop over time. It is important to find and treat AF as soon as possible. AF may not be found until after a stroke or other heart problems happen.

You could have symptoms while you are on medicine for atrial fibrillation. If so, be sure to see your doctor as soon as you can, or call 911 if the symptoms are urgent.

**How is atrial fibrillation (AF) treated?**
There are a number of treatments for AF. The treatments best for you depend on the cause of your atrial fibrillation and your symptoms.

If the AF is making your heart pump very fast or your blood pressure drop a lot, you will probably need to go to the hospital for treatment. If the atrial fibrillation is not causing severe symptoms, you may get treatment as an outpatient.

You may have an Electrophysiology Study (EP Study) while you are in the hospital. For this test, the doctor places special wires in the blood vessels and moves them to your heart. There the wires sense when the electrical signals in the heart begin and how often they happen. This study helps your doctor learn more about your atrial fibrillation.

Usually the first treatment is trying to get the heart back to a normal rhythm. How soon and how this is done is based on how severe your symptoms are and how long they have lasted. Your heart doctor may perform a cardioversion. This is done either with a low-voltage electrical shock or with medicine. For some people, the cardioversion makes their heart go back to normal beating. For others, the AF returns.

If your symptoms are mild or if atrial fibrillation returns after cardioversion, your doctor may use medicines to control your heart. These may include:
- Rhythm-control medicines (*antiarrhythmics*) to help return the heart to its normal rhythm and keep it there
- Rate-control medicines to keep the heart from beating too fast during AF

If your doctor tells you to take these medicines, you will probably stay on them from now on in order to stay healthy.

Many people with atrial fibrillation need to take blood-thinning (*anticoagulant*) medicine to help prevent strokes. Your doctor will tell you about this. For people with severe symptoms from AF or with symptoms that cannot be controlled with the medicines, there are surgeries that may help.

**What can I do about my atrial fibrillation (AF)?**
Making changes that improve the condition of your heart may also improve your overall health. Many of these are the same changes that will lessen your risk of stroke.
• **Quit smoking.** Quitting smoking is the most important change you can make to reduce the risk of stroke and heart attack. Avoid secondhand smoke also.

• **Control your cholesterol.** You can do this with a heart-healthy diet, exercise and medicine.

• **Control your blood pressure.** Take medicines, if your doctor says you need them. Stay on a low-sodium, low fat and low saturated fat diet. Increase your exercise; drink less or no alcohol.

• **Eat a heart-healthy diet.** A diet with plenty of vegetables, fruits, dried beans, high-fiber grains and breads, fish, and olive oil is best.

• **Get regular exercise.** Exercise on most days of the week; every day if possible. Your doctor can suggest a safe level of exercise.

• **Control your blood sugar.** If you have diabetes, keep your blood sugar in your target range.

• **Manage your stress level.** Ways to reduce and help deal with stress each day include meditation, biofeedback, and relaxation exercises.

• **Avoid caffeine, alcohol and stimulants.** Some nonprescription medicines, especially cold and herbal remedies, contain stimulants that can set off atrial fibrillation. Talk to your doctor or pharmacist before taking any new medicine – prescription, over-the-counter or herbal remedy.

• **Take antibiotics when needed.** Take antibiotics when your doctor tells you to. This will lower your chance of getting a heart infection (*endocarditis*) that could lead to atrial fibrillation.

• **Avoid getting the flu.** Get a flu shot every year.

• **Watch for sleep apnea.** When a person stops breathing or has slowed breathing during the night, that is **sleep apnea.** How often the person stops or slows his or her breathing while asleep tells how severe the apnea is. Many people with atrial fibrillation also have sleep apnea, so watch for it.

• **Check your heartbeat often.** If your heartbeat is not regular, talk to your doctor at once.

• **Take medicines.** If your doctor has prescribed a medicine for your atrial fibrillation, take it as directed.

### Atrial Fibrillation Medicines

There are several different types of medicines used to treat atrial fibrillation.

**Rate-control medicines**

Rate-control medicines are used if your heart rate is too fast. These include beta-blockers, calcium channel blockers, and/or digoxin. These medicines can keep your heart from beating at a dangerously fast rate. They usually do not return your heart to a normal rhythm – in other words, your heartbeat will still be irregular. Most people can tolerate an irregular rhythm if the rate is kept between 60 and 100 beats per minute.

**Rhythm-control medicines**

Rhythm-control medicines (antiarrhythmics) may be prescribed if symptoms keep on even with rate-control medicines. These medicines help the heart get back to its normal rhythm and keep AF from returning. Rhythm-control medicines include amiodarone.
hydrochloride, dronedarone, flecainide acetate, dofetilide (Tikosyn) and propafenone (Rythmol). Research studies have changed the way persistent AF is treated. The studies found that the rhythm-control medicines were expensive, often had side effects and did not produce better results than rate-control medicines. Still, rhythm-control medicines are sometimes needed for atrial fibrillation. Your doctor will talk with you about which medicines might be best.

**Anticoagulant medicines (“Blood thinners”)**
Most people with AF should take an anticoagulant medicine to prevent blood clots that can lead to a stroke. If you have high blood pressure, diabetes, heart failure, atrial fibrillation, or have had a transient ischemic attack (TIA) or stroke, you may be at high risk of another stroke. Your doctor will talk with you about whether you should take warfarin, aspirin, or another anticoagulant.

If you were in the hospital following your stroke or TIA, you may have received heparin or enoxaparin (Lovenox). These are anticoagulants given through IV or by injection and are usually not prescribed for long-term use when you leave the hospital. The anticoagulant used frequently is warfarin (Coumadin or Jantoven). It is a strong blood thinner and works against the factors in your blood that form clots. Other anticoagulants include: apixaban, dabigatran etexilate mesylate (Pradaxa) and rivaroxaban (Xarelto).

For people with low risk of stroke or those who cannot take warfarin, a daily aspirin or other anti-platelets may be recommended. Aspirin-dipyridamole (Aggrenox), ticlopidine hydrochloride (Ticlid) and clopidogrel (Plavix) are anti-platelet medicines that make the blood platelets less sticky so they will not stick together and make a blood clot.

**While taking anticoagulant medicines**
If you are taking an anticoagulant, such as warfarin, carefully follow the instructions as it is powerful and can cause bad side effects. You will receive special instructions about this before you leave the hospital. Take extra steps to avoid problems. You need to:

- **Have regular blood tests.** To determine the right dose of warfarin, you will need blood tests. Usually people have the tests once a week to once a month, as advised by their doctor. The test gives the **International Normalized Ratio (INR)** that will show how fast your blood is clotting. The right ratio will prevent clots that could cause a stroke. If you take too much warfarin and your INR is too high, it can cause bleeding problems. It is very important to have these tests regularly and change the dose of warfarin you take when your doctor tells you to.

- **Take the medicine at the same time each day.**

- **Prevent falls and injuries** because you may bruise or bleed more easily. If you have a serious fall, especially if you hit your head, you may need to call 911 or see your doctor immediately. This is also true for deep cuts and large bruises. If you have a cut, put pressure on it for 5 – 10 minutes. If the bleeding does not stop, call your doctor.

- **Eat a steady diet.** Pay attention to foods with vitamin K in them. Try to keep the amount of these foods in your diet about the same from week to week. Large amounts of food high in vitamin K (such as broccoli, spinach and turnip greens) may
change the way warfarin works. Some herbal teas may cause the INR to become too high or low.

- **Avoid alcohol.** It is best not to drink alcohol while taking warfarin. Alcohol interferes with its effectiveness.
- **Shave with an electric razor.**
- **Avoid all sports or activities in which you can be hit.**
- **Always wear shoes.** Do not trim your fingernails or corns on your hands or feet with a sharp object such as a razor blade or knife.
- **Tell your doctor about all other medicines and vitamins you take.** If the doctor wants you to take any new medicines, be sure to ask if you can take the new one while taking warfarin. Get all of your medicines at the same drug store and have the pharmacist check on your medicines to be sure they can work with warfarin.
- **Health changes or other changes.** Illness, diet, medicine changes and physical activities may affect your INR. Tell your health care provider about changes in your health, your medications (prescription and over-the-counter), or your lifestyle so that he or she can check on your warfarin.
- **Have identification.** Wear or carry identification that says you take warfarin.
- **Keep dental checkups and use a soft toothbrush.** Avoid dental work that you do not need.
- **Tell your dentist, doctor or all health care providers that you take warfarin.** Before you have any dental work or surgery, be sure your dentist or surgeon knows that you take warfarin. You may need to stop taking it before surgery. You may also need to talk with the doctor who prescribed your warfarin. It is important that all your doctors know you are taking a blood-thinner.

**Remember**

**Be sure to watch for danger signs and call your doctor immediately if you:**

- Cough up blood or throw up “coffee grounds”-colored vomit
- Have red or black stools (bowel movements)
- Have pink, red, or dark brown urine.

**If you notice any of the following, you also need to speak with your doctor about these as soon as possible:**

- Gums bleed a lot
- Unusual bruising
- Heavier periods (menstrual flow) than normal
- Bleeding you can’t stop from a cut or nosebleed
- Unusual pain or swelling in arms or legs
- Severe headache

Some people live full and active lives while being treated for atrial fibrillation. Others must try a variety of treatments to manage it. In all cases, it is critical that people with atrial fibrillation take precautions to reduce the risk of stroke.

**Resources for this information include:** National Heart, Lung and Blood Institute of the National Institute of Health – nhbi.nih.gov/health/health-topics/topics/af/; American Heart Association Website – heartorg.HEARTORG/Conditions/arrhythmia/atrial-fibrillation and MicroMedex 2.0.