At Northern Light Health, we’re all behind you... and your care team is right beside you.

Northern Light wants every patient to get the full value of our medical care. Successfully treating atrial fibrillation (AFib) requires specialized treatments, careful monitoring and lifestyle changes. We know following your personalized treatment plan can seem overwhelming, especially for patients with other conditions or stress factors. That is why we provide atrial fibrillation patients with specially trained care providers. Just one more way Northern Light Health is by your side, every step of the way.

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Atrial fibrillation or AFib is a common heart rhythm problem that affects over 2 million adults in the US. In AFib, the electrical signals in the heart are abnormal. AFib can put you at risk of having a stroke.

Chapter 1

What is Atrial Fibrillation?

The heart is made up of 4 chambers. The top 2 chambers are called the atria and the bottom 2 chambers are the ventricles. In a normal heart, these top chambers contract and all the blood inside those 2 chambers is pumped into the ventricles. In AFib, the top chambers do not contract like normal because there is an electrical problem in the heart. The heart’s upper chambers (atria) beat out of coordination with the lower chambers (ventricles).

Signs and Symptoms

Atrial fibrillation may have no symptoms, if symptoms are present, they may include palpitations, shortness of breath, and fatigue. Other symptoms could be chest pain, lightheadedness, feeling dizzy, or feeling tired, or lacking energy.

Instead of contracting, the atria quiver and the blood inside them cannot move out of the heart as quickly. Abnormal electric currents can cause excessively slow or fast heart rates which cause symptoms. This can also cause blood clots to form in the atrium which increase your risk of stroke.
In AFib, a stroke can happen when a blood clot that forms in the left atrium breaks free and lodges in an artery in your brain. The blood clot blocks an artery in the brain and the brain goes without oxygen for too long which causes the stroke. This clot can also travel to other areas of your body like your kidneys, eyes, spine, arms and legs.

Your healthcare provider will use a scoring system to calculate your risk of stroke. The risk of stroke increases with age. Other factors that increase your risk include diabetes, high blood pressure, coronary artery disease, heart failure, and prior stroke or embolus.

**Causes of AFib**

- High blood pressure
- Heart failure
- Excessive alcohol intake
- Obesity
- Heart valve disease
- Thyroid problems
- Drug Abuse
- Chronic kidney disease

**Atrial Fibrillation**

AFib, increases stroke risks fivefold. That's because it causes the heart's upper chambers to beat incorrectly, which can allow the blood to pool and develop a clot. The clot can travel to the brain and cause a stroke. If you have AFib, know your stroke risks and get treatment to keep your risks low.

Stroke is a disease that affects the arteries leading to and within the brain. It is the No. 5 cause of death and a leading cause of disability in the United States.

A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or bursts (or ruptures). When that happens, part of the brain cannot get the blood (and oxygen) it needs, so brain cells die.
Signs and Symptoms of a Stroke
Use the letters in “F.A.S.T.” to spot stroke signs and know when to call 9-1-1.

| F  | Face Drooping  
|    | Does one side of the face droop or is it numb? Ask the person to smile. Is the person’s smile uneven or lopsided? |
| A  | Arm Weakness  
|    | Is one arm weak or numb? Ask the person to raise both arms. Does one arm drift downward? |
| S  | Speech  
|    | Is speech slurred? Is the person unable to speak or hard to understand? Ask the person to repeat a simple sentence. |
| T  | Time to Call 9-1-1  
|    | If the person shows any of these symptoms, even if the symptoms go away, call 9-1-1 and get them to the hospital immediately. |

Additional Symptoms of Stroke
If someone shows any of these symptoms, call 9-1-1 or emergency medical services immediately.

- Sudden NUMBNESS or weakness of face, arm, or leg, especially on one side of the body
- Sudden CONFUSION, trouble speaking or understanding speech
- Sudden TROUBLE SEEING in one or both eyes
- Sudden TROUBLE WALKING, dizziness, loss of balance or coordination
- Sudden SEVERE HEADACHE with no known cause

Chapter 2
Testing you might expect with AFib

- **Electrocardiogram.**  
  Also known as an EKG. This measures the electrical activity of your heart.

- **Holter monitor.**  
  This measures the electrical activity of your heart over 24-48 hours.

- **Echocardiogram.**  
  This test uses ultrasound to see if you have any valve problems that could be causing atrial fibrillation.

- **Blood test** to check your thyroid  
- **Sleep study.** To test for sleep apnea.  
- **Pulmonary Function Tests (PFT).**  
  To look for underlying lung disease.
Chapter 3

How is AFib treated?

Treating atrial fibrillation
Treating AFib can sometimes be very confusing. There are many options available. The initial goal is to return your heart to a normal rhythm (rhythm control). In some patient’s, long term therapy can involve either fixing the rhythm or just controlling the heart rate (rate control). The prevention of clots is a very important part of atrial fibrillation treatment. You and your provider will discuss the options, risk and benefits and develop the best plan for you.

Treating the heart rate (Rate control)
Rate control involves trying to bring the heart rate down to near normal levels without worrying about keeping you in a regular rhythm. Medications can bring your heart into normal range but sometimes it is difficult to adequately control your heart rate and relieve symptoms.

Beta Blockers
- This is a very important heart pill that protects your heart from damage.
- The dose may change, make sure you are taking the right amount.
- Don’t stop taking this medicine without talking to your provider first.
- You should only be on one.

Examples of Beta blockers:

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metoprolol succinate</td>
<td>Toprol XL®</td>
</tr>
<tr>
<td>Carvedilol</td>
<td>Coreg®</td>
</tr>
<tr>
<td>Bisoprolol</td>
<td>Zebeta®</td>
</tr>
<tr>
<td>Atenolol</td>
<td>Tenormin®</td>
</tr>
</tbody>
</table>

My Beta Blocker is: ________________________________

Calcium Channel Blockers
Used to slow the heart rate down

Examples of Calcium Channel Blockers

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verapamil / Verelan</td>
<td>Calan SR®, Calan®</td>
</tr>
<tr>
<td>Diltiazem</td>
<td>Cardizem®, Cartia XT® and Tiazac®.</td>
</tr>
</tbody>
</table>

My Calcium Channel Blocker: ________________________
**Digoxin**
Not everyone in Afib needs to take Digoxin because of the risk of side effects. Digoxin may be used alone or with other medications for Afib. Digoxin is useful in patients who are too sensitive to lower blood pressures from other medications or for those with heart failure. Digoxin blood levels need to be checked at least once a year or anytime there is a change in kidney function, or when symptoms of high levels are present. It is important to monitor for side effects of Digoxin. Contact your healthcare provider immediately if you experience any of the following:
- Severe dizziness or passing out
- Nausea, vomiting, and/or diarrhea
- Vision changes such as yellow or green halos

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digoxin</td>
<td>Lanoxin®, Digitex®, Digox®</td>
</tr>
</tbody>
</table>

**Treating the rhythm (Rhythm control)**
Ideally, the goal is to keep you in a normal heart rhythm (Sinus rhythm). Rhythm control can reduce symptoms, although there is a high rate of recurrent Afib and some of the side effects of the medications may be unpleasant.

**Antiarrhythmics**
These medicines can help you maintain normal rhythm.

**Examples of Antiarrhythmics**

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dofetilide</td>
<td>Tikosyn®</td>
</tr>
<tr>
<td>Flecaïnide</td>
<td>Tambocor®</td>
</tr>
<tr>
<td>Sotalol</td>
<td>Betapace® AF</td>
</tr>
<tr>
<td>Amiodarone</td>
<td>Cordarone®, Nexterone®</td>
</tr>
</tbody>
</table>

**Prevention of Clots**
Every patient with Afib should be evaluated for the need for a blood thinner. Your provider will use a special scoring system to estimate your risk of a stroke. All patients whose risk of stroke exceeds the risk of bleeding should be on long-term anticoagulation (blood thinner). You and your provider can decide what is best for you.

**Anticoagulants** (Blood thinners)- Used to prevent clots
- Always tell your doctor, dentist, and pharmacist if you take any of these.
- If you have any unusual bleeding or bruising or other problems, tell your doctor right away.

**Examples of Anticoagulants (Blood thinners)**

<table>
<thead>
<tr>
<th>Generic Name</th>
<th>Brand Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>apixaban</td>
<td>Eliquis®</td>
</tr>
<tr>
<td>edoxaban</td>
<td>Savaysa®</td>
</tr>
<tr>
<td>rivaroxaban</td>
<td>Xarelto®</td>
</tr>
<tr>
<td>dabigatran</td>
<td>Pradaxa®</td>
</tr>
<tr>
<td>warfarin</td>
<td>Coumadin®</td>
</tr>
</tbody>
</table>

- Rivaroxaban (Xarelto®) should be taken WITH FOOD (evening meal).
- If you happen to miss a dose, take as soon as you remember as long as it's the same calendar day AND not beyond the halfway point between doses, skip the missed dose and take the next dose at the regular time.
- Don't double doses of any blood thinner unless specifically told to do so by your heart doctor.

My Antiarrhythmic: _________________________________

My Anticoagulant: ____________________________________
Medicines

How to take your medicines
Atrial fibrillation may be controlled with medicine. Taking your medicine correctly will help you reduce the chances that your AFib will cause a stroke.

Take your pills
• Take your medicines on the right days and times.
• Do not skip doses of your medicines, even when you feel good.
• If you think you are having side effects from your medicines, don’t stop taking them, talk to your provider immediately.
• If you are having trouble paying for your medicine, talk to your provider.

Don’t run out of pills
• Make sure you always have enough medicine left in your pill bottles.

Don’t let your medicine bottles run out.
• Be aware of how many refills you have left.
• Every time you pick up your medicines, check the number of refills you have left. If the label says No Refills or Refills: 0 then call your pharmacy or provider right away to get more refills.
• Get all of your pills from the same pharmacy every time.
• Take only medications that are prescribed.

Have a system
• Have a system that helps you remember how and when to take your medicines.
• Keep a list of your medicines with instructions for how many pills to take, when to take them, and what they are for. Keep the list updated and current.
• Keep your medicine bottles in a place that makes it easy to remember to take them. Keeping your medicines next to your toothbrush, at your bedside, or in the kitchen are good ideas.
• One of the best ways to keep your medication straight and organized is to use a pill box to organize your pills for each day of the week.
• If you are going out of the house for a long time, bring enough medicine with you.
• Bring your pills when you go to your provider.
• Bring all of your pill bottles (not your pill box) and medicine list to each visit with your provider.
• Show your provider how and when you take your pills. This will help you and your provider keep you safe, and make sure you don’t run out of pills.
• Save at least one bottle of each medicine.

Here is a place to write down ideas to help you take your medicines.

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
Exercising well with atrial fibrillation

What’s in it for you?
- Being more active is one of the best things you can do for your heart.
- Moving more can help you have more energy and feel more upbeat.

Start now!
If you are not exercising, start with 10 minutes a day. It can be as simple as walking five minutes from your door and turning around and walking back.

Be safe
- Start slowly.
- Stop if you feel palpitation, chest pain, dizziness, or have severe shortness of breath.
- Work with your provider to set realistic goals.

You can exercise by
- Using a stationary bicycle.
- Walking in your neighborhood or at the mall.
- Going to an exercise class.
- Sweeping, vacuuming, or dusting.
- Mowing the lawn or working in your garden.

A lot of people say that walking is the easiest exercise for them. Many people walk with a friend or their pet. Walking is easy, fun, and free.

Exercising will get easier. Your body needs time to get used to being more active. You will notice that it will get easier and you will be able to do more.
Chapter 5

Procedures that may be done

Atrial Fibrillation Patient Guidebook

Electrical cardioversion
This is a procedure that is performed in the hospital. A patient is given anesthesia and the heart is shocked back into a normal rhythm. This is used to restore the normal heartbeat. A transesophageal echocardiogram (TEE) may be done prior to the cardioversion to look in your atrium for clots.

Steps for doing more:

• Begin by doing an activity for 10 minutes, three times per week.

• After a couple of weeks, add five minutes, so that you are exercising 15 minutes at a time.

• When you feel comfortable doing more, add another five minutes.

• You want to work up to 30 minutes of exercise three times a week.

• Exercise with a friend or partner if possible.

• Wear clothes and shoes that fit well.

• Start slowly. Ease your way into exercise.

• Talk with your provider about an exercise plan that is right for you.

AFib Ablation
AFib Ablation is a common procedure used to maintain a regular heart rhythm (sinus rhythm). This is sometimes called radiofrequency ablation. This procedure is performed by a cardiologist or cardiac surgeon in the hospital. AFib ablation isolates (walls off) the part of the heart that is creating abnormal electrical signals. After the procedure, hopefully, the heartbeat may be in a regular rhythm. You and your doctor can decide if this procedure is right for you.
Left Atrial Appendage Occlusion Device or Left Atrial Clip

Left Atrial Appendage Occlusion Device or Left Atrial Clips are devices that are put in place by a cardiologist or cardiac surgeon. The procedure is performed in the hospital.

In AFib, clots can form in your left atrium. Blood can pool in an area in your heart, the left atrial appendage. A left atrial appendage device or clip blocks this area off so clots will not develop. You and your doctor can decide if this procedure is right for you.

Call your provider if you are having worsening symptoms of AFib

- Palpitations
- Lightheadedness
- Shortness of breath
- Dizziness
- Bleeding while on blood thinner treatment for AFib

Go to the Emergency Department or call 9-1-1 if you:

- Feel that you can't breathe or have trouble breathing at rest and it does not get better no matter what you do.
- Have chest discomfort that does not go away with nitroglycerin or lasts more than 20 minutes.
- Have a fast or uneven heartbeat that will not go away or makes you feel dizzy or lightheaded.
- Faint.
- Have sudden confusion, trouble speaking, or understanding.
- Have sudden numbness or weakness of the face, arm, or leg especially on one side of the body.
- Have sudden trouble seeing in one or both eyes.
- Have sudden trouble walking.
- Have sudden severe headache with no known cause.
Chapter 7

What else will help me live well with atrial fibrillation?

Maintain a healthy weight
Obesity has been associated with AFib. Attention to diet and a healthy lifestyle may help improve AFib. Even modest weight loss, especially if it is kept off, can reduce blood pressure, cholesterol levels and help control diabetes.

Some medications for AFib may interact with foods in your diet. You will receive special instructions from your health care provider if you are on these medications.

Avoiding excessive caffeinated drinks can decrease the incidence of AFib. Excessive use of alcohol has been shown to increase AFib. Minimizing or quitting alcohol can help decrease AFib.

Manage Stress
Stress results from any change in life you must adapt to and/or cope with - including a cardiac event. Simple and effective ways to manage stress include: adopting a positive, hopeful attitude, deep breathing, regular exercise, treating yourself to healthy pleasures and finding humor in your life. Avoid responding to stress by getting angry or struggling to change a situation that cannot be controlled. Managing stress does not mean eliminating it but learning to control your reaction to it.

Quit Smoking
Quitting TODAY is the most important thing you can do for your heart. Avoid using all tobacco or vaping products. Smoking, secondhand smoke and other tobacco products make your heart and lungs work harder.

If you smoke, talk to your provider or nurse about getting help to quit. You can get help to quit from the Maine Tobacco Helpline, 1-800-207-1230.

Keep your visits with your provider
Be sure to keep all your appointments, and partner with your provider to plan your care. By learning more about atrial fibrillation, you and your care team can better manage your care. When you see your provider, bring a list of your medications. Keep your visits with your provider, even when you are feeling well.

Get a flu shot
Get a flu shot every year and pneumonia shots as directed by your provider. A flu shot will help you to not get the flu.

More Information and Resources
American Heart Association – www.aha.org
American College of Cardiology – www.acc.org
My AFib Experience - https://myafibexperience.org/
Northern Light Health – www.northernlighthealth.org
Northern Light Health

Acadia Hospital
A.R. Gould Hospital
Beacon Health
Blue Hill Hospital
C.A. Dean Hospital
Eastern Maine Medical Center
Home Care & Hospice
Inland Hospital
Maine Coast Hospital
Mayo Hospital
Mercy Hospital
Northern Light Health Foundation
Northern Light Laboratory
Northern Light Pharmacy
Sebasticook Valley Hospital
Work Force
Work Health