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**Problem**: Atrial fibrillation (AF) can cause serious medical complications, such as thromboembolism, stroke and heart failure. The American College of Cardiology (ACC) and the American Heart Association (AHA) have revised their AF guidelines. The new guidelines focus on prevention, classification and early intervention.

**Solution**: This article highlights the three most essential changes:

- 1. Prevention prescriptions
- 2. Afib staging
- 3. Optimizing therapies

# New AFib Guidelines Improve Diagnosis and Management

Atrial fibrillation (AF), also known as AFib, is the most common cardiac arrhythmia and the primary cause of stroke. It can provoke other medical complications, such as thromboembolism and heart failure (HF). The American College of Cardiology (ACC) and the American Heart Association (AHA) have revised their AF guidelines. This article highlights the three most essential changes: prevention, classification and early intervention.

## Key Takeaways

- AFib's erratic electrical impulses result in turbulent and abnormal blood flow. Patients with AF are at greater risk for blood clots, stroke and heart failure.
- AF is a complex cardiovascular condition, requiring a holistic approach. The new guidelines provide strategic interventions for prevention, risk modification and therapy optimization.
- The new ACC/AHA guidelines recommend a comprehensive guideline-directed lifestyle and risk factor modification plan. This team-based approach aims to bolster adherence and prevention.
- AF is no longer classified based on arrhythmia duration. The new staging system classifies atrial fibrillation more chronologically. Consequently, intervention begins before AF develops.
- Research indicates that catheter ablation controls heart rhythms better than drug therapy. Ablation is now the first-line therapy for appropriate patients.

## Atrial fibrillation overview

AF is an abnormal, unsynchronized firing of electrical impulses. This erratic activity leads to irregularity of atrial contractions. The result is turbulent and abnormal blood flow. **AF reduces the heart's blood pumping capacities and increases the risk of clots.** 

Cardiac remodeling provokes most cases of AFib. AF causes structural changes to myocytes and other cardiac tissue. Electrical changes result in tachycardia and shorten refractory periods. The underlying etiology of these structural and electrical changes is not well understood. However, some AF triggers or risk factors include:

- Inflammation
- Atrial ischemia
- Hemodynamic stress
- Endocrine and neurological disorders
- Advanced age
- Illicit drug and alcohol use
- Genetic factors
- Emotional or physical stress, including surgery

Research shows a link between AF and chromosome 10. However, most cases of AFib result from cardiovascular disease, not genetic factors.

## New AFib guidelines summarized

The ACC/AHA guidelines encompass comprehensive care of AF. The top take-home focal points of the new guidelines are the following:

- 1. Formulating stages of AF based on the disease continuum rather than arrhythmia duration
- 2. Emphasizing lifestyle and risk factor modification through prescriptive prevention recommendations
- 3. Supporting flexibility in utilizing clinical risk scores
- 4. Considering stroke risk modifiers in shared decision-making
- 5. Seeking to maintain sinus rhythm early and reduce the AF burden
- 6. Upgrading catheter ablation to Class 1, making it a first-line therapy for appropriate, symptomatic patients
- 7. Upgrading catheter ablation to Class 1 for appropriate HF patients with reduced ejection fraction
- 8. Modifying recommendations for device-detected AF
- 9. Upgrading the class level of left atrial appendage occlusion devices
- 10. Recommending therapy for patients who experience AF during surgery or medical illnesses

The most impactful guideline changes address prescriptive prevention, AF classification and therapy optimization.

## Prescriptive recommendations for prevention

AF is a complex cardiovascular condition requiring intervention regardless of the stage. New AF guidelines encourage physicians to take a more prescriptive approach to prevention. Patients often understand that weight loss and smoking cessation improve health. However, they may not know how to accomplish these goals. Understanding the importance of something and implementing a strategy are two different things.

Physicians should provide a thorough guideline-directed lifestyle and risk factor modification (LRFM) plan. Additionally, nurse-led clinics help support patients in their communities. A comprehensive, team-based approach promotes adherence and prevention.

## **Classifying AFib**

Previously, AF classification was determined by arrhythmia duration. Current staging emphasizes AF's disease continuum and the need for a holistic approach. New classifications require different strategies for each stage: prevention, LRFM, screening and therapy.

#### Stage 1

Stage 1 encompasses patients **at risk for AF with no clinical findings.** The treatment objectives during this stage are patient education and self-advocacy.

Patients need to feel the urgency. The time for action is now. Supporting and helping patients become proactive about prevention is vital. Clinicians are most effective when utilizing a compassionate, comprehensive, team-based approach. Physicians should treat modifiable risk factors and help establish an LRFM plan.

#### Stage 2

Stage 2 is for pre-AF. Patients who present with **structural or electrical remodeling** are predisposed to AF. In addition to stage 1 interventions, clinicians should consider increasing surveillance.

#### Stage 3

People **experiencing AF** are in stage 3. The new AF guidelines subdivide stage 3 into four groups:

- 1. Paroxysmal: AF for less than seven days
- 2. Persistent: AF more than seven days
- 3. Long-standing persistent
- 4. Successful ablation

During stage 3, physicians must regularly assess a patient's AF burden, pathophysiological changes and stroke risks. The goal is to treat symptoms while addressing modifiable risk factors.

#### Stage 4

Stage 4 is for those experiencing **permanent AF.** No further attempts to stabilize the patient's heart rhythm are necessary. Clinicians should treat symptoms while continuing to evaluate stroke risk and disease process.

## **Optimizing AFib therapies**

Research indicates that early and aggressive rhythm control improves outcomes. **Catheter ablation is now the first line of defense against AF for many.** Ideal candidates for catheter ablation include:

- 1. Patients with heart failure and reduced ejection fraction
- 2. Younger patients with minimal comorbidities and symptomatic paroxysmal AF

Catheter ablation is superior to drug therapy for rhythm control. Physicians should consider ablation as a first-line therapy for appropriate, symptomatic patients. Physicians should also consider ablation for appropriate HF patients with reduced ejection fraction. This strategy aims to improve symptoms and slow progression.

## Promoting better heart health with new AFib guidelines

AFib is a chronic condition that significantly impacts people's quality of life. It frequently evolves to become a persistent problem, causing blood clots and stroke. Successful management of AF depends on utilizing a holistic approach, patient participation, interprofessional teamwork and evidence-based strategies.

We are committed to making a difference. **Our hospital seeks to promote better heart health for all our loved ones.** If you are looking for a partner in care, we would be happy to help. Click the "Refer" button to get started.

### Resources

"New in Clinical Documents | ACC/AHA Guideline Focuses on Diagnosis, Management of AFib." American College of Cardiology, 2024, New in Clinical Documents | ACC/AHA Guideline Focuses on Diagnosis, Management of AFib -American College of Cardiology.

"2023 ACC/AHA/ACCP/HRS Guideline for the Diagnosis and Management of Atrial Fibrillation: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines." American Heart Association: Circulation, 2023, 2023 ACC/AHA/ACCP/HRS Guideline for the Diagnosis and Management of Atrial Fibrillation: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines.

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