



**ACNAP**  
Association of Cardiovascular  
Nursing & Allied Professions

● **ESC Guidelines Implementation**  
for Nurses and Allied Professionals

# Be Guidelines Smart!



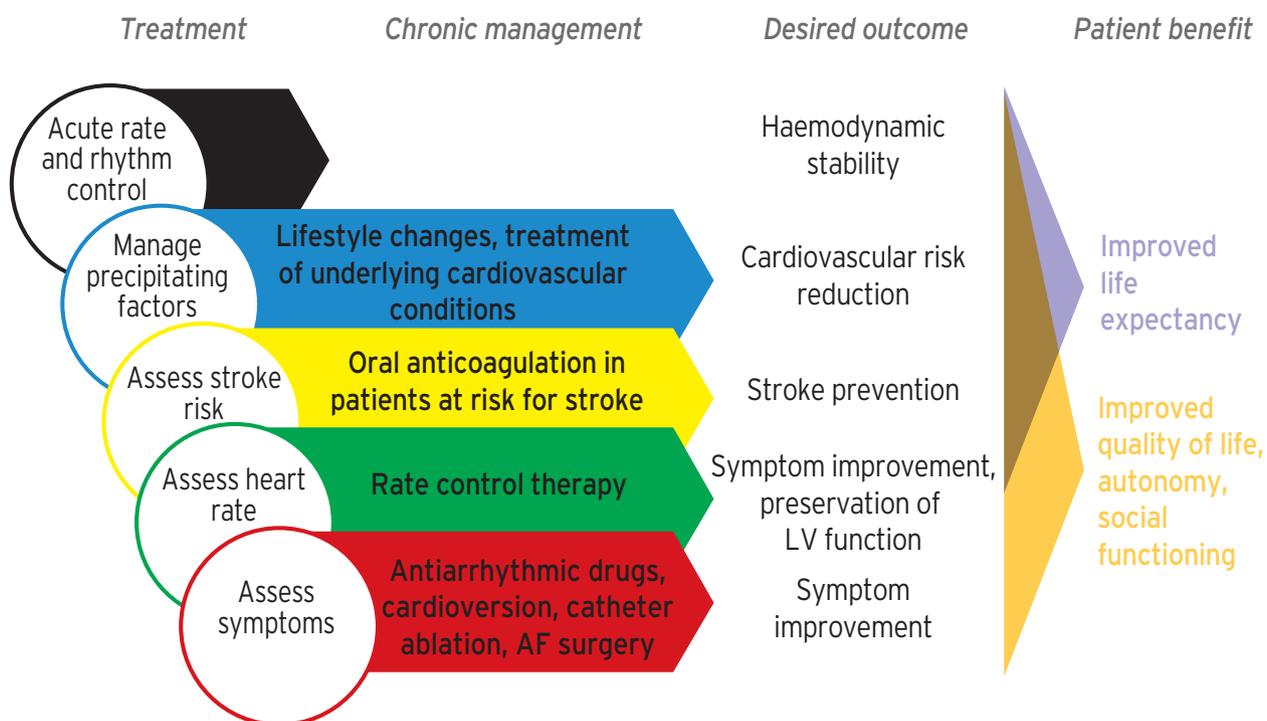
**The Management of Atrial Fibrillation**  
**Specific Recommendations for**  
**Cardiovascular Nurses & Allied Professionals**



**ESC**  
European Society  
of Cardiology

**Atrial Fibrillation (AF)** is the most common heart rhythm disorder, with a steep rise predicted in the number of patients in coming years. AF is one of the major causes of stroke, heart failure, sudden death and cardiovascular morbidity, and is associated with poor quality of life and adverse symptoms. Comprehensive management of AF should include treatment of acute AF; cardiovascular risk reduction and treatment of comorbidities such as hypertension, diabetes mellitus, obesity and obstructive sleep apnea; stroke prevention using appropriate oral anticoagulation; rate control and rhythm control therapy to improve symptoms (**Figure 1**).

**Figure 1: Domains of AF management**



AF = atrial fibrillation; LV = left ventricular.

## ● Screening and diagnosis

- Silent or undetected AF is common, especially in the elderly, while these patients carry the same morbidity and mortality risk.
- Therefore, opportunistic screening for AF is recommended by pulse taking or ECG rhythm strip in all patients >65 years of age (i.e. not only in those with cardiovascular conditions).
- Systematic ECG screening may be considered to detect AF in patients aged >75 years, or those at high risk of stroke.
- Confirmation of AF through ECG recording is required to set the medical diagnosis (i.e. showing irregular RR intervals and no distinct P waves for at least 30 seconds).

## ● Integrated care of AF patients – significant role for nurses and allied professionals

- An integrated, structured approach to AF care, will facilitate consistent, guideline-adherent management for all patients with the potential to improve outcomes. Integrated care consists of the following crucial pillars (Figure 2):
- Patient involvement: patients should have a central role in their care process (patient-centred) and be involved in shared decision making to ensure the care is based on the best available evidence and fits the needs, values and preferences of the patient. This requires engagement and provision of continuous education throughout the care continuum, to empower and support patients to undertake (self-)management of their condition.
- Multidisciplinary teams: an AF-team with involvement of nurses specialised in AF, allied professionals such as exercise specialists and pharmacists, primary care physicians, cardiologists, stroke specialists, and all other specialists that may be required in the management of AF, as well as informed patients. Nurses to focus on coordination in order to provide fragmentation of care (Figure 6).
- Technology tools: the use of smart technology has potential to support the implementation of evidence-based healthcare. Such tools can be used by patients and healthcare professionals. ESC guideline-based AF applications for patients and health care professionals are freely available (Figure 5).
- Access to all treatment options for AF: based on the five domains of AF management (Figure 1), a comprehensive treatment approach is required in which all facets of AF management will be covered and a diversity of specialists should be involved.



**Figure 2: Integrated AF Management**

Patient involvement	Multidisciplinary teams	Technology tools	Access to all treatment options for AF
<ul style="list-style-type: none"> <li>• Central role in care process</li> <li>• Patient education</li> <li>• Encouragement and empowerment for self-management</li> <li>• Advice and education on lifestyle and risk factor management</li> <li>• Shared decision making</li> </ul> <p><b>• <i>Informed, involved, empowered patient</i></b></p>	<ul style="list-style-type: none"> <li>• Physicians (general physicians, cardiology and stroke AF specialists, surgeons) and allied health professionals work in a collaborative practice model</li> <li>• Efficient mix of communication skills, education, and experience</li> </ul> <p><b>• <i>Working together in a multidisciplinary chronic AF care team</i></b></p>	<ul style="list-style-type: none"> <li>• Information on AF</li> <li>• Clinical decision support</li> <li>• Checklist and communication tool</li> <li>• Used by healthcare professionals and patients</li> <li>• Monitoring of therapy adherence and effectiveness</li> </ul> <p><b>• <i>Navigation system to support decision making in treatment team</i></b></p>	<ul style="list-style-type: none"> <li>• Structured support for lifestyle changes</li> <li>• Anticoagulation</li> <li>• Rate control</li> <li>• Antiarrhythmic drugs</li> <li>• Catheter and surgical interventions (ablation, LAA occluder, AF surgery, etc.)</li> </ul> <p><b>• <i>Complex management decisions underpinned by an AF Heart Team</i></b></p>

AF = atrial fibrillation; LAA = left atrial appendage.



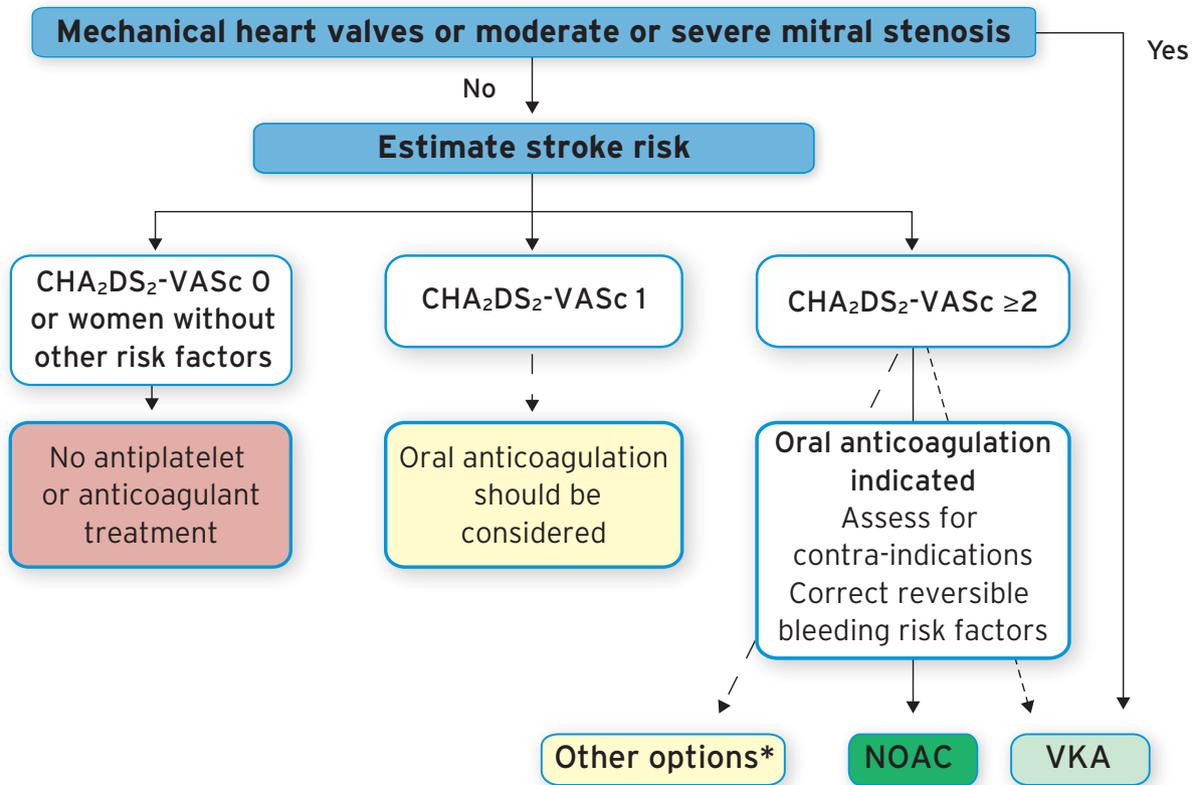
● **AF is associated with increased risk of stroke - treatment with oral anticoagulation may be required - always assess patients for stroke risk and consider treatment**

- In all patients with AF, the CHA<sub>2</sub>DS<sub>2</sub>-VASc score (**Figure 3**) should be systematically assessed to identify the risk of stroke and to decide on the initiation of appropriate oral anticoagulation therapy accordingly. Technology tools may assist in this undertaking.
- Oral anticoagulation therapy is recommended in all male patients with CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 2 or more, and in all female patients with a score of 3 or more.
- Oral anticoagulation therapy should be considered in male patients with CHA<sub>2</sub>DS<sub>2</sub>-VASc score of 1 and in female patients with a score of 2, considering individual characteristics and patient preferences.
- When initiating anticoagulation, a non-vitamin K antagonist (NOAC) is preferred, however there are exceptions (**Figure 4**).
- Do not use aspirin or other antiplatelets for stroke prevention in AF.

**Figure 3: CHA<sub>2</sub>DS<sub>2</sub>-VASc Score**

CHA <sub>2</sub> DS <sub>2</sub> -VASc risk factor	Points
<b>Congestive heart failure</b> Signs/symptoms of heart failure or objective evidence of reduced left-ventricular ejection fraction	+1
<b>Hypertension</b> Resting blood pressure >140/90 mmHg on at least two occasions or current antihypertensive treatment	+1
<b>Age 75 years or older</b>	+2
<b>Diabetes mellitus</b> Fasting glucose >125 mg/dL (7 mmol/L) or treatment with oral hypoglycaemic agent and/or insulin	+1
<b>Previous stroke, transient ischaemic attack, or thromboembolism</b>	+2
<b>Vascular disease</b> Previous myocardial infarction, peripheral artery disease, or aortic plaque	+1
<b>Age 65-74 years</b>	+1
<b>Sex category (female)</b>	+1

**Figure 4: Stroke prevention in AF**



NOAC = Non-vitamin K oral anticoagulant (apixaban, dabigatran, edoxaban, rivaroxaban).

VKA = Vitamin K oral anticoagulant (e.g. warfarin, with INR 2.0-3.0 and time in therapeutic range kept as high as possible and closely monitored).

\*No anticoagulation, or left atrial appendage exclusion if clear contra-indications for anticoagulation.

**Figure 5: eHealth to support AF management**

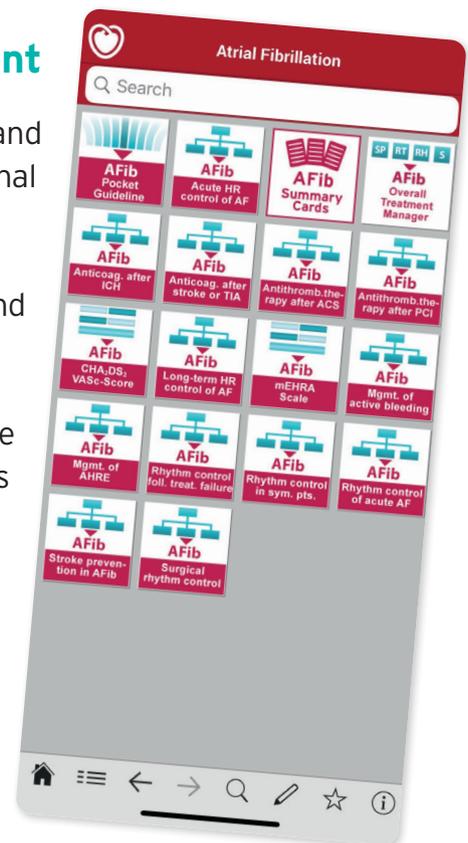
The CATCH ME Consortium (funded by EU Horizon 2020) and the ESC have developed patient and healthcare professional apps for AF.

The patient app aims to enhance patient education and encourage active patient involvement in AF management.

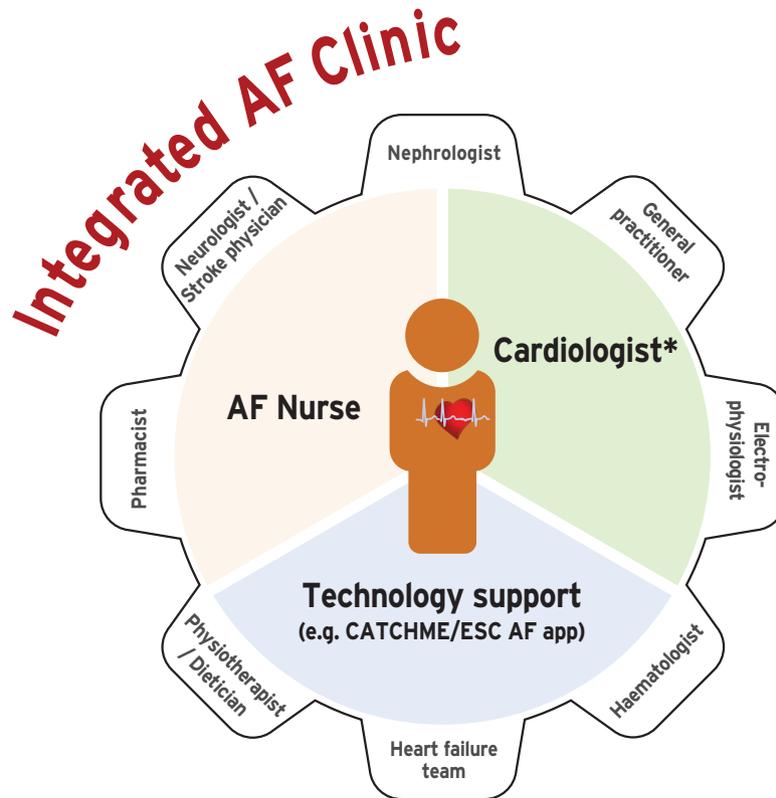
The healthcare professional app is designed as an interactive management tool incorporating the ESC Pocket Guidelines on AF.

Both apps are freely available through Google Play, Amazon and Apple App stores.

The interactive AF Treatment Manager is also accessible through the freely available ESC Pocket Guidelines app.



**Figure 6: Example of integrated AF care**  
*Kotecha D, et al. Europace (2018) 20, 395 - 407*



\*Depending on local policies, this could alternatively be a general physician with interest in AF or an electrophysiologist.

## ● Core Curriculum Cardiovascular Nurses and Be Guidelines Smart - ACNAP

- Education and professional development can be guided by the Core Curriculum, developed by ACNAP, with the aim that nurses and allied professionals should be able to identify and implement guidelines to their clinical practice in order to deliver evidence-based care.
- A 'Be Guidelines Smart Toolkit' is available, aiming to ensure that nurses and allied professionals throughout Europe are aware of the variety of ESC guidelines and provide access to the latest evidence based resources in the management of cardiac conditions. More information available from: [www.escardio.org/be-guidelines-smart](http://www.escardio.org/be-guidelines-smart)

Summary card of the 2016 ESC AF Guidelines with a focus on specific recommendations for Nurses and Allied Professionals - European Society of Cardiology and Association of Cardiovascular Nursing and Allied Professions

From the ESC Guidelines for the Management of Atrial Fibrillation published in the *European Heart Journal* (2016) 37:2893-2962

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