

NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE

SCOPE

1 **Guideline title**

Atrial fibrillation: the management of atrial fibrillation

1.1 **Short title**

Atrial fibrillation

2 **The remit**

This is a partial update of 'Atrial fibrillation' (NICE clinical guideline 36). See section 4.3.1 for details of which sections will be updated. We will also carry out an editorial review of all recommendations to ensure that they comply with NICE's duties under equalities legislation.

This update is being undertaken as part of the guideline review cycle.

3 **Clinical need for the guideline**

3.1 **Epidemiology**

- a) Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia; it affects about 1.3% of the population in England and Wales. Men are more commonly affected than women and the prevalence of AF increases with age.
- b) Early recognition of AF can be difficult. The sometimes 'silent' nature of the arrhythmia means that AF may remain undiagnosed for a long time, and about one third of people with AF are not aware of the rhythm disturbance. Many people with AF may never present to hospital, which may cause an underestimation of the prevalence of AF.

- c) AF can lead to complications such as heart failure and stroke. The risk of stroke in people with AF is five times higher than in a person with a normal heart rhythm.
- d) People with AF have an increased rate of hospitalisations compared with people without AF; AF accounts directly for about 130,000 finished consultant episodes per year in England.
- e) AF is associated with an increased risk of mortality. The mortality rate for people with AF is double that for people without AF, independent of other known predictors of mortality.
- f) Several conditions are associated with an increased risk of developing AF. These include hypertension, valvular heart diseases, diabetes mellitus, heart failure and chronic or acute alcohol use.

3.2 Current practice

- a) The aim of treatment for AF is to prevent complications, in particular stroke, and to alleviate symptoms.
- b) AF is confirmed by an electrocardiogram (ECG), and an echocardiogram may also be performed.
- c) Drug treatments for AF include anticoagulants to reduce the risk of stroke, and antiarrhythmics to restore or maintain the normal heart rhythm or to slow the heart rate in patients who remain in AF.
- d) Non-pharmacological management of AF includes:
 - electrical cardioversion, which may be used to 'shock' the heart back to its normal rhythm
 - catheter or surgical ablation to create lesions to stop the abnormal electrical impulses that cause AF.
- e) People with AF receive anticoagulation prophylaxis to reduce the risk of clot formation, because of their increased risk of stroke. Until

recently this has been with traditional anticoagulants such as warfarin or heparin. However, newer antithrombotic agents are now being used as alternatives to warfarin for treating people with non-valvular AF.

- f) Current good practice in the care of people with AF includes the regular review of stroke and bleeding risk, together with assessment of the efficacy of anticoagulant therapy and the adequacy of symptom control.
- g) An update of the guideline is needed because there is:
 - new evidence available for several clinical areas, including stroke and bleeding risk stratification, the role of new antithrombotic agents and ablation strategies
 - variation in practice as to when it is appropriate to offer cardioversion, and whether electrical or pharmacological cardioversion should be used, and which first-line treatments should be used for rate control in AF.

4 The guideline

The guideline development process is described in detail on the NICE website (see section 6, 'Further information').

This scope defines what the guideline will (and will not) examine, and what the guideline developers will consider.

The areas that will be addressed by the guideline are described in the following sections.

4.1 Population

4.1.1 Groups that will be covered

- a) Adults (18 years or older) with AF, including:
 - new-onset or acute AF

- chronic AF, including paroxysmal (recurrent), persistent and permanent
- post-operative AF
- atrial flutter

b) Specific consideration will be given to the needs of:

- older people
- people with left ventricular dysfunction
- people with reversible causes of AF.

4.1.2 Groups that will not be covered

a) People under 18 years.

b) People with congenital heart disease precipitating AF.

4.2 *Healthcare setting*

a) All settings where NHS healthcare is provided or commissioned.

4.3 *Clinical management*

4.3.1 Key clinical issues that will be covered

Areas that were not in the original guideline that will be included in the update are denoted by an asterisk (*).

a) Risk stratification for:

- stroke or thromboembolic events
- bleeding.

b) Prevention of stroke using:

- antithrombotic therapy
- left atrial appendage occlusion*.

- c) Treatment of AF with:
- rhythm-control strategies using:
 - pharmacological management
 - cardioversion (electrical and pharmacological)
 - atrial ablation, including criteria for referral, and catheter and surgical ablation strategies (as stand-alone or concomitant treatment) that are routinely use in clinical practice (this guideline will cross-refer to the relevant NICE interventional procedures guidance)*.
 - Rate-control strategies using:
 - pharmacological management
 - 'ablate and pace' strategies*.
- d) Referral of people with AF to specialist care.
- e) Review and monitoring of*:
- symptoms of AF
 - rhythm control and management
 - indications for anticoagulation and bleeding risk
 - quality of control of anticoagulation, including time in therapeutic range.
- f) Patient information and support specific to AF*.

Note that guideline recommendations about use of drugs will normally fall within licensed indications; exceptionally, and only if clearly supported by evidence, use outside a licensed indication may be recommended. The guideline will assume that prescribers will use a drug's summary of product characteristics to inform decisions made with individual patients.

4.3.2 Clinical issues that will not be covered

Areas from the original guideline that will not be updated

- a) Identification and diagnosis of AF (the 2006 recommendations will be incorporated into the updated guideline).
- b) Self-monitoring or self-management of anticoagulation (this guideline will cross-refer to [Venous thromboembolic disease: the management of venous thromboembolic disease and the role of thrombophilia testing](#) [NICE clinical guideline 144]).

Areas not covered by the original guideline or the update

- a) Treatment of comorbidities associated with AF.

4.4 Main outcomes

- a) Health-related quality of life.
- b) Mortality.
- c) Stroke or thromboembolic complications.
- d) Major bleeding.
- e) Hospitalisation with a primary diagnosis of AF.
- f) Patients developing heart failure.

4.5 Economic aspects

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in 'The guidelines manual' (see 'Further information').

4.6 Status

4.6.1 Scope

This is the final scope.

4.6.2 Timing

The development of the guideline recommendations will begin in July 2012.

5 Related NICE guidance

5.1 Published guidance

5.1.1 NICE guidance to be updated

This guideline will update and replace the following NICE guidance:

- [Atrial fibrillation](#). NICE clinical guideline 36 (2006).

5.1.2 Other related NICE guidance

- [Venous thromboembolic disease](#). NICE clinical guideline 144 (2012).
- [Rivaroxaban for the prevention of stroke and systemic embolism in people with atrial fibrillation](#). NICE technology appraisal guidance 256 (2012).
- [Percutaneous balloon cryoblation for pulmonary vein isolation in atrial fibrillation](#). NICE interventional procedure guidance 427 (2012).
- [Patient experience in adult NHS services](#). NICE clinical guideline 138 (2012).
- [Dabigatran etexilate for the prevention of stroke and systemic embolism atrial fibrillation](#). NICE technology appraisal guidance 249 (2012).
- [Hypertension](#). NICE clinical guideline 127 (2011).
- [Thoracoscopic exclusion of the left atrial appendage in atrial fibrillation \(with or without other cardiac surgery\) for the prevention of thromboembolism](#). NICE interventional procedure guidance 400 (2011).
- [Percutaneous endoscopic catheter laser balloon pulmonary vein isolation for atrial fibrillation](#). NICE interventional procedure guidance 399 (2011).
- [Chronic heart failure](#). NICE clinical guideline 108 (2010)

- [Alcohol-use disorders](#). NICE clinical guideline 100 (2010).
- [Percutaneous occlusion of the left atrial appendage in non-valvular atrial fibrillation for the prevention of thromboembolism](#). NICE interventional procedure guidance 349 (2010).
- [Dronedronone for the treatment of non-permanent atrial fibrillation](#). NICE technology appraisal guidance 197 (2010).
- [Percutaneous \(non-thoroscopic\) epicardial catheter radiofrequency ablation for atrial fibrillation](#). NICE interventional procedure guidance 294 (2009).
- [Thoracoscopic epicardial radiofrequency ablation for atrial fibrillation](#). NICE interventional procedure guidance 286 (2009).
- [Rivaroxaban for the prevention of venous thromboembolism after total hip or total knee replacement in adults](#). NICE technology appraisal guidance 170 (2009).
- [Medicines adherence](#). NICE clinical guideline 76 (2009).
- Type 2 diabetes - newer agents. NICE clinical guideline 87 (2009).
- Type 2 diabetes. NICE clinical guideline 66 (2008).
- [Stroke](#). NICE clinical guideline 68 (2008).
- [High intensity focused ultrasound ablation of atrial tissue for atrial fibrillation as an associated procedure with other cardiac surgery](#). NICE interventional procedure guidance 184 (2006).
- [Percutaneous radiofrequency catheter ablation for atrial fibrillation](#). NICE interventional procedure guidance 168 (2006).
- [Cryoablation for atrial fibrillation in association with other cardiac surgery](#). NICE interventional procedure guidance 123 (2005).
- [Microwave ablation for atrial fibrillation in association with other cardiac surgery](#). NICE interventional procedure guidance 122 (2005).
- [Radiofrequency ablation for atrial fibrillation in association with other cardiac surgery](#). NICE interventional procedure guidance 121 (2005).
- [Guidance on the use of drugs for early thrombolysis in the treatment of acute myocardial infarction](#). NICE technology appraisal guidance 52 (2002).

5.2 *Guidance under development*

NICE is currently developing the following related guidance (details available from the NICE website):

- WatchBP Home A for diagnosing and monitoring hypertension and detecting atrial fibrillation. NICE medical technologies guidance. Publication expected August 2012.
- MI: secondary prevention (update). NICE technology appraisal guidance. Publication expected February 2013.
- Stroke and systemic embolism (prevention, non-valvular atrial fibrillation) - apixaban. NICE technology appraisal guidance. Publication expected April 2013.
- Physical activity advice in primary care. NICE public health guidance. Publication expected May 2013.
- Stroke rehabilitation. NICE clinical guideline. Publication expected June 2013.
- Myocardial infarction with ST-segment-elevation. NICE clinical guideline. Publication expected July 2013.
- Implantable cardioverter defibrillators for the treatment of arrhythmias and cardiac resynchronisation therapy for the treatment of heart failure (review of TA95 and TA120). NICE technology appraisal guidance. Publication expected September 2013.
- Type 1 Diabetes (update). NICE clinical guideline. Publication expected July 2014.
- Type 2 diabetes. NICE clinical guideline. Publication date to be confirmed.
- Venous thromboembolism (prevention) - rivaroxaban. NICE technology appraisal guidance. Publication date to be confirmed.
- Acute heart failure. NICE clinical guideline. Publication date to be confirmed.
- Atrial fibrillation - idraparinux sodium. NICE technology appraisal guidance. Appraisal suspended.

- Vernakalant for the treatment of rapid conversion of recent onset atrial fibrillation = 7 days. NICE technology appraisal guidance. Appraisal suspended.

6 Further information

Information on the guideline development process is provided in the following documents, available from the NICE website:

- [‘How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS’](#)
- [‘The guidelines manual’](#).

Information on the progress of the guideline will also be available from the [NICE website](#).