



Policy statement

Atrial fibrillation

Introduction

Atrial fibrillation (AF) is the most common type of significant abnormal heart rhythm. Normally, the heart's natural pacemaker sends out regular electrical impulses but for people with AF, the impulses fire off from different places in the atria (the top chambers of the heart) in a disorganised way.

Most people who have atrial fibrillation are over 65 – about 7 in every 100 people over 65 have AF¹ – and it is much less common in younger individuals. Symptoms can include palpitation, breathlessness, feeling faint and tiredness although many people don't have any symptoms at all.

Atrial fibrillation increases the risk of a blood clot developing inside the atria (top chambers of the heart) which can lead to an embolic stroke. Each year in the UK, it is estimated that there are around 111,000 first time strokes² and AF is responsible for 14% of these.³ Therefore over 15,500 strokes a year are thought to be attributable to AF. However, with appropriate treatment, the risk of stroke can be substantially reduced.

Policy statement

The BHF is committed to helping to detect undiagnosed atrial fibrillation. This includes raising public awareness of how a simple pulse check can help to identify an irregular heart rhythm. GPs can then assess the patient and, if confirmed as atrial fibrillation, this can be effectively managed.

In order to ensure that as many people as possible who have atrial fibrillation are diagnosed and treated, the BHF supports opportunistic pulse checks when people potentially at risk are in contact with the health service. Pilots offering pulse checks for patients attending flu clinics and integrating pulse checks into chronic disease management templates have demonstrated that this is an effective and cost effective way to ensure that people living with undetected AF are identified.

Local Health Boards in Scotland and Primary Care Trusts in England should explore the potential to include pulse checks within existing systematic cardiovascular risk assessment programmes.

The Quality and Outcomes Framework has helped to incentivise detection and treatment of people living with atrial fibrillation. The indicators on atrial fibrillation were revised in 2012 to better reflect NICE guidance on the use of anticoagulation and antiplatelet drugs. This should help to reduce the risk of stroke amongst people living with atrial fibrillation.

¹ Hobbs et al (2005) 'A randomised controlled trial and cost effectiveness study of systematic screening (targeted and total population screening) versus routine practice for the detection of atrial fibrillation in people aged 65 and over. the SAFE study.' Health Technology Assessment Vol 9, No 40

² Scarborough et al (2009) 'Stroke Statistics 2009' BHF and The Stroke Association

³ Scarborough et al (2009) 'Stroke Statistics 2009' BHF and The Stroke Association and Wolf et al (1987) 'Atrial Fibrillation: A major contributor to stroke in the elderly. The Framingham Study Archives of Internal Medicine 177, 1561-1564

Background

Public awareness

In November 2009, the BHF ran a public awareness campaign encouraging members of the public to take their pulse and to make an appointment with their GP if they detected an irregular pulse. This campaign was targeted at the over-55 population where the incidence of AF is higher than in younger people. This was intended to help to ensure that people most likely to have undiagnosed AF seek assistance if they detect an irregular pulse.

An irregular pulse is not always AF. Occasional irregularities in the pulse – extra or missed beats – are very common in all ages and are not in any way dangerous. Such irregularities usually have a pattern such as a missed or extra beat (often called regularly irregular), and the background pulse is regular. By contrast, AF is continuously irregular with no pattern (often called irregularly irregular). However, in some patients with an irregular pulse it may be impossible to determine whether it is due to AF or extra beats without the aid of an ECG.

Cardiovascular risk assessment programmes

In England, NHS Health Checks have been available to people aged 40-74 from 1 April 2009. The check comprises taking a personal history, testing cholesterol and blood pressure levels, measuring BMI, and a diabetes risk assessment.⁴ Pulse checks are not included in the core national requirements, although there is scope for them to be included at the local level according to local priorities. From April 2013, responsibility for carrying out health checks will be passed to new Directors of Public Health working for local authorities.⁵

In Scotland, the Keep Well programme offers free health checks for people aged 45-64 living in certain areas of Scotland.⁶ The areas that are taking part in the programme are identified using the Scottish Index of Multiple Deprivation and this forms part of the Scottish Government's commitment to reducing health inequalities.⁷ The checks do not include a pulse check.

In Wales, the Healthy Heart Wales programme is run by health boards and Public Health Wales. In addition, a scheme has been introduced in Carmarthenshire to screen employees at Corus for their risk of developing cardiovascular disease and Type 2 diabetes.⁸ This does not include a pulse check.

There is no national cardiovascular risk assessment programme in Northern Ireland.

Evidence indicates that systematic screening increases the detection of new cases of AF by approximately 60 per cent.⁹

Treatment of atrial fibrillation

Treatment of AF has two aims:

- to reduce the risk of developing a blood clot, and

⁴ <http://www.nhs.uk/Planners/NHSHealthCheck/Pages/TheTests.aspx>

⁵ DH (2011) The new public health system: summary

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_131897.pdf

⁶ This was launched in 2006 and was formerly named Prevention 2010

⁷ <http://www.healthscotland.com/anticipatory-care-keepwell.aspx>

⁸ http://www.wales.nhs.uk/sites3/Documents/808/feb09-Carmarthenshire_Workforce_Screening2.pdf

⁹ http://www.heart.nhs.uk/Heart/Portals/0/atrial_fibrillation/Brief%20-%20Chapter%208%20Atrial%20Fibrillation%20in%20Primary%20Care.pdf

- to control the rate and/or rhythm of the heartbeat.

NICE guidance recommends that patients with paroxysmal (intermittent), persistent or permanent AF who have a high stroke/thromboembolic risk should be treated with anticoagulation e.g. warfarin, that those with moderate risk should be treated with anticoagulation or antiplatelet e.g. aspirin, and those with low risk should be treated with antiplatelet unless they have a contraindication.¹⁰

As with all clinical decisions, it is important to balance the risks and benefits of prescribing particular treatments. Haemorrhage is a known side-effect of warfarin and aspirin, but for those at high risk of embolic stroke the benefits of taking warfarin outweigh the potential risks of taking it.

Appropriate anticoagulation of all patients with recognised AF would prevent approximately 4,500 strokes a year and prevent 3,000 deaths.¹¹

The Quality and Outcomes Framework

The Quality and Outcomes Framework (QOF) is a voluntary annual reward and incentive scheme for general practitioners and has been introduced as part of GP contracts across the UK.

The indicators for atrial fibrillation from April 2012 are¹²:

- **AF1** The practice can produce a register of patients with atrial fibrillation.
- **AF6** In those patients with atrial fibrillation in whom there is a record of a CHADS₂ score of 1, the percentage of patients who are currently treated with anti-coagulation drug therapy or anti-platelet therapy¹³
- **AF7** In those patients with atrial fibrillation in whom there is a record of a CHADS₂ score of greater than 1, the percentage of patients who are currently treated with anti-coagulation drug therapy

The QOF data from 2010/11 suggest that indicators have helped to increase identification of the number of people living with AF and to secure effective treatment.¹⁴

	Proportion of patients on AF register	% patients with AF diagnosed by ECG	% patients with AF currently treated with anticoagulation or antiplatelet therapy
England – North East	1.6%	96.5%	93.8%
England – North West	1.5%	96.2%	93.6%
England – Yorkshire and the Humber	1.5%	96.2%	93.7%
England – East Midlands	1.5%	96.0%	94.1%
England – West Midlands	1.5%	96.4%	93.6%
England - East	1.5%	95.4%	93.3%
England - London	0.9%	95.6%	93.7%
England – South East	1.7%	95.7%	93.2%
England – South Central	1.4%	96.3%	93.1%

¹⁰ NICE (June 2006) Atrial fibrillation: the management of atrial fibrillation, p47

¹¹ NHS Improvement (2009) Atrial fibrillation in primary care: making an impact on stroke prevention: National priority project final summaries

¹² http://www.nhsemployers.org/SiteCollectionDocuments/Summary_of_QOF_changes_for_2012-13_mh111111.pdf

¹³ CHADS₂ is a clinical scoring system used for assessing risk of stroke. A score of 1 indicates moderate level risk of risk; risk increases as score increases.

¹⁴ <http://www.ic.nhs.uk/statistics-and-data-collections/supporting-information/audits-and-performance/the-quality-and-outcomes-framework/qof-2010-11/qof-2010-11-data-tables>

England – South West	1.8%	96.4%	93.9%
Northern Ireland	1.4%	99.6%	99.9%
Scotland	1.5%	97.5	95.1
Wales	1.7%	96.8%	93.9%

The previous version of the indicator relating to effective treatment did not distinguish between anticoagulation drugs and anti-platelet therapy. This may have led some primary care practitioners to use anti-platelet drugs, despite the fact that NICE guidance states anti-coagulation drugs should be used for people at high risk of stroke.¹⁵ An audit undertaken in Leeds found that of 2,116 patients reviewed with AF, 50% were at high risk of stroke and of those, 46% were not on warfarin. Most of these patients were on aspirin.¹⁶

However, the revised indicator introduced in 2012 should ensure that all patients receive the most effective treatment for their condition.

NHS Improvement

As part of the response to Chapter 8 of the National Service Framework for Coronary Heart Disease, NHS Improvement established pilot projects in 18 areas in England to look at how to improve detection and management of AF.¹⁷ The pilot projects undertook a range of innovative approaches, including opportunistic screening for AF at flu clinics and enhanced local service provision for the detection and treatment of AF.

For example, North Somerset PCT introduced opportunistic AF screening in nine practices either in chronic disease clinics, on GP visits or practice nurse visits. 7,089 pulses were taken during the year period which, assuming patients only had their pulse checked once, represents 45% of the over-65 population. 66 new diagnoses were made which equates to one new diagnosis for every 107 pulses taken. The patient, carer and public involvement group showed keen interest in the project and strongly expressed a wish that a pulse check be mandatory in the vascular checks programme. Clinicians generally felt that opportunistic screening was beneficial.

The Colchester Practice Based Commissioning Group incentivised 37 out of 43 practices to undertake opportunistic screening at flu clinics. This led to 32,401 patients being screening in six weeks. 189 patients were found to have AF and it estimated that this prevented 5 strokes in the coming year. At an estimated annual cost saving of £220,000 this represented a 322% return on investment.

In another pilot project, the Black Country Cardiovascular Network and Walsall PCT piloted AF screening at flu clinics from September 2008 to December 2008. A total of 1,324 pulses were recorded, of which 62 were found to be irregular. Of those 33 were known to have AF, seven were found to have AF and seven were awaiting an ECG at the time of publication. In a separate project, the North Trent Network of Cardiac Care and Sheffield PCT used opportunistic screening to identify patients with AF over the age of 65. Sixteen new patients were identified by four of the six pilot practices between April 2008 and February 2009. Although the project has now ended, opportunistic screening has become part of the primary prevention phase of the PCT's stroke project.

¹⁵ NICE Clinical guideline 26: The management of atrial fibrillation, June 2006

¹⁶ Harvard, J (2009) Why are we so bad in primary care at initiating warfarin in atrial fibrillation patients? The British Journal of Cardiology Vol 16 Issue 1; 237-240

¹⁷ NHS Improvement (2009) Atrial fibrillation in primary care: making an impact on stroke prevention, National priority project final summaries

BHF activity

BHF health checks

The BHF offers lifestyle checks through our Heart Health Roadshow, the Hearty Lives programme and our other work in the community. These assessments comprise of a lifestyle check including a BMI assessment and act as a route into further advice on aspects of health living including exercise, nutrition and smoking cessation.

We also conduct health checks which consist of a cardiovascular risk assessment to identify those who are at high risk of developing CVD. This assessment includes a pulse check.

BHF nurses

The BHF currently funds over 400 nurses who provide expert care for a range of heart patients both in their home and in hospital. The nurses cover a range of specialisms including arrhythmia nurses who provide care for people with cardiac rhythm disorders including AF.

The role of arrhythmia nurses includes developing specific care pathways, providing nurse-led clinics including pre assessment for cardioversion and pacemaker implants, managing patients with ICDs, and enabling patients to self manage their condition by providing appropriate education and support.

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