## Atrial fibrillation NICE quality standard Draft for consultation

February 2015

### Introduction

This quality standard covers identification, treatment and management of atrial fibrillation (including paroxysmal, persistent and permanent atrial fibrillation, and atrial flutter) in adults (18 years and older). For more information see the <u>topic</u> <u>overview</u>.

#### Why this quality standard is needed

Atrial fibrillation is a condition that affects the heart, causing it to beat irregularly and too fast. When this happens, blood does not flow properly through the heart and the rest of the body. This means that people with atrial fibrillation may be at increased risk of blood clots. Blood clots can block blood vessels and a stroke can occur if a blood vessel in the brain is blocked by a clot. As a result, if left untreated atrial fibrillation is a significant risk factor for stroke and other morbidities.

Atrial fibrillation is the most common sustained cardiac arrhythmia, and estimates suggest that its prevalence is increasing. The Health and Social Care Information Centre's 2011–12 <u>Quality and outcomes framework</u> estimated the prevalence of known atrial fibrillation to be 1.48%. The AF Association's <u>Guidance on risk</u> assessment and stroke prevention for atrial fibrillation (GRASP-AF) tool estimated the prevalence to be between 1.65% and 1.76%. However, it has been shown that the true prevalence of atrial fibrillation is underestimated and could be around 2.0% (Hobbs, FD, Fitzmaurice DA, Mont J et al. [2005] <u>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 40: 1–74).</u>

The management of atrial fibrillation aims to prevent complications, particularly stroke, and alleviate symptoms. Drug treatments include anticoagulants to reduce the risk of stroke, antiarrhythmics to restore or maintain normal heart rhythm and drugs to slow the heart rate in adults who remain in atrial fibrillation. Non-pharmacological management includes electrical cardioversion, which may be used to 'shock' the heart back to its normal rhythm, and catheter or surgical ablation to create lesions to stop the abnormal electrical impulses that cause atrial fibrillation.

The quality standard is expected to contribute to improvements in the following outcomes:

- mortality rates in adults with atrial fibrillation
- stroke and transient ischaemic attack rates in adults with atrial fibrillation
- admission rates with a primary diagnosis of atrial fibrillation
- quality of life of adults with atrial fibrillation.

## How this quality standard supports delivery of outcome frameworks

NICE quality standards are a concise set of prioritised statements designed to drive measurable quality improvements in a particular area of health or care. They are derived from high-quality guidance, such as that from NICE or other sources accredited by NICE. This quality standard, in conjunction with the guidance on which it is based, should contribute to the improvements outlined in the following 2 outcomes frameworks published by the Department of Health:

- NHS Outcomes Framework 2015–16
- Improving outcomes and supporting transparency: a public health outcomes framework for England 2013–2016, <u>Parts 1A, 1B and 2</u>.

Tables 1 and 2 show the outcomes, overarching indicators and improvement areas from the frameworks that the quality standard could contribute to achieving.

#### Table 1 NHS Outcomes Framework 2015–16

Domain	Overarching indicators and improvement areas

1 Preventing people from	Overarching indicator
dying prematurely	1a Potential Years of Life Lost (PYLL) from causes
	considered amenable to healthcare
	i Adults
	Improvement areas
	Reducing premature mortality from the major causes of death
	1.1 Under 75 mortality rate from cardiovascular disease (PHOF 4.4*)
2 Enhancing quality of life for people with long-term conditions	Overarching indicator
	2 Health-related quality of life for people with long-term conditions (ASCOF 1A**)
	Improvement areas
	Ensuring people feel supported to manage their condition
	2.1 Proportion of people feeling supported to manage their condition
	Reducing time spent in hospital by people with long-term conditions
	2.3i Unplanned hospitalisation for chronic ambulatory care sensitive conditions (adults)
4 Ensuring that people have	Overarching indicator
a positive experience of care	4a Patient experience of primary care
	i GP services
	i GP services 4b Patient experience of hospital care
	4b Patient experience of hospital care
	4b Patient experience of hospital care <i>Improvement areas</i> Improving people's experience of outpatient care 4.1 Patient experience of outpatient services
	4b Patient experience of hospital care <i>Improvement areas</i> Improving people's experience of outpatient care 4.1 Patient experience of outpatient services Improving access to primary care services
	<ul> <li>4b Patient experience of hospital care</li> <li><i>Improvement areas</i></li> <li>Improving people's experience of outpatient care</li> <li>4.1 Patient experience of outpatient services</li> <li>Improving access to primary care services</li> <li>4.4 Access to i GP services</li> </ul>
Alignment across the health	4b Patient experience of hospital care <i>Improvement areas</i> Improving people's experience of outpatient care 4.1 Patient experience of outpatient services Improving access to primary care services 4.4 Access to i GP services and social care system
* Indicator shared with Public H	<ul> <li>4b Patient experience of hospital care</li> <li><i>Improvement areas</i></li> <li>Improving people's experience of outpatient care</li> <li>4.1 Patient experience of outpatient services</li> <li>Improving access to primary care services</li> <li>4.4 Access to i GP services</li> </ul>

#### Table 2 Public health outcomes framework for England, 2013–2016

Domain

Objectives and indicators

4 Healthcare public health and	Objective	
preventing premature mortality	Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities	
	Indicators	
	<ul><li>4.3 Mortality rate from causes considered preventable ** (NHSOF 1a)</li></ul>	
	4.4 Under 75 mortality rate from all cardiovascular disease (including heart disease and stroke)* (NHSOF 1.1)	
Alignment across the health and social care system		
*Indicator shared with the NHS Outcomes Framework (NHSOF)		
**Complementary to indicators in the NHS Outcomes Framework (NHSOF)		

#### Patient experience and safety issues

Ensuring that care is safe and that people have a positive experience of care is vital in a high-quality service. It is important to consider these factors when planning and delivering services relevant to atrial fibrillation.

NICE has developed guidance and an associated quality standard on patient experience in adult NHS services (see the NICE pathway on <u>patient experience in</u> <u>adult NHS services</u>), which should be considered alongside this quality standard. They specify that people receiving care should be treated with dignity, have opportunities to discuss their preferences, and be supported to understand their options and make fully informed decisions. They also cover the provision of information to patients and service users. Quality statements on these aspects of patient experience are not usually included in topic-specific quality standards. However, recommendations in the development source(s) for quality standards that impact on patient experience and are specific to the topic are considered during quality statement development.

#### **Coordinated services**

The quality standard for atrial fibrillation specifies that services should be commissioned from and coordinated across all relevant agencies encompassing the whole atrial fibrillation care pathway. A person-centred, integrated approach to providing services is fundamental to delivering high-quality care to adults with atrial fibrillation. The Health and Social Care Act 2012 sets out a clear expectation that the care system should consider NICE quality standards in planning and delivering services, as part of a general duty to secure continuous improvement in quality. Commissioners and providers of health and social care should refer to the library of NICE quality standards when designing high-quality services. Other quality standards that should also be considered when choosing, commissioning or providing a high-quality atrial fibrillation service are listed in <u>Related NICE quality</u> standards.

#### Training and competencies

The quality standard should be read in the context of national and local guidelines on training and competencies. All healthcare professionals involved in assessing, caring for and treating adults with atrial fibrillation should have sufficient and appropriate training and competencies to deliver the actions and interventions described in the quality standard. Quality statements on staff training and competency are not usually included in quality standards. However, recommendations in the development source(s) on specific types of training for the topic that exceed standard professional training are considered during quality statement development.

#### Role of families and carers

Quality standards recognise the important role families and carers have in supporting adults with atrial fibrillation. If appropriate, healthcare professionals should ensure that family members and carers are involved in the decision-making process about investigations, treatment and care.

### List of quality statements

<u>Statement 1.</u> Adults with risk factors for atrial fibrillation have a manual pulse palpation.

<u>Statement 2.</u> Adults with atrial fibrillation and a <u>CHA<sub>2</sub>DS<sub>2</sub>-VAS<sub>C</sub></u> stroke risk score of 2 or above are offered anticoagulation.

<u>Statement 3</u>. Adults with atrial fibrillation prescribed anticoagulation are given a choice of anticoagulants.

<u>Statement 4</u>. Adults with atrial fibrillation taking a vitamin K antagonist with a time in therapeutic range below 65% have their anticoagulation reassessed.

<u>Statement 5.</u> Adults with atrial fibrillation whose treatment fails to control their symptoms are referred for specialised management within 4 weeks.

<u>Statement 6 (developmental).</u> Adults with atrial fibrillation taking a vitamin K antagonist are offered a coagulometer to self-monitor their coagulation status.

## **Questions for consultation**

#### Questions about the quality standard

**Question 1** Does this draft quality standard accurately reflect the key areas for quality improvement?

**Question 2** If the systems and structures were available, do you think it would be possible to collect the data for the proposed quality measures?

**Question 3** For each quality statement what do you think could be done to support improvement and help overcome barriers?

#### Questions about the individual quality statements

**Question 4** For draft quality statement 1: Is the term manual pulse palpation widely understood to mean that it is done by hand or is a definition of this term required? If so, can a definition be provided?

**Question 5** For draft quality statement 6 (developmental): Does this reflect an emergent area of cutting-edge service delivery or technology? If so, does it indicate outstanding performance, currently found only in a minority of providers, which will need specific, significant changes to be put in place, such as redesign of services or new equipment? Can you provide any evidence of current practice for this?

### **Quality statement 1: Pulse palpation**

#### Quality statement

Adults with risk factors for atrial fibrillation have a manual pulse palpation.

#### Rationale

Checking for an irregular pulse can help to identify atrial fibrillation. Early identification of atrial fibrillation can reduce the likelihood of it being detected only after adults present with serious complications, such as a stroke or transient ischaemic attack, thromboembolism or heart failure.

#### **Quality measures**

#### Structure

Evidence of local arrangements and written clinical protocols to ensure that adults with risk factors for atrial fibrillation have a manual pulse palpation.

Data source: Local data collection.

#### Process

Proportion of adults with risk factors for atrial fibrillation who have a manual pulse palpation.

Numerator – the number in the denominator who have a manual pulse palpation.

Denominator – the number of adults with risk factors for atrial fibrillation.

Data source: Local data collection.

#### Outcome

Detection of atrial fibrillation in adults presenting with stroke.

*Data source:* Local data collection. Data can be collected using the Royal College of Physicians' <u>Sentinel Stroke National Audit Programme (SSNAP)</u>, question 2.1.

## What the quality statement means for service providers, healthcare professionals and commissioners

**Service providers** (such as primary care services) ensure that systems are in place to identify adults with risk factors for atrial fibrillation and for them to have a manual pulse palpation.

**Healthcare professionals** ensure that they perform a manual pulse palpation for adults who present with risk factors for atrial fibrillation to assess for an irregular pulse and identify any atrial fibrillation.

**Commissioners** (NHS England) ensure that they commission services that can demonstrate that adults who present with risk factors for atrial fibrillation have a manual pulse palpation to assess for an irregular pulse.

## What the quality statement means for patients, service users and carers

Adults with risk factors for atrial fibrillation, such as shortness of breath or difficulty breathing, palpitations (when you can feel your heart beating), dizziness or fainting, chest pain or discomfort, or a stroke or transient ischaemic attack (sometimes called a 'mini-stroke' or TIA for short) have their pulse checked for irregularities by hand. If they are diagnosed with atrial fibrillation they can be offered treatment to reduce their risk of stroke and other problems caused by atrial fibrillation.

#### Source guidance

• Atrial fibrillation (2014) NICE guideline CG180, recommendation 1.1.1

#### Definitions of terms used in this quality statement

#### **Risk factors for atrial fibrillation**

Risk factors for atrial fibrillation are:

- breathlessness/dyspnoea
- palpitations
- syncope/dizziness

- chest discomfort
- stroke/transient ischaemic attack.

[Atrial fibrillation (NICE guideline CG180) recommendation 1.1.1]

### **Quality statement 2: Anticoagulation to reduce stroke risk**

#### **Quality statement**

Adults with atrial fibrillation and a  $CHA_2DS_2-VAS_C$  stroke risk score of 2 or above are offered anticoagulation.

#### Rationale

Adults with atrial fibrillation and a  $CHA_2DS_2$ -VAS<sub>C</sub> score of 2 or above are at a much higher risk of having a stroke than the general population. Anticoagulation can help to prevent strokes by reducing the likelihood of a blood clot forming.

#### **Quality measures**

#### Structure

Evidence of local arrangements and written clinical protocols to ensure that adults with atrial fibrillation and a  $CHA_2DS_2$ -VAS<sub>C</sub> score of 2 or above are offered anticoagulation.

Data source: Local data collection.

#### Process

Proportion of adults with atrial fibrillation and a  $CHA_2DS_2$ -VAS<sub>C</sub> score of 2 or above who receive anticoagulation.

Numerator – the number in the denominator who receive anticoagulation.

Denominator – the number of adults with atrial fibrillation and a  $CHA_2DS_2$ -VAS<sub>C</sub> score of 2 or above.

*Data source:* Local data collection. Data can be collected using the NICE menu indicator <u>NM82</u> and the AF Association's <u>Guidance on risk assessment and stroke</u> <u>prevention for atrial fibrillation (GRASP-AF)</u> tool.

#### Outcome

Stroke rates in adults with a primary diagnosis of atrial fibrillation.

*Data source:* Local data collection. Data can be collected using the Royal College of Physicians' <u>Sentinel Stroke National Audit Programme (SSNAP)</u>, question 2.1.

## What the quality statement means for service providers, healthcare professionals and commissioners

**Service providers** (such as primary and secondary care services) ensure that protocols are in place for adults with atrial fibrillation and a CHA<sub>2</sub>DS<sub>2</sub>-VAS<sub>C</sub> score of 2 or above to be offered anticoagulation.

**Healthcare professionals** ensure that they offer anticoagulation to adults with atrial fibrillation and a CHA<sub>2</sub>DS<sub>2</sub>-VAS<sub>C</sub> score of 2 or above.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services that offer anticoagulation to adults with atrial fibrillation and a  $CHA_2DS_2$ -VAS<sub>C</sub> score of 2 or above.

## What the quality statement means for patients, service users and carers

Adults with atrial fibrillation and a stroke risk score of 2 or more (estimated by their doctor using a special risk score called the  $CHA_2DS_2-VAS_C$ ) are offered treatment with a drug called an anticoagulant to lower their risk of having a blood clot that could cause a stroke.

#### Source guidance

• <u>Atrial fibrillation</u> (2014) NICE guideline CG180, recommendation 1.5.3 (key priority for implementation).

#### Definitions of terms used in this quality statement

#### CHA<sub>2</sub>DS<sub>2</sub>-VASc stroke risk score

The <u>CHA<sub>2</sub>DS<sub>2</sub>-VASc</u> stroke risk score estimates the risk of stroke in people with atrial fibrillation on a point scale of 1–9, using the following risk factors:

- age 65–74 years (1 point)
- age 75 years or older (2 points)

- female sex (1 point)
- congestive heart failure (1 point)
- hypertension (1 point)
- diabetes (1 point)
- stroke, transient ischaemic attack or thromboembolism (2 points)
- vascular disease (previous myocardial infarction, peripheral artery disease, aortic plaque) (1 point).

The NICE guideline on <u>atrial fibrillation</u> recommends that bleeding risk, estimated using the <u>HAS-BLED</u> score, is taken into account when offering anticoagulation. The HAS-BLED score estimates the risk of bleeding on a point scale of 1–9. Each of the following risk factors represents 1 point:

- hypertension (uncontrolled, for example systolic blood pressure higher than 160 mmHg)
- renal disease (chronic dialysis, renal transplantation or serum creatinine 200 micromol/l or more)
- liver disease (chronic hepatic disease such as cirrhosis or biochemical evidence of significant hepatic derangement [for example bilirubin more than 2 times upper limit of normal in association with aspartate/alanine aminotransferase or alkaline phosphatase more than 3 times upper limit of normal])
- stroke
- major bleeding event or predisposition to bleeding
- labile INR (for people taking vitamin K antagonists, unstable or high INRs or poor time in therapeutic range [for example less than 60%])
- age over 65 years
- use of drugs such as antiplatelet agents or non-steroidal anti-inflammatory drugs
- alcohol misuse or harmful excess.

[Adapted from <u>Atrial fibrillation</u> (NICE guideline CG180) recommendation 1.5.3]

## **Quality statement 3: Choice of anticoagulation**

#### Quality statement

Adults with atrial fibrillation prescribed anticoagulation are given a choice of anticoagulants.

#### Rationale

Offering a choice of suitable anticoagulants will help to ensure adherence to anticoagulants. Adherence to anticoagulation can help to prevent strokes by reducing the likelihood of a blood clot forming.

#### **Quality measures**

#### Structure

Evidence of local arrangements to ensure that adults with atrial fibrillation prescribed anticoagulation are given a choice of anticoagulation.

Data source: Local data collection.

#### Process

Proportion of adults with atrial fibrillation prescribed anticoagulants who are given a choice of anticoagulation.

Numerator – the number in the denominator who are given a choice of anticoagulation.

Denominator – the number of adults with atrial fibrillation prescribed anticoagulants.

Data source: Local data collection.

#### Outcomes

a) Patient experience.

Data source: Local data collection.

b) Rates of adults with atrial fibrillation anticoagulation adherence.

Data source: Local data collection.

## What the quality statement means for service providers, healthcare professionals and commissioners

**Service providers** (such as primary and secondary care services) ensure that protocols are in place for adults with atrial fibrillation prescribed anticoagulation to be given a choice of anticoagulants.

**Healthcare professionals** ensure that when offering anticoagulation they discuss the options with the person.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services that demonstrate they are offering a choice of anticoagulation.

## What the quality statement means for patients, service users and carers

Adults with atrial fibrillation who are prescribed anticoagulants are offered a choice of anticoagulants after a discussion with their doctor about the types of anticoagulants they could have and the advantages and disadvantages of each type.

#### Source guidance

<u>Atrial fibrillation</u> (2014) NICE guideline CG180, recommendations 1.5.4, 1.5.6, 1.5.8 and 1.5.10

#### Definitions of terms used in this quality statement

#### Choice of anticoagulants

Anticoagulants include vitamin K antagonists (such as warfarin), apixaban, dabigatran etexilate and rivaroxaban. A decision aid such as NICE's <u>Atrial fibrillation:</u> <u>patient decision aid</u> can be used to help people make choices.

[Adapted from Atrial fibrillation (NICE guideline CG180)]

## **Quality statement 4: Anticoagulation control**

#### Quality statement

Adults with atrial fibrillation taking a vitamin K antagonist with a time in therapeutic range below 65% have their anticoagulation reassessed.

#### Rationale

A time in therapeutic range (TTR) below 65% indicates that anticoagulation control is poor. Improving poor anticoagulation control by reassessing anticoagulation can ensure that a person's risks of stroke, and of having a major bleed, are as low as possible.

#### Quality measures

#### Structure

Evidence of local arrangements and written clinical protocols to ensure that adults with atrial fibrillation taking a vitamin K antagonist with a TTR below 65% have their anticoagulation reassessed.

Data source: Local data collection.

#### Process

a) Proportion of adults with atrial fibrillation taking a vitamin K antagonist who have their TTR calculated at each visit.

Numerator – the number in the denominator who have their TTR calculated at each visit.

Denominator – the number of adults with atrial fibrillation taking a vitamin K antagonist.

Data source: Local data collection.

b) Proportion of adults with a TTR below 65% who have their anticoagulation reassessed.

Numerator – the number in the denominator who have their anticoagulation reassessed.

Denominator – the number of adults with a TTR below 65%.

Data source: Local data collection.

#### Outcomes

a) Rates of thromboembolic complications.

Data source: Local data collection.

b) Patient experience.

Data source: Local data collection.

## What the quality statement means for service providers, healthcare professionals and commissioners

**Service providers** (such as primary and secondary care services) ensure that systems are in place for adults with atrial fibrillation taking a vitamin K antagonist with a TTR below 65% to have their anticoagulation reassessed.

**Healthcare professionals** ensure that they calculate TTR at each visit for adults with atrial fibrillation taking a vitamin K antagonist and reassess anticoagulation if their TTR is below 65%.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services that can demonstrate that systems are in place for adults with atrial fibrillation taking a vitamin K antagonist whose TTR is below 65% to have their anticoagulation reassessed.

## What the quality statement means for patients, service users and carers

Adults who are taking a type of drug called a vitamin K antagonist (such as warfarin) to treat atrial fibrillation have regular blood tests to check whether the dose they are taking is at the right level to reduce their risk of stroke and bleeding problems.

### Source guidance

<u>Atrial fibrillation</u> (2014) NICE guideline CG180, recommendations 1.5.11(key priority for implementation), 1.5.12, 1.5.13 and 1.5.14 (key priority for implementation)

#### Definitions of terms used in this quality statement

#### Time in therapeutic range (TTR)

TTR is measured to assess anticoagulation control. The NICE guideline on <u>atrial</u> <u>fibrillation</u> recommends that TTR is measured at each visit and at least annually, and that healthcare professionals should:

- use a validated method of measurement such as the Rosendaal method for computer-assisted dosing or proportion of tests in range for manual dosing
- exclude measurements taken during the first 6 weeks of treatment
- calculate TTR over a maintenance period of at least 6 months.

[Adapted from <u>Atrial fibrillation</u> (NICE guideline CG180) recommendation 1.5.11 and 1.5.18]

#### **Reassessing anticoagulation**

The NICE guideline on <u>atrial fibrillation</u> recommends that the following factors should be taken into account and addressed if they are contributing to poor anticoagulation control:

- cognitive function
- adherence to prescribed therapy
- illness
- interacting drug therapy
- lifestyle factors including diet and alcohol consumption.

[Adapted from <u>Atrial fibrillation</u> (NICE guideline CG180) recommendation 1.5.12 and 1.5.13]

The guideline recommends that, if poor anticoagulation control cannot be improved as a result of this reassessment, the risks and benefits of alternative stroke prevention strategies should be evaluated and discussed with the person. [Atrial fibrillation (NICE guideline CG180) recommendation 1.5.14]

## **Quality statement 5: Referral for specialised management**

#### **Quality statement**

Adults with atrial fibrillation whose treatment fails to control their symptoms are referred for specialised management within 4 weeks.

#### Rationale

Prompt referral to specialised management if treatment fails can help to alleviate symptoms and reduce the likelihood of poor outcomes such as stroke or heart failure.

#### **Quality measures**

#### Structure

Evidence of local arrangements and referral pathways to ensure that adults with atrial fibrillation whose treatment fails to control their symptoms are referred for specialised management within 4 weeks.

Data source: Local data collection.

#### Process

Proportion of adults with atrial fibrillation whose treatment fails to control their symptoms who are referred for specialised management within 4 weeks.

Numerator – the number in the denominator who are referred for specialised management within 4 weeks.

Denominator – the number of adults with atrial fibrillation whose treatment fails to control their symptoms.

Data source: Local data collection.

#### Outcomes

a) Adults with atrial fibrillation symptom control.

Data source: Local data collection.

b) Rates of stroke and heart failure for adults with atrial fibrillation.

Data source: Local data collection.

## What the quality statement means for service providers, healthcare professionals and commissioners

**Service providers** (such as primary and secondary care services) ensure that systems are in place for adults with atrial fibrillation whose treatment fails to control their symptoms to be referred for specialised management within 4 weeks.

**Healthcare professionals** ensure that they refer adults with atrial fibrillation whose treatment fails to control their symptoms to specialised management within 4 weeks.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services that refer adults with atrial fibrillation whose treatment fails to control their symptoms for specialised management within 4 weeks. They should also ensure that referral pathways enable this referral.

## What the quality statement means for patients, service users and carers

Adults who still have symptoms of atrial fibrillation after treatment are referred for specialised care within 4 weeks to try to ease their symptoms and reduce their risk of having a heart attack or stroke.

#### Source guidance

• <u>Atrial fibrillation</u> (2014) NICE guideline CG180, recommendation 1.3.1(key priority for implementation)

#### Definitions of terms used in this quality statement

#### Failed to control symptoms

Patients who remain symptomatic despite management with an initial care package. [<u>Atrial fibrillation.</u> (NICE guideline CG180), full guideline]

#### **Referral within 4 weeks**

Referral should be no longer than 4 weeks after the final failed treatment or no longer than 4 weeks after recurrence of atrial fibrillation following cardioversion. [Adapted from <u>Atrial fibrillation</u>. (NICE guideline CG180)]

#### **Specialised management**

Specialised management can be provided by an 'atrial fibrillation specialist' such as a cardiologist or nurse with an interest in arrhythmias. Specialised management should be provided through a package of care that covers key elements of service provision tailored to the person with atrial fibrillation. Formally documenting key elements of the service can help to ensure that it has been delivered. [<u>Atrial</u> <u>fibrillation.</u> (NICE guideline CG180), full guideline]

# Quality statement 6 (developmental): Self-monitoring of anticoagulation

Developmental quality statements set out an emergent area of cutting-edge service delivery or technology currently found in a minority of providers and indicating outstanding performance. They will need specific, significant changes to be put in place, such as redesign of services or new equipment.

#### Developmental quality statement

Adults with atrial fibrillation taking a vitamin K antagonist are offered a coagulometer to self-monitor their coagulation status.

#### Rationale

Enabling adults with atrial fibrillation to self-monitor their coagulation status using a coagulometer can help to optimise anticoagulation treatment. As well as reducing the frequency of hospital or clinic visits, it can improve health outcomes such as risk of stroke and bleeding.

#### Quality measures

#### Structure

Evidence of local arrangements for the provision of self-monitoring coagulometers for adults with atrial fibrillation who are taking a vitamin K antagonist.

Data source: Local data collection.

#### Process

Proportion of adults with atrial fibrillation taking a vitamin K antagonist who receive a coagulometer to self-monitor their coagulation status.

Numerator – the number in the denominator who receive a coagulometer to selfmonitor their coagulation status.

Denominator – the number of adults with atrial fibrillation taking a vitamin K antagonist.

Data source: Local data collection.

#### Outcome

Admission rates with a primary diagnosis of atrial fibrillation.

Data source: Local data collection

## What the quality statement means for service providers, healthcare professionals and commissioners

**Service providers** (such as primary and secondary care services) ensure that systems are in place to enable the provision of self-monitoring coagulometers for adults with atrial fibrillation taking a vitamin K antagonist.

**Healthcare professionals** ensure that they offer a coagulometer to adults with atrial fibrillation taking a vitamin K antagonist to self-monitor their coagulation status.

**Commissioners** (such as clinical commissioning groups and NHS England) ensure that they commission services that can provide self-monitoring coagulometers for adults with atrial fibrillation taking a vitamin K antagonist.

## What the quality statement means for patients, service users and carers

Adults with atrial fibrillation who take a vitamin K antagonist are offered a monitor they can use to help check how well the vitamin K antagonist is working.

#### Source guidance

 Atrial fibrillation and heart valve disease: self-monitoring coagulation status using point-of-care coagulometers (the CoaguChek XS system and the INRatio2 OT/INR monitor) (2014) NICE guideline DG14, recommendations 1.1 and 1.2.

#### Definitions of terms used in this quality statement

#### Coagulometers

Coagulometers monitor blood clotting in adults taking anticoagulants.

The CoaguChek XS system is recommended for self-monitoring in adults on longterm vitamin K antagonist therapy who have atrial fibrillation or heart valve disease if:

- the person prefers this form of testing and
- the person or their carer is both physically and cognitively able to self-monitor effectively.

[Atrial fibrillation and heart valve disease: self-monitoring coagulation status using point-of-care coagulometers (the CoaguChek XS system and the INRatio2 OT/INR monitor) (NICE guideline DG14) recommendation 1.1]

The InRatio2 PT/INR monitor is recommended for self-monitoring coagulation status in adults on long-term vitamin K antagonist therapy who have atrial fibrillation or heart valve disease if:

- the person prefers this form of testing and
- the person or their carer is both physically and cognitively able to self-monitor effectively.

[Atrial fibrillation and heart valve disease: self-monitoring coagulation status using point-of-care coagulometers (the CoaguChek XS system and the INRatio2 OT/INR monitor) (NICE guideline DG14) recommendation 1.2]

Patients and carers should be trained in the effective use of the CoaguChek XS system or the INRatio2 PT/INR monitor and clinicians involved in their care should regularly review their ability to self-monitor. Equipment for self-monitoring should be regularly checked using reliable quality control procedures, and by testing patients' equipment against a healthcare professional's coagulometer which is checked in line with an external quality assurance scheme. Ensure accurate patient records are kept and shared appropriately.

[Atrial fibrillation and heart valve disease: self-monitoring coagulation status using point-of-care coagulometers (the CoaguChek XS system and the INRatio2 OT/INR monitor (NICE guideline DG14) recommendations 1.3 and 1.4]

#### Equality and diversity considerations

For people who may have difficulty with or who are unable to self-monitor, such as adults with disabilities, their carers should be considered to help with self-monitoring.

Coagulometers currently come at a cost to the adult with atrial fibrillation. Reasonable adjustments should be made for the socio-economic status of the person with atrial fibrillation.

## Status of this quality standard

This is the draft quality standard released for consultation from 13 February to 13 March 2015. It is not NICE's final quality standard on atrial fibrillation. The statements and measures presented in this document are provisional and may change after consultation with stakeholders.

Comments on the content of the draft standard must be submitted by 5pm on 13 March 2015. All eligible comments received during consultation will be reviewed by the Quality Standards Advisory Committee and the quality statements and measures will be refined in line with the Quality Standards Advisory Committee's considerations. The final quality standard will be available on the <u>NICE website</u> from July 2015.

## Using the quality standard

### Quality measures

The quality measures accompanying the quality statements aim to improve the structure, process and outcomes of care in areas identified as needing quality improvement. They are not a new set of targets or mandatory indicators for performance management.

We have indicated if current national indicators exist that could be used to measure the quality statements. These include indicators developed by the Health and Social Care Information Centre through its <u>Indicators for Quality Improvement Programme</u>. If there is no national indicator that could be used to measure a quality statement, the quality measure should form the basis for audit criteria developed and used locally.

See NICE's <u>What makes up a NICE quality standard?</u> for further information, including advice on using quality measures.

### Levels of achievement

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of

100% should be aspired to (or 0% if the quality statement states that something should not be done). However, NICE recognises that this may not always be appropriate in practice, taking account of safety, choice and professional judgement, and therefore desired levels of achievement should be defined locally.

#### Using other national guidance and policy documents

Other national guidance and current policy documents have been referenced during the development of this quality standard. It is important that the quality standard is considered alongside the documents listed in <u>Development sources</u>.

### Diversity, equality and language

During the development of this quality standard, equality issues have been considered and <u>equality assessments</u> are available.

Good communication between healthcare professionals and adults with atrial fibrillation is essential. Treatment, care and support, and the information given about it, should be culturally appropriate. It should also be accessible to people with additional needs such as physical, sensory or learning disabilities, and to people who do not speak or read English. Adults with atrial fibrillation should have access to an interpreter or advocate if needed.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

#### **Development sources**

Further explanation of the methodology used can be found in the <u>quality standards</u> <u>process guide</u>.

### Evidence sources

The documents below contain recommendations from NICE guidance or other NICE-accredited recommendations that were used by the Quality Standards Advisory Committee to develop the quality standard statements and measures.

- Atrial fibrillation (2014) NICE guideline CG180
- Atrial fibrillation and heart valve disease: self-monitoring coagulation status using point-of-care coagulometers (the CoaguChek XS system and the INRatio2 <u>OT/INR monitor</u>) (2014) NICE guideline DG14

#### Policy context

It is important that the quality standard is considered alongside current policy documents, including:

- Atrial Fibrillation Association (2014) Grasp the initiative: action plan.
- European Heart Rhythm Association (2014) UK report (white book).
- National Institute for Cardiovascular Outcomes Research (2014) <u>National audit of</u> <u>cardiac rhythm management devices.</u>
- Department of Health (2013) <u>Cardiovascular disease outcomes strategy:</u> improving outcomes for people with or at risk of cardiovascular disease.

#### Definitions and data sources for the quality measures

- Atrial Fibrillation Association (2014) <u>Guidance of risk assessment and stroke</u> prevention for atrial fibrillation (GRASP-AF) tool.
- NICE menu: NM82 (2014) In those patients with atrial fibrillation whose latest record of a CHA2DS2-VASc score is 2 or above, the percentage of patients who are currently treated with anti-coagulation drug therapy.
- Royal College of Physicians (2014) <u>Sentinel Stroke National Audit Programme</u> (<u>SSNAP</u>).

## **Related NICE quality standards**

#### Published

• <u>Hypertension</u> (2013) NICE quality standard 28

- <u>Stable angina</u> (2012) NICE quality standard 21
- Patient experience in adult NHS services (2012) NICE quality standard 15
- Alcohol dependence and harmful alcohol use (2011) NICE quality standard 11
- Chronic heart failure (2011) NICE quality standard 9
- Diabetes in adults (2011) NICE quality standard 6
- <u>Venous thromboembolism prevention</u> (2010) NICE quality standard 3
- Stroke (2010) NICE quality standard 2

#### In development

- Lipid modification. Publication expected September 2015
- <u>Risk assessment of modifiable cardiovascular risk factors.</u> Publication expected September 2015
- <u>Acute heart failure</u>. Publication expected December 2015
- <u>Physical activity: encouraging activity in all people in contact with the NHS (staff,</u> <u>patients and carers)</u>. Publication date to be confirmed

#### Future quality standards

This quality standard has been developed in the context of all quality standards referred to NICE, including the following topics scheduled for future development:

- Medicines optimisation (covering medicines adherence and safe prescribing)
- Physical activity: encouraging activity within the general population
- Primary prevention: population and community based primary prevention strategies, including the role of A&E, at different stages of the life course

The full list of quality standard topics referred to NICE is available from the <u>quality</u> <u>standards topic library</u> on the NICE website.

# Quality Standards Advisory Committee and NICE project team

#### **Quality Standards Advisory Committee**

This quality standard has been developed by Quality Standards Advisory Committee 1. Membership of this committee is as follows:

#### **Mr Lee Beresford**

Director of Strategy and System Development, NHS Wakefield Clinical Commissioning Group

#### Dr Gita Bhutani

Professional Lead, Psychological Services, Lancashire Care NHS Foundation Trust

## Mrs Jennifer Bostock

Lay member

#### Dr Helen Bromley

Locum Consultant in Public Health, Cheshire West and Chester Council

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Mr Gavin Maxwell Lay member

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#### **Ms Hazel Trender**

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#### Hugo Van Woerden

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#### Ms Karen Whitehead

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#### Ms Alyson Whitmarsh

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#### Dr Arnold Zermansky

GP, Leeds

The following specialist members joined the committee to develop this quality standard:

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Specialist arrhythmia nurse, South Tees NHS Foundation Trust

#### **Dr Campbell Cowan**

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## Dr Matthew Fay

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#### **Professor Gregory Lip**

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#### Mrs Eileen Porter Lay member

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### About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

The methods and processes for developing NICE quality standards are described in the <u>quality standards process guide</u>.

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care, and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and Northern Ireland Executive. NICE guidance or other products may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

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