

# **NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE**

## **QUALITY AND OUTCOMES FRAMEWORK (QOF) INDICATOR DEVELOPMENT PROGRAMME**

### **Cost impact statement: Atrial Fibrillation**

**Proposed change to QOF indicator:** NNM45/AF004 and NNM46 / AF005

**Date:** July 2014

#### **Indicator**

NM45 / AF004: 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 therapy.

NM46 / AF005: In those patients with atrial fibrillation whose latest record of a CHADS2 score is greater than 1, the percentage of patients who are currently treated with anti-coagulation therapy.

#### **Introduction**

This report covers a proposed change to 2 existing Quality and Outcomes Framework (QOF) indicators relating to atrial fibrillation.

Following recommendations from the independent QOF advisory committee in June 2014, it is proposed that the existing indicator AF004 should be retired. In addition it is proposed existing indicator AF005 is replaced to remove the reference to CHADS2 and replace it with CHA<sub>2</sub>DS<sub>2</sub>-VASc and replace greater than 1 with a score of 2 or above.

The previous indicator wording was:

*AF004: 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 therapy*

*AF005: In those patients with atrial fibrillation whose latest record of a CHADS2 score is greater than 1, the percentage of patients who are currently treated with anti-coagulation therapy.*

The proposed new indicator wording is:

*In those patients with atrial fibrillation whose latest record of a CHA<sub>2</sub>DS<sub>2</sub>-VASc score is 2 or above, the percentage of patients who are currently treated with anti-coagulation therapy.*

The reason for the proposed change is to ensure that the indicator and its supporting technical specifications (business rules) are consistent with the updated NICE guidance (CG180).

This report considers the likely cost impact of the proposed change to this indicator in terms of the relevant number of people with atrial fibrillation and the cost interventions provided. Costs to NHS commissioners are outlined where relevant, along with the cost of additional activity to general practices.

## **Cost implication**

### ***Number of people affected***

If left untreated AF is a significant risk factor for stroke and other morbidities. In people who have had a stroke, concurrent AF is associated with greater disability, a longer stay in hospital and a lower rate of discharge home. The incidence of stroke attributable to AF increases from 1.5% at age 50–59 years to 23.5% at age 80–89 years.

### ***Impact on health services***

Patients with AF form a significant part of general practice workload. The 2012/13 QOF prevalence from the AF register was 1.7% for England.

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Atrial fibrillation is common among UK hospital admissions being present in 3–6% of acute medical admissions. It also accounts for 33% of admissions for cardiac arrhythmias<sup>1</sup>.

The proposed change means that an estimated additional 28,000 people may have anti-coagulation therapy

The denominator is not anticipated to change.

### ***Current care***

The previous version of the NICE guideline (CG36) did not recommend a specific risk assessment tool only that the use of a stroke risk stratification algorithm .

### ***Proposed care***

NICE guideline (CG180) recommends that all people are assessed using CHA<sub>2</sub>DS<sub>2</sub>-VASc.

### ***Resource impact***

The resource impact is set out in appendix 1 at an estimated annual net cost of £30 million

### ***Conclusion***

The cost of potential of additional people receiving anti-coagulation therapy and the switch to an updated risk assessment tool is estimated at £30 million.

### ***References***

Health and Social Care Information Centre (2014) [QOF 2012/13 data](#) [online].

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<sup>1</sup> Gregory Y H Lip, Hung-Fat Tse, Management of atrial fibrillation, Lancet 2007; 370: 604–18  
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## Appendix 1

	Proportions	Populations	Unit cost (Per annum)	Totals	Populations	Unit cost	Per 100,000 population
People with atrial fibrillation in whom there is a record of a CHADS2 score of 1 receiving anti-coagulation drug therapy or anti-platelet therapy				178,847			322
People with atrial fibrillation in whom there is a record of a CHADS2 score of 2 receiving anti-coagulation drug therapy or anti-platelet therapy				310,580			559
Total of people being treated				489,427			881
People not treated				286,009			515
				775,436			1396
<b>Current medication</b>							
People receiving warfarin	30.51%	236,579	282.86	66,918,838	426	282.86	120,466
People receiving aspirin	19.99%	155,031	32.07	4,971,850	279	32.07	8,950
People receiving dabigatran etexilate	4.20%	32,605	801.78	26,142,429	59	801.78	47,061
People receiving rivoroxaban	4.20%	32,605	766.5	24,992,107	59	766.5	44,990
People receiving apixaban	4.20%	32,605	801.7	26,139,820	59	801.7	47,056
People receiving no medication	36.88%	286,009	0	-	515	0	-

<b>Costs of adverse events</b>							
Strokes (intracranial haemorrhage, haemorrhagic stroke, ischaemic stroke) cost in 1st year of commencing drug of having stroke		30337	12,228	370,956,236	55	12,228	667,786
Major bleeds		5604	1,173	6,573,171	10	1,173	11,833
<b>Total</b>	<b>100%</b>			<b>526,694,451</b>			<b>948,143</b>
<b>Future medication</b>							
People receiving warfarin	37.53%	291,017	282.86	82,317,171	524	282.86	148,185
People receiving aspirin	2.44%	18,933	32.07	607,187	34	32.07	1,093
People receiving dabigatran etexilate	7.72%	59,825	801.78	47,966,880	108	801.78	86,349
People receiving rivoroxaban	7.72%	59,825	766.5	45,856,237	108	766.5	82,549
People receiving apixaban	7.72%	59,825	801.7	47,962,094	108	801.7	86,340
People receiving no medication	36.88%	286,009	0	-	515	0	-
<b>Costs of adverse events</b>							
Strokes (intracranial haemorrhage, haemorrhagic stroke, ischaemic stroke) cost in 1st year of commencing drug of having stroke		26270	12,228	321,229,660	47	12,228	578,270
Major bleeds		6439	1,173	7,553,378	12	1,173	13,597
<b>Total</b>	<b>100%</b>			<b>553,492,608</b>			<b>996,384</b>
<b>Cost impact due to change in prescribing</b>				<b>26,798,157</b>			<b>48,241</b>

2012/13 QOF indicator AF5 number of people requiring annual risk reassessment using CHADS VASC				775,436			1396
Less people being currently treated				489,427			881
People not currently treated (CHADS2 score of 0 or 1)				286,009			515
Estimated proportion of people reclassified as result of change to CHA2DS2-VASc score				10%			10%
Increase in the number of people who currently receive anti-coagulation therapy				28,601			51
People receiving warfarin	11,440	282.86	3,236,020	21	282.86	5,825	
People receiving dabigatran etexilate	5,720	801.78	4,586,326	10	801.78	8,256	
People receiving rivoroxaban	5,720	766.5	4,384,518	10	766.5	7,893	
People receiving apixaban	5,720	801.7	4,585,868	10	801.7	8,255	
<b>Cost of additional anti-coagulation therapy</b>			<b>16,792,732</b>			<b>30,230</b>	
Reduction on adverse events due to more treatment							
Strokes (intracranial haemorrhage, haemorrhagic stroke, ischaemic stroke) cost in 1st year of commencing drug of having stroke	1,119	12,228	13,688,503	2	12,228	24,642	
Major bleeds	-	1,173	190,222	-	1,173	-	
<b>Saving due to reduction in adverse events</b>			<b>13,498,281</b>			<b>24,642</b>	
<b>Cost due additional treatment</b>			<b>3,294,452</b>			<b>5,588</b>	
<b>Total cost of indicator = (Cost impact due to change in prescribing + Cost of additional anti-coagulation therapy ) -Saving due to reduction in adverse events</b>			<b>30,092,609</b>			<b>53,830</b>	