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 CHA₂DS₂-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 CHA₂DS₂-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 arrhythmias¹.

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 CHA₂DS₂-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].

¹ Gregory Y H Lip, Hung-Fat Tse, Management of atrial fibrillation, Lancet 2007; 370: 604–18 QOF cost impact statement: proposed change to AF004 and AF005 indicator (July 2014) page 3 of 6

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 anticoagulation 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- | | | | 310,580 | | | 559 |
| coagulation drug therapy or anti-platelet therapy Total of people being treated | | | | 489,427 | | | 881 |
| People not treated | | | | 286,009 | | | 515 |
| . oopie net neuteu | | | | 775,436 | | | 1396 |
| Current medication | | | | | | | |
| 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 | - |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Costs of adverse events | | | | | | | |
|--|--------|---------|--------|-------------|-----|--------|---------|
| 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 |
| Total | 100% | | | 526,694,451 | | | 948,143 |
| Future medication | | | | | | | |
| 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 | - |
| Costs of adverse events | | | | | | | |
| 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 |
| Total | 100% | | | 553,492,608 | | | 996,384 |
| Cost impact due to change in prescribing | | | | 26,798,157 | | | 48,241 |

| 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 |
| Cost of additional anti-coagulation therapy Reduction on adverse events due to more treatment | | | 16,792,732 | | | 30,230 |
| 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 | 162 | 1,173 | 190,222 | - | 1,173 | - |
| Saving due to reduction in adverse events | | | 13,498,281 | | | 24,642 |
| Cost due additional treatment | | | 3,294,452 | | | 5,588 |
| Total cost of indicator = (Cost impact due to | | | | | | |
| change in prescribing + Cost of additional anti-coagulation therapy) -Saving due to | | | | | | |
| reduction in adverse events | | | 30,092,609 | | | 53,830 |