NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

INDICATOR DEVELOPMENT PROGRAMME

Consultation report

Indicator area: Pulse rhythm assessment and annual review for people with AF

Consultation period: 1 February – 29 February 2016

Date of Indicator Advisory Committee meeting: 6 June 2017

Contents

Summary of indicators

ID		Evidence source
GP1	The percentage of patients registered at the practice aged 65 years and over who have been diagnosed with one or more of the following conditions: hypertension, diabetes, CKD, PAD, stroke/TIA, COPD or RA who have had a pulse rhythm assessment in the preceding 12 months.	Atrial fibrillation: management (2014) NICE guideline CG180 recommendation 1.1.1 Hypertension in adults: diagnosis and management (2011) NICE guideline CG127 recommendations 1.1.2 and 1.2.1 Type 1 diabetes in adults: diagnosis and management (2015) NICE guideline NG17 recommendation 1.13.1 Type 2 diabetes in adults: management (2015) NICE guideline NG28 recommendation 1.4.1 Chronic kidney disease in adults: assessment and management (2014) NICE guideline CG182 recommendation 1.6.1 Peripheral arterial disease: diagnosis and management (2012) NICE guideline CG147 recommendation 1.2.1 Stroke and transient ischaemic attack in over 16s: diagnosis and initial management (2008) NICE guideline CG68 recommendation 1.5.3.2 AF: How can we do better? (2015) Stroke association.
QOF2	The percentage of patients with atrial fibrillation, currently treated with an anticoagulant, who have had a review in the preceding 12 months which included: a) Assessment of stroke/VTE risk b) Assessment of bleeding risk c) Assessment of renal function, creatinine clearance, FBC and LFTs. d) Any adverse events related to anticoagulation e) Assessment of compliance f) Choice of anticoagulant	Atrial fibrillation (2015) NICE QS93 statement 3 Atrial fibrillation: management (2014) NICE guideline CG180 recommendation 1.5.18

Notes

Consultation took place in February 2016 and was previously discussed at the June 2016 Indicator Advisory Committee.

The indicators published at consultation were as follows:

GP1: Of those patients registered at the practice aged 65 years and over who have been diagnosed with one or more of the following conditions hypertension, diabetes, CKD, PAD, stroke or COPD and who have had at least one consultation in the preceding 12 months: the proportion that have had a manual pulse palpation on at least one occasion.

QOF2: The proportion of people with atrial fibrillation who are prescribed anticoagulation who have a review of the need for and quality of anticoagulation in the preceding 12 months.

However, following committee deliberations, amendments were made to the wording prior to testing:

GP1: Rheumatoid arthritis was included as a long term condition. The phrase ‘manual pulse palpation’ was altered to ‘pulse rhythm assessment’ to allow use of alternative technologies utilised in primary care.

QOF2: Specific content of the annual review was added for clarity.

Consultation comments are being presented to the June 2017 IAC for reference purposes only.

GP1: Pulse rhythm assessment – 65 years and over with long-term conditions

The percentage of patients registered at the practice aged 65 years and over who have been diagnosed with one or more of the following conditions: hypertension, diabetes, CKD, PAD, stroke/TIA, COPD or RA who have had a pulse rhythm assessment in the preceding 12 months.

Rationale

This indicator will embed pulse rhythm assessment into routine clinical reviews for people over 65 years with long term conditions. This will help identify people with atrial fibrillation.

Atrial fibrillation can be diagnosed by performing a pulse rhythm assessment to assess for an irregular pulse, followed by an electrocardiogram (ECG) where an irregular pulse has been detected. Any blood pressure measurement should include checking for an irregular pulse. Blood pressure measurement is recommended for patients with hypertension, diabetes, CKD, PAD or previous stroke. Therefore a pulse rhythm assessment should also be performed in these patients to assess for an irregular pulse. Atrial fibrillation is also more likely in people with COPD (Stroke Association, 2015).

Summary of consultation comments

Mixed comments were received about the potential impact of this indicator upon general practice.

Some said there would be little impact on workload as the people would be presenting anyway. Significant benefits could therefore be achieved for minimal additional work. Others said that the impact would be additional and longer appointments, adding to the workload.

Some felt that implementation of this indicator would effectively be a screening programme. It was highlighted that the National Screening Committee reviewed the evidence for an AF screening programme and did not recommend it was taken forward.

It may be inappropriate in the context of the consultation to check the pulse, and patients and their doctors may feel this is intrusive if not indicated. The consultation could change from being patient-centred to one driven by the needs of the doctor.

There is potential to miss people with paroxysmal atrial fibrillation, as they would only present with an irregular pulse if they were asymptomatic. Asking

these people if they had previously had an irregular pulse may help detect atrial fibrillation.

Specific questions included at consultation

- Can respondents comment on access to ECG services?

  Stakeholders stated that ECGs are available within primary care. It was highlighted that there is variation in access to ECG services, and where ECGs are available within primary care there is variation in the skills available to interpret the results. Access is available within secondary care.

- People with chronic conditions were identified as an appropriate population for manual pulse rhythm assessment. Do stakeholders consider the range of the conditions covered in the indicator suitable?

  Stakeholders said the conditions covered were suitable, with additional conditions suggested such as obesity, serious mental illness, congestive heart failure, asthma, obstructive sleep apnoea and dementia.

  There were mixed responses from stakeholders regarding limiting the population to those over 65 years. Some agreed, while others said it should be all people with the conditions specified irrespective of age.

Considerations for the advisory committee

The committee is asked to:

- consider consultation comments alongside the testing report
- note that the inclusion of COPD is not based on NICE guidance.
- Rheumatoid arthritis was including in piloting however this is not supported by NICE or NICE-accredited guidance.

QOF2: People currently treated with anticoagulant therapy

The percentage of patients with atrial fibrillation, currently treated with an anticoagulant, who have had a review in the preceding 12 months which included:

a) Assessment of stroke/VTE risk

b) Assessment of bleeding risk

c) Assessment of renal function, creatinine clearance, FBC and LFTs.

d) Any adverse events related to anticoagulation

e) Assessment of compliance

f) Choice of anticoagulant

Rationale

This indicator seeks to ensure that people with atrial fibrillation taking anticoagulant therapy have controlled anticoagulation. When poorly controlled, anticoagulation is not as effective in preventing stroke.

Appropriate anticoagulation can help to prevent stroke in people with atrial fibrillation by reducing the likelihood of a blood clot forming. However if anticoagulation with a vitamin K antagonist is poorly controlled, or adherence to any anticoagulation is poor, prevention will be suboptimal.

People with atrial fibrillation who are prescribed anticoagulation should have a review. This will ensure appropriate anticoagulation is being taken, and include discussing any challenges in adherence and control. Available anticoagulation options should include vitamin K antagonists such as warfarin and non-vitamin K antagonist oral anticoagulants (NOACs).

Summary of consultation comments

Stakeholders agreed it is necessary to review the need for, and quality of, anticoagulation on a regular basis (often more regularly than 12 months). However, not all people with atrial fibrillation who take anticoagulation will have their anticoagulation managed within primary care. In particular, people taking vitamin K antagonists (warfarin) attend anticoagulation clinics for their review of international normalised ratio (INR), often in secondary care settings.

Definitions are needed to focus this indicator. The importance of staying within INR limits for people taking vitamin K antagonists, and the need to take NOACs at regular intervals were highlighted.

People taking vitamin K antagonists should be able to self-monitor the quality of their anticoagulation if they are able and wish to do so. CoaguChek XS system and the INRatio2 PT/INR are recommended by NICE for self-monitoring coagulation status in adults and children on long-term vitamin K antagonist therapy who have atrial fibrillation. NICE diagnostics guidance DG14 (2014).

Some stakeholders suggested this indicator could come under a wider indicator on medication review.

Considerations for the advisory committee

The committee is asked to consider consultation comments alongside the testing report.

Appendix A: Consultation comments

ID	Proforma question no.	Stakeholder organisation	Comment
Question 2.1: Do you think there are any barriers to implementing the care described by this indicator?			
GP1	2.1	Association for the study of obesity	Uncertain
GP1	2.1	Association of British Clinical Diabetologists	No
GP1	2.1	Boehringer Ingelheim	No. We support that patients with hypertension, diabetes, CKD, PAD or previous stroke should receive manual pulse palpation to assess for irregular pulse.
GP1	2.1	British Holistic Medical Association	The intention is laudable: AF is important in cardiovascular disease, but distinguishing potential AF from harmless forms of irregularity is difficult and requires an experienced clinician if many unnecessary ECGs is to be avoided. Also, it can be intermittent. This has significant impact on workload and possibly patient anxiety.
GP1	2.1	British Thoracic Society	No but need to ensure pulse recorded long enough and need to ask patients if they had irregular heart beat.
GP1	2.1	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	Staff training with regard to pulse checks.
GP1	2.1	Daiichi Sankyo UK	Nil. As this'll ready part of existing established assessments, the addition of manual pulse check should not be an issue.
GP1	2.1	Individual comment	This appears to be a screening programme of the sort rejected by the NSC as not effective. http://legacy.screening.nhs.uk/atrialfibrillation. The guidance says that this is supported by NICE guideline but this is not the case. The guideline supports a pulse check with specific symptoms rather than screening of asymptomatic patients. Most of the other references to NICE guidelines are simply incorrect
GP1	2.1	Individual comment	No
GP1	2.1	Individual comment	no
GP1	2.1	Individual comment	Not enough GP’s or Practice Staff.

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.1	Individual comment - GP	No
GP1	2.1	Individual comment - GP	Yes. Getting GPs to comply with palpation. Better to screen all over 65s at flu jab clinics which are the required cohort. Problem that GPs and CCGs see this as “extra work” and may not comply without some form of compensation. Very cost effective to the “whole system” but not to the narrow primary care silo.
GP1	2.1	Individual comment - GP	Limited time of primary care providers
GP1	2.1	Individual comment - GP	No. this is a good marker
GP1	2.1	Individual comment - GP	Perception of the pulse
GP1	2.1	Liverpool LA public health team	Staff training with regard to pulse checks.
GP1	2.1	London Borough of Redbridge	None
GP1	2.1	London Diabetes Strategic Clinical Network	No
GP1	2.1	Medtronic Limited	For patients who have had a stroke there will be a barrier to diagnosis by using manual pulse palpation as they will have received standard of care for diagnosis of AF during their hospital stay (manual palpation, ecg, holter, external extended monitoring).For those patients having had a stroke of unknown cause and where AF hasn’t been detected they are at high risk of a recurrent stroke and should be considered for referral to secondary care for long term monitoring via an Insertable Loop Recorder (ILR). The use of ILR versus standard of care gives 8 times the detection rate of AF and is proven to be cost effective in patients with stroke of unknown cause. http://www.nejm.org/doi/full/10.1056/NEJMoa1313600
GP1	2.1	NHS Employers	This needs to be specifically apical pulse and not peripheral.
GP1	2.1	NHS England	Undertaking a pulse assessment will add very little time to a consultation unless an abnormality is detected. NICE already recommends routine pulse assessment before blood pressure measurement. However many consultations with people over 65 or with long term conditions are conducted by HCAs – they

ID	Proforma question no.	Stakeholder organisation	Comment
			may need training or technological assistance to identify abnormal pulse rhythms and to understand the case for diagnosing AF.
GP1	2.1	Nightingale Valley Surgery.	Massive work load and re-direction of already very limited resources.
GP1	2.1	Nottinghamshire County Council	Some practices do not use manual pulse palpation but a BP and pulse monitor (e.g. Watch-Home BP) which accurately detects AF. Use of a suitable pulse monitor should be included as an alternative to manual pulse palpation.
GP1	2.1	Primary Care CVD Leadership Forum	Pulse assessment will add very little time to a consultation unless an abnormality is detected. NICE already recommends routine pulse assessment before blood pressure measurement.
GP1	2.1	Public Health England	Pulse assessment will add very little time to a consultation unless an abnormality is detected. NICE already recommends routine pulse assessment before blood pressure measurement.
GP1	2.1	Royal College of General Practitioners (RCGP)	These patients (except those with CKD, who don't have any disease and may not be being monitored at all), will be having annual reviews, and very often pulse rate and rhythm will be being recorded already. However other barriers do exist: 1.The need for patient education and self monitoring as GPs are aiming to increase patient responsibility and reporting. (Individual comment) 2.Organisational barriers to cue the clinician and to ensure that in 12 months all patients in the age group have been seen and recorded, then to review those not seen. This is a paradigm of selective screening. (Individual comment)

ID	Proforma question no.	Stakeholder organisation	Comment
			3.Pulse assessment will add very little time to a consultation unless an abnormality is detected. NICE already recommends routine pulse assessment before blood pressure measurement. However many consultations with people over 65 or with long term conditions are conducted by HCAs – they may need training or technological assistance to identify abnormal pulse rhythms and to understand the case for diagnosing AF. (Individual comment) 4.It may be inappropriate in the context of the consultation to check the pulse and patients and their doctors are likely to feel this is intrusive if not indicated. It switches the consultation from a patient-centred one to one driven by the needs of the doctor. Also, time is a big issue, not just for the ECG but for appointments which will be needed to discuss results, many of which will be normal. (RCGP Overdiagnosis Group)
GP1	2.1	Royal College of Nursing	Reviewing patients who already have a diagnosis is quite time consuming.
GP1	2.1	Somerset CCG	No
GP1	2.1	Stroke Association	We do not believe that there are any significant barriers to implementing this indicator. Clearly, regular appointments are needed for monitoring those with comorbidities but this should not be a barrier to the indicator. Well-trained and practiced staff are also obviously needed but, again, this should not be a barrier. The importance of identifying those at risk from AF – and therefore at increased risk from a more serious stroke – should always outweigh these barriers.
GP1	2.1	The British Heart Foundation	No – all patients should be offered manual pulse checks in these categories as good clinical practice. Applying this to all

ID	Proforma question no.	Stakeholder organisation	Comment
			patients aged 65 or over supports consistency in clinical practice.
GP1	2.1	Thrombosis UK	No, we think this is very achievable given the cohort targeted have pre-existing conditions and so should be attending chronic disease clinics / annual appointments for monitoring.
Question 2.2: Do you think there are potential unintended consequences to implementing / using this indicator?			
GP1	2.2	Association for the study of obesity	No
GP1	2.2	Association of British Clinical Diabetologists	No
GP1	2.2	Boehringer Ingelheim	No
GP1	2.2	British Holistic Medical Association	The intention is laudable: AF is important in cardiovascular disease, but distinguishing potential AF from harmless forms of irregularity is difficult and requires an experienced clinician if many unnecessary ECGs is to be avoided. Also, it can be intermittent. This has significant impact on workload and possibly patient anxiety.
GP1	2.2	British Medical Association	This would lead to further appointments when there is already pressure on appointment availability
GP1	2.2	British Thoracic Society	no
GP1	2.2	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	Diagnosis in those who do not regularly access health services for LTC management including those under secondary care service could lead to inequality.
GP1	2.2	Daiichi Sankyo UK	Some patients with paroxysmal AF, which only manifests occasionally may be missed unless symptomatic at the time of palpating.
GP1	2.2	Individual comment	Introduction of an inappropriate screening programme
GP1	2.2	Individual comment	No
GP1	2.2	Individual comment	This is screening for AF – the national screening committee have stated there is no benefit to a screeing program and opportunistic screening is appropriate – this is therefore screeing programme via the back door
GP1	2.2	Individual comment	no

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.2	Individual comment	Removal of resources from other areas.
GP1	2.2	Individual comment - Consultant Cardiologist	There is a potential unintended consequence that diagnoses of Atrial Fibrillation are missed due to the recommendation that the patient has a manual pulse palpitation. Patients with undiagnosed Atrial Fibrillation are five times more likely to have a stroke. The manual pulse palpitation has several limiting factors including low specificity meaning patients need to be referred for further diagnostic tests, such as an ECG. "The first diagnostic test a general practitioner would use is to palpate the pulse for any irregularity, which has a sensitivity of 94% for detecting atrial fibrillation (determined in cohorts of elderly patients). However, because of the low specificity (72%) further diagnostic tests are needed" [Cooke G, Doust J, Sanders S. Is pulse palpation helpful in detecting atrial fibrillation? A systematic review. J Fam Pract 2006;55:130-4] The limiting factors in the current approach's ability to provide an immediate diagnosis include: • The manual pulse check is only a snapshot of a moment in time, not necessarily capturing the time of symptoms and thus missing the arrhythmia completely. • The time lag between manual pulse palpitation, referral to ECG and then appointment with a consultant to receive the result of the ECG. If the patient has undiagnosed AF, they remain at five times the risk of stroke until treated.

ID	Proforma question no.	Stakeholder organisation	Comment
			New technologies have now emerged that can do both a pulse check and single lead ECG at the same time providing an immediate diagnosis of Atrial Fibrillation. One example of this new technology was reviewed by NICE in August 2015. [NICE Medical Innovation Briefing, nice.org.uk/guidance/mib35] This smartphone ECG has a number of publications where the authors do not subsequently undertake a confirmatory 12 lead ECG recording, but rather use it as a single step diagnosis tool. In consideration of the need for a Cardiologist to review the recording from the smartphone ECG, the built in detection algorithm has a body of evidence behind it, comparing favourably with the manual pulse, quote N. Lowres et al. / European Journal of Cardio-Thoracic Surgery [Lowres N, Mulcahy G, Gallagher R, Freedman SB, Marshman D, Kirkness A et al. Self-monitoring for atrial fibrillation recurrence in the discharge period post-cardiac surgery using an iPhone electrocardiogram. Eur J Cardiothorac Surg 2016; doi:10.1093/ejcts/ezv486.] “The iECG has an automated AF detection algorithm that we validated with recordings both in a clinic setting (98% sensitivity, 97% specificity, and in community pharmacies (98.5% sensitivity and 91.4% specificity. This accuracy makes it an ideal device to detect asymptomatic or unrecognized AF.”

ID	Proforma question no.	Stakeholder organisation	Comment
			[Lau JK, Lowres N, Neubeck L, Brieger DB, Sy RW, Galloway CD et al. iPhone ECG application for community screening to detect silent atrial fibrillation: a novel technology to prevent stroke [Research Letter]. Int J Cardiol 2013;165:193–4.] [Lowres N, Neubeck L, Salkeld G, Krass I, McLachlan AJ, Redfern J et al. Feasibility and cost effectiveness of stroke prevention through community screening for atrial fibrillation using iPhone ECG in pharmacies. The SEARCH-AF study. Thromb Haemost 2014;111:1167–76.] Additional examples of new technologies exist on the market with growing evidence to support their sensitivity and specificity
GP1	2.2	Individual comment - GP	Increased workload for practices & training needs for PNs/HCAs
GP1	2.2	Individual comment - GP	No. It would be, and has been proven to be, a clear win in terms of reducing AF induced strokes which are usually serious strokes with serious QOF consequences to the patient and their relatives and carers, and serious financial consequences to the patient, the NHS, and care support services, usually council.
GP1	2.2	Individual comment - GP	Yes – a number. It will detract focus from the reason that the patient attended and their agenda. It switches the consultation to a very doctored-centred model rather than one that concentrates on the patient's needs and hopes.
GP1	2.2	Individual comment - GP	Less time by primary care providers to deliver other services/meet patient expectations Unnecessary deaths due to haemorrhage; I am unconvinced that there has been much attention paid to the outcome of anticoagulated patients

ID	Proforma question no.	Stakeholder organisation	Comment
			bleeding to death. the higher the numbers of people anticoagulated, the more will die of bleeding. What is the evidence base for patients in their 90's being anticoagulated in AF (I suspect there isn't one)
GP1	2.2	Individual comment - GP	more bleeds due to treatment and insecurity in doctors and patients, because the patient decision aid has been removed and there is no clear EBM understanding of all the different AF conditions
GP1	2.2	Individual comment - GP partner	A recent study in the BMJ noted that patients who have IHD and Hypertension as well as AF did not show benefit from medication
GP1	2.2	Liverpool LA public health team	Diagnosis in those who do not regularly access health services for LTC management including those under secondary care service could lead to inequality.
GP1	2.2	London Borough of Redbridge	Although the likelihood is very small, patients that fit the criteria but have not had a consultation in the preceding 12 months would miss out on having their pulse checked manually.
GP1	2.2	London Diabetes Strategic Clinical Network	No
GP1	2.2	NHS Employers	Use of peripheral pulse will miss AF. False low reporting
GP1	2.2	NHS England	NHS England feel that as the indicator is worded (manual palpation) it may discourage the use of diagnostic devices such as Watch BP Home A and AliveCor which provide a suitable alternative to manual palpation.
GP1	2.2	Nightingale Valley Surgery.	finding asymptomtic pts. Which may not be appropriate to treat due to old age and frailty and se of anticoags.
GP1	2.2	Nottinghamshire County Council	For practices using a pulse monitor to detect AF (see above comment), specifying manual palpation only would be a backward step
GP1	2.2	Primary Care CVD Leadership Forum	As worded (manual palpation) it may discourage the use of diagnostic devices such as Watch BP Home A and AliveCor which provide a suitable alternative to manual palpation.

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.2	Public Health England	As worded (manual palpation) it may discourage the use of diagnostic devices such as Watch BP Home A and AliveCor which provide a suitable alternative to manual palpation.
GP1	2.2	RCGP	We feel there are a number of potential consequences: 1. Feeling the pulse is a process marker and not an outcome of care, and there is no link to whether or not the practice does anything about any abnormal findings. The process is likely to raise anxiety in patients with an irregular pulse not due to AF and result in over-medicalization and more appointments. (Individual comment) 2. Not all patients welcome screening and intervention. (Individual comment) 3. The ability to implement this depends on the funding possibly. All opportunistic screenings increase consultation length and therefore unexpected waits in a GP surgery, and some practices will manage this better than others. (CH) It could also lead to an increased workload for practices and training needs for PNs/HCAs. (Individual comment) 4. The wording used in the indicator – “manual palpation” - may discourage the use of diagnostic devices such as Watch BP Home A and AliveCor which provide a suitable alternative to manual palpation. (Individual comment)

ID	Proforma question no.	Stakeholder organisation	Comment
			5. Time will be wasted checking pulses that are normal. ECGs are oversensitive and will often pick up minor abnormalities of no significance but will have caused people to worry. It may also cause damage to the doctor-patient relationship if the patient feels that their doctor has a different agenda from their own. (RCGP Overdiagnosis Group)
GP1	2.2	Somerset CCG	No – if done in a long term condition clinic by an HCA at a "data gathering" appointment. This is not ideally placed for GP consultations when the patient may be presenting with something irrelevant to checking pulse (ie it is important to keep GP consultations person-centred)
GP1	2.2	Stroke Association	As NICE points out in its indicator rationale, people aged 65 and over on average attend general practice around six times a year. Given the likelihood of those over 65 attending a consultation with their GP is so high, it is not unreasonable to perform a manual pulse palpitation on those who have presented on more than one occasion. However, the incidence of AF increases with age and the risk of AF doubles in every decade after the age of 55.[1] Those between the ages of 55 and 64 will, therefore, be at significantly increased risk of AF and this indicator does not allow for people in that risky age group to have their pulse routinely checked.
GP1	2.2	Thrombosis UK	Individuals with AF (undiagnosed), aged younger than 65 years and with one or more of the pre-existing conditions listed, are very likely to also carry a significant AF-stroke risk. This groups would benefit from being considered manual pulse palpation and assessment for anticoagulation if AF diagnosed.
Question 2.3: Do you think there is potential for differential impact (in respect of age, disability, gender and gender reassignment, pregnancy and maternity, race, religion or belief, and sexual orientation)? If so, please state whether this is adverse or positive and for which group.			

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.3	Association for the study of obesity	No
GP1	2.3	Association of British Clinical Diabetologists	No
GP1	2.3	Boehringer Ingelheim	No
GP1	2.3	British Holistic Medical Association	This looks like political correctness. What matters is for the clinician to have respect for people because of their difference, not because it is PC to enquire.
GP1	2.3	British Thoracic Society	No
GP1	2.3	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	People with disabilities or movement disorders that prevents a full minute pulse measurement.
GP1	2.3	Daiichi Sankyo UK	This condition is more common with age so it is likely to be picked up the older the patient.
GP1	2.3	Individual comment	No
GP1	2.3	Individual comment	No
GP1	2.3	Individual comment	Where are the resources so they do not to effect societies current delusions
GP1	2.3	Individual comment - Consultant Cardiologist	No differential impact
GP1	2.3	Individual comment - Consultant Cardiologist	No differential impact
GP1	2.3	Individual comment - GP	Those people who do not attend for review will be the ones who are not examined/pulse taken.
GP1	2.3	Individual comment - GP	No. there is increasing likelihood of AF with age, and with the usual risk factors of smoking, drinking, weight, diet, exercise and general lifestyle.
GP1	2.3	Individual comment - GP	don’t know
GP1	2.3	Liverpool LA public health team	People with disabilities or movement disorders that prevents a full minute pulse measurement.
GP1	2.3	London Borough of Redbridge	No
GP1	2.3	London Diabetes Strategic Clinical Network	No
GP1	2.3	Medtronic Limited	Affects all patient groups

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.3	NHS Employers	Is there a risk for patients under 65 years with co-morbidities who do not have their pulse palpated? Could we be missing a proportion of eligible patients?
GP1	2.3	NHS England	The usual difficulty in achieving similar implementation in harder to reach groups would be anticipated but could be offset by greater focus on them. Health Checks have shown some encouraging uptake in these groups.
GP1	2.3	Nightingale Valley Surgery.	no.
GP1	2.3	Primary Care CVD Leadership Forum	Patients who are part of vulnerable groups such as those with Learning Disabilities and mental illness as well as younger men often have poorer access to care and may have fewer routine consultations.
GP1	2.3	Public Health England	Patients who are part of vulnerable groups such as those with Learning Disabilities and mental illness as well as younger men often have poorer access to care and may have fewer routine consultations.
GP1	2.3	RCGP	The RCGP feels there is potential for differential impact in the following situations: 1. By limiting the service to those who have had a consultation in the past year it may be that this will be more beneficial to cultures and groups who tend to be higher attenders and higher users of health care. This may lead to a differential impact. (Individual comment) 3. Equally, patients who are part of vulnerable groups such as those with learning disabilities and mental illness as well as younger men often have poorer access to care and may have fewer routine consultations and would therefore miss out on this check. (Individual comment)

ID	Proforma question no.	Stakeholder organisation	Comment
			2. There is a capacity issue with housebound patients because of the difficulty of checking and rechecking pulses and ECGs. Usually GPs rely on district nurses' help but they have recruitment and capacity issues. (Individual comment)
GP1	2.3	Royal College of Nursing	No
GP1	2.3	Somerset CCG	No
GP1	2.3	Stroke Association	It should be highlighted to GPs that men have a 1.5 times greater risk of developing AF than women. However, it should also be noted that AF-related strokes in women carry a greater risk of mortality than AF-related strokes in men. While the reason for this is not currently known, men's and women's relative risk should always be in doctors' minds.
GP1	2.3	Thrombosis UK	No
Question 2.4: Do you have any general comments on this indicator?			
GP1	2.4	Association of British Clinical Diabetologists	People with diabetes are at increased risk of AF and heart failure. They should already be having an annual blood pressure measurement, enshrined in the 8 care processes.
GP1	2.4	Bayer plc	Bayer plc welcomes the inclusion of this indicator as a 'general practice indicators for quality improvement', and also recommends that it should go forward for the full development process for QOF indicators.
GP1	2.4	Boehringer Ingelheim	We welcome this indicator and are aware that a certain proportion of patients are missed and so we support all indicators to improve identification of patients to the AF register including via manual palpation.
GP1	2.4	British Holistic Medical Association	This is about good clinical practice and should not be linked with practice income. However, the caveats could be reassessed if there were a reliable and rapid bedside test to distinguish AF.
GP1	2.4	British Medical Association	This is a screening procedure and as such is excluded from provision under essential services as defined in the GMS

ID	Proforma question no.	Stakeholder organisation	Comment
			contract. Screening procedures should only take place within the NHS if they have been approved by the NSC and resources have been provided. The National Screening Committee have investigated and rejected this: http://legacy.screening.nhs.uk/atrialfibrillation
GP1	2.4	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	it appears to be a good idea, we already doing it in Liverpool as part of local agreement – it has the potential of high impact if management of identified patients is effective
GP1	2.4	Digital Health & Care Alliance	This and the next indicator are classic cases where by embedding current practice in an indicator, NICE is preventing the introduction of new technology – eg the Alivecor peripheral+mobile phone recording enables diagnosis of AF in a single step. Please offer this as an alternative, to encourage more doctors than already use the Alivecor device to try it and improve diagnosis, save costs, improve patient outcomes.
GP1	2.4	Individual comment	Screening in not within the remit of NICE and it should not be proposed by this mechanism.
GP1	2.4	Individual comment	Perfectly sensible.
GP1	2.4	Individual comment	good idea
GP1	2.4	Individual comment	We all use pulseoximeter now as it is quicker and can be done whilst we are doing something els as well.
GP1	2.4	Individual comment - Consultant Cardiologist	In summary, we recommend that the text regarding the diagnosis be expanded to: “Atrial fibrillation can be diagnosed by performing a manual pulse palpation to assess for an irregular pulse followed by an electrocardiogram (ECG) where an irregular pulse has been detected or in a single step using novel tools such as a clinically proven Smartphone ECG”
GP1	2.4	Individual comment - GP	It needs a push to make it happen. This has been well known for at least a decade and thousands of serious strokes could have been prevented.

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.4	Individual comment - GP	Yes. I am not aware of any evidence that has shown that screening for AF (and that is what this is) has been proven to reduce morbidity and mortality. Until this has been shown to be an effective screening method in a controlled trial, it should not be used.
GP1	2.4	Individual comment - GP	there need to be an explicit benefit –harm comparison for starting medication, which is currently missing?
GP1	2.4	Individual comment - GP partner	I note that the National Screening Committee has not recommended screening for AF. It would be good to know why their stance is being overruled.
GP1	2.4	Liverpool LA public health team	it appears to be a good idea, we already doing it in Liverpool as part of local agreement – it has the potential of high impact if management of identified patients is effective
GP1	2.4	London Diabetes Strategic Clinical Network	Perfectly sensible.
GP1	2.4	NHS Employers	Will this be a rolling 12 month period or 12 months from a set point?
GP1	2.4	NHS England	NHS England strongly welcomes this indicator as a third of people with AF are undiagnosed despite the high risk of poor outcomes and the availability of very effective preventive treatment. General practice has a major potential role in improving detection and treatment rates
GP1	2.4	NHS Sheffield Clinical Commissioning Group	We note the specific reference to the application of manual pulse palpation and that this is in accord with the NICE guideline recommendation. However, we ask NICE to consider acknowledging that pulse rhythm is often now measured using automated devices (such as the WatchBP device approved by NICE https://www.nice.org.uk/guidance/mtg13). In view of this is it necessary to specify in this indicator that practitioners ONLY employ manual palpation?
GP1	2.4	NICE	Is this necessary? As the rationale states, all these people should have their blood pressure measured and manual pulse

ID	Proforma question no.	Stakeholder organisation	Comment
			palpitation should form part of any blood pressure measurement. In addition, it seems to overlap with IND GP2 (many of the people with these conditions will be aged 65 years and over and will have had at least one consultation in the preceding 12 months). The issues discussed there about screening are relevant here, too.
GP1	2.4	Nightingale Valley Surgery.	Not workable or practical.
GP1	2.4	Novartis Pharmaceuticals UK Ltd	There is a relationship between atrial fibrillation and heart failure. Though the relationship has not been fully determined, their coexistence can be explained to some degree by the presence of common risk factors such as age, hypertension, diabetes, and obesity, as well as valvular, ischemic, and nonischemic structural heart disease. (Entler, et al. Contemporary Reviews in Cardiovascular Medicine. Circulation. 2009; 119: 2516-2525). For this reason, patients with hypertension, diabetes, CKD, PAD, stroke or COPD should also examined for undiagnosed heart failure. In order to diagnose heart failure, the NICE chronic heart failure guidelines recommends:
GP1	2.4	Primary Care CVD Leadership Forum	We strongly welcome this indicator as a third of people with Atrial Fibrillation (AF) are undiagnosed despite the high risk of poor outcomes and the availability of very effective preventive treatment. General practice has a major potential role in improving detection and treatment rates.
GP1	2.4	Public Health England	We welcome this indicator as a third of people with AF are undiagnosed despite the high risk of poor outcomes and the availability of very effective preventive treatment. General practice has a major potential role in improving detection and treatment rates.
GP1	2.4	RCGP	The RCGP has a number of general comments:

ID	Proforma question no.	Stakeholder organisation	Comment
			1. It would be useful to be able to verify the figure of 400,000 undiagnosed. There is no mention of this figure in the current NICE guideline (CG180). The earlier guideline (36) doesn't seem to be accessible from the website. (Individual comment) 2. Some practices are using sophisticated technology to screen for AF in the consultation (eg the diagnostick) and this should be included. (Individual comment) 3. BP monitors do not always pick up pulse irregularities so this requires a trained person to check the pulse. (Individual comment) 4. The check is worthwhile and these patients are all having an annual review so this isn't a significant amount of extra work.(Individual comment) 5. In some chronic disease management, GPs are trying to get this done online without the need for actual face-to-face consultation. It would be good if the indicator could take this into account e.g. manual pulse or technology-enabled pulse check. (Individual comment) 6. A third of people with AF are undiagnosed despite the high risk of poor outcomes and the availability of very effective preventative treatment. General practice has a major potential role in improving detection and treatment rates. It is not clear why the indicator is limited to those who have had at least one consultation – all patients with these conditions should expect to be seen at least once per year. (Individual comment)

ID	Proforma question no.	Stakeholder organisation	Comment
			7. This is a proposal to screen for atrial fibrillation. Screening was considered and rejected by the UK National Screening Committee in 2014 (see http://legacy.screening.nhs.uk/atrialfibrillation). NICE should not be promoting a screening activity that has been considered by the NSC and rejected. It will mean that the GP's agenda will be the focus of the consultation and not the patient's agenda. David Haslam said at the RCGP Conference in October that NICE wanted to focus more on what matters to patients. What matters to patients is that their GP is concentrating fully on the problem that they, the patient, has attended to discuss. Patients should be invited to take part in a screening programme and should be given the information beforehand to make an informed decision on whether they opt in or not. (RCGP Overdiagnosis Group)
GP1	2.4	Roche Diagnostics Ltd	We welcome the addition of this indicator to expand the scope of the clinical domain beyond the ongoing management of patients with diagnosed atrial fibrillation (AF). However, we feel this is an opportunity not only to record the proportion of patients receiving a manual pulse palpation, but also the proportion for whom a manual pulse palpation ultimately leads to the diagnosis of atrial fibrillation. Abnormal pulse findings could be the result of any number of conditions; however, the aim of this intervention is the earlier diagnosis of AF, on which the reward should be based.
GP1	2.4	Royal College of Nursing	Will need to check on training and competency of all primary care staff conducting and interpreting ECG data. Will need to examine educational programme for ECG interpretation and risk stratification.

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.4	Somerset CCG	It should be easily achievable if long term condition annual reviews are in place in the practice (to reiterate – this is best placed in an HCA data gathering appointment)
GP1	2.4	Stroke Association	We welcome this indicator. Opportunistic manual pulse palpation for over 65s (e.g. as part of routine chronic disease monitoring and management) have been shown as an effective and cost effective way to increase AF case finding in this higher risk population.[5]
GP1	2.4	Thrombosis UK	Due to the nature of the condition – paroxysmal / permanent / symptomatic / asymptomatic, we welcome this indicator to support early identification of undetected AF in high-risk groups.
Question 2.5: Can respondents comment on access to ECG services?			
GP1	2.5	Association for the study of obesity	No
GP1	2.5	Association of British Clinical Diabetologists	While access to a confirmatory ECG would not be a problem in secondary care, ABCD cannot comment on the availability on primary care.
GP1	2.5	British Holistic Medical Association	No comment
GP1	2.5	British Medical Association	ECG provision is not included as part of essential services in the GMS contract and needs separate commissioning at a local level.
GP1	2.5	British Thoracic Society	Varies across the country. Need to recognise it is also interpretation and not only performing. Practice staff may perform but need experienced clinical staff to review
GP1	2.5	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	Variety of new technological devices which also check pulse that are increasingly in use. It is important to define if acceptable whether ECG is full 12 lead or a single lead.
GP1	2.5	Daiichi Sankyo UK	If not available already, this should be made available at all practices.
GP1	2.5	Individual comment	No comment
GP1	2.5	Individual comment	Will affect ecg provision as likely to increase demand for ecgs

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.5	Individual comment	practices have these (or should)
GP1	2.5	Individual comment - Consultant Cardiologist	Adequate equipment access but not diagnostic interpretation education
GP1	2.5	Individual comment - GP	MUCH better 10 years ago, latterly deteriorating at a worrying rate. My consultant told me to get an ECG at A&E if I suspected AF, which I did several times. Pressure on A&E makes that impossible now. BUT I now have an AliveECG app on my iPhone where I can instantly take an ECG myself and email to the cardiac dept. But not all patients would be suitable/capable for that.
GP1	2.5	Individual comment - GP	not an issue
GP1	2.5	Individual comment - GP	it also needs ECG interpretation services and subsequent cardiology appointment availabilities
GP1	2.5	Liverpool LA public health team	Variety of new technological devices which also check pulse that are increasingly in use. It is important to define if acceptable whether ECG is full 12 lead or a single lead.
GP1	2.5	London Borough of Redbridge	The local CCG has commissioned same day ECG services available across GP Practices.
GP1	2.5	London Diabetes Strategic Clinical Network	No comment
GP1	2.5	Medtronic Limited	Access to ECG services is fragmented in primary care and expensive to access in secondary care.
GP1	2.5	NHS Employers	Most practices have ECG machines and all have access to them.
GP1	2.5	NHS England	Pulse assessment is a crucial first step in AF detection.
GP1	2.5	NHS Sheffield Clinical Commissioning Group	We would anticipate that this indicator would increase referral to secondary care for ECG measurement and/or confirmation of diagnosis, sand so there will be a financial impact to take account of.
GP1	2.5	Nightingale Valley Surgery.	Yes.
GP1	2.5	Primary Care CVD Leadership Forum	Pulse assessment is a crucial first step in AF detection.
GP1	2.5	Public Health England	Pulse assessment is a crucial first step in AF detection.

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.5	RCGP	The RCGP has the following comments about access to ECG services: 1. Many surgeries have immediate access to in-surgery ECGs and this is considered 'reasonable practice' for every primary care facility. (Individual comment) 2. ECG access is more difficult for housebound patients with the lack of capacity in district nursing (Individual comment), specially patients who are suspected to be in AF – few practices have the facility to do domiciliary ECGs. (RCGP Overdiagnosis Group) 3. The ability to interpret ECGs is variable and gaps provision and training need to be addressed by practices or CCGs. Although access to ECGs is essential for diagnosis, initial pulse assessment is the key step to be incentivised to improve detection of AF. (Individual comment)
GP1	2.5	Royal College of Nursing	This is variable depending on level of interest and understanding with individual practices. In the UK there are no formal guidelines regarding ECG training or interpretation and clinical studies suggest that primary care physicians have difficulties interpreting all types of ECG compared with reference diagnoses made by cardiologists.
GP1	2.5	Somerset CCG	In house ECGs available in GP practices.
GP1	2.5	Stroke Association	Immediate access to ECG equipment can vary across practices, meaning some people are not being diagnosed with AF due to a lack of suitable equipment. This, however, need not necessarily be the case given the availability and low purchase cost of simple ECG equipment. There are also increasingly affordable and usable smartphone applications which are recommended and used by a growing number of

ID	Proforma question no.	Stakeholder organisation	Comment
			practitioners. Many of these have been validated in published literature and should therefore be treated as a viable and reliable detection option.
GP1	2.5	The British Heart Foundation	Appropriate and timely access to ECG services is highly variable across the country. All practices should offer timely access to ECGs. There are some concerns related to competency in skills to read and interpret ECGs and we would recommend a minimum quality standard on training in interpretation.
GP1	2.5	Thrombosis UK	Immediate or prompt access to 12-lead ECG may vary across practices, however there are increasing numbers of single lead portable / hand held ECG devices at very low cost and with NICE advice, eg MIB35, that would be able to immediately capture ECG reading, record and support indication for referral for 12 Lead ECG, helping to manage volume and appropriate referral.
Question 2.6: People with chronic conditions were identified as an appropriate population for manual pulse palpation. Do stakeholders consider the range of the conditions covered in the indicator suitable?			
GP1	2.6	Association for the study of obesity	Obesity, as a disease, may benefit from inclusion in the list of conditions. Obesity is frequently associated with the conditions already listed and its inclusion may make the inclusion criteria more effective in discovering all those at high risk of developing AF.
GP1	2.6	Association of British Clinical Diabetologists	Yes
GP1	2.6	Bayer plc	Bayer plc recommend that the manual pulse palpation in people with co-morbidities is not limited to those 65 years and over, as several of the co-morbidities constitute risk factors in themselves and blood pressure measurement is recommended for all people with these conditions. Indeed, the recommendations cited in the evidence base for IND-GP1 are not limited to people over 65.

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.6	Boehringer Ingelheim	Boehringer Ingelheim considers the range conditions to be suitable.
GP1	2.6	British Holistic Medical Association	The problem with such a list is that it discourages thinking about conditions outwith that list.
GP1	2.6	British Thoracic Society	No. strong association with recent onset AF and pneumonia. AF not uncommon in elderly sleep apnoea patients too.
GP1	2.6	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	yes appropriate. It is good to incorporate the manual pulse check as an essential component of the annual review for people with these conditions.
GP1	2.6	Daiichi Sankyo UK	Yes
GP1	2.6	Individual comment	No. Pulse should be checked in symptomatic patients.
GP1	2.6	Individual comment	Yes, although seems sensible (and perhaps easier to implement) for all patients attending surgery?
GP1	2.6	Individual comment	Yes
GP1	2.6	Individual comment	Why manual when we have pulseoximeters.
GP1	2.6	Individual comment - Consultant Cardiologist	Believe all over 65s deserve to be screened as a pre-condition of being able to measure blood pressure correctly which is not possible with some devices accurately in a patient with background of AF
GP1	2.6	Individual comment - Consultant Cardiologist	Believe all over 65s deserve to be screened as a pre-condition of being able to measure blood pressure correctly which is not possible with some devices accurately in a patient with background of AF
GP1	2.6	Individual comment - GP	Yes – tho' could have included people with SMI who are at risk of CVD and metabolic syndrome
GP1	2.6	Individual comment - GP	Non-presenting, i.e. hidden AF, in the over 65s is a real issue as people will not be anticoagulated so at high stroke risk. Yes, chronic conditions can make patients more liable to AF but these are the people more likely to have been palpated for other reasons such as hypertension. I repeat, screen ALL over 65s at flu jab clinics.

ID	Proforma question no.	Stakeholder organisation	Comment
GP1	2.6	Individual comment - GP	Yes, but the issue is that if GPs are forced to focus on screening for AF then they are not focussing on patient-meaningful things.
GP1	2.6	Individual comment - GP	No. Those with relevant SYMPTOMS should be assessed for AF.
GP1	2.6	Individual comment - GP partner	A recent study in the BMJ noted that patients who have IHD and Hypertension as well as AF did not show benefit from medication
GP1	2.6	Liverpool LA public health team	yes appropriate. It is good to incorporate the manual pulse check as an essential component of the annual review for people with these conditions.
GP1	2.6	London Borough of Redbridge	Yes.
GP1	2.6	London Diabetes Strategic Clinical Network	Yes, although seems sensible (and perhaps easier to implement) for all patients attending surgery?
GP1	2.6	Medtronic Limited	Consider patients with mental health issues and dementia
GP1	2.6	NHS Employers	Yes
GP1	2.6	NHS England	The purpose of this indicator is to embed pulse assessment in the routine clinical reviews provided to people with long term conditions.
GP1	2.6	Nottinghamshire County Council	Consider including hypothyroidism and obstructive sleep apnea
GP1	2.6	Primary Care CVD Leadership Forum	The purpose of this indicator is to embed pulse assessment in the routine clinical reviews provided to people with long term conditions.
GP1	2.6	Public Health England	The purpose of this indicator is to embed pulse assessment in the routine clinical reviews provided to people with long term conditions.
GP1	2.6	RCGP	The RCGP feels that the range of conditions covered in the indicator is suitable but we suggest the following additions:

ID	Proforma question no.	Stakeholder organisation	Comment
			1. Obesity: There is a 2.4 fold increase in AF in the obese population. (Individual comment) 2. Serious mental illness – patients who are at risk of cardiovascular disease and metabolic syndrome both from the long term condition and the antipsychotic medication used. (Individual comment) 3.Ischaemic heart disease heart failure, asthma, dementia and non-diabetic hyperglycaemia. (Individual comment) 4. People with learning disabilities on long term antipsychotropic medication which may be used to control behaviour rather than treat a mental illness. (Individual comment)
GP1	2.6	Roche Diagnostics Ltd	Yes
GP1	2.6	Royal College of Nursing	Yes
GP1	2.6	Somerset CCG	Yes – it is important that the population would naturally be seen by an HCA for an annual long term condition review. It would not be appropriate to rely on an attendance to a GP appointment or for the GP to be tasked with the duty of checking the pulse (ie – maximising clinician performance and person-centredness must be paramount)
GP1	2.6	Stroke Association	We would like to see health professionals carry out manual pulse checks as a matter of routine on as many patients as possible. While conditions such as hypertension are key risk factors in stroke, not everyone who has a stroke has an underlying chronic condition, or if they do, they may not be aware of it.
GP1	2.6	Thrombosis UK	We would suggest also including those diagnosed with Congestive Heart Failure– since this increases stroke risk and

ID	Proforma question no.	Stakeholder organisation	Comment
			is a risk factor included in the approved CHADSVASc risk assessment.

ID	Proforma question no.	Stakeholder organisation	Comment
Question 5.1: Do you think there are any barriers to implementing the care described by this indicator?			
QOF2	5.1	AntiCoagulation Europe (ACE)	There shouldn't be if embedded into standard practice by clinicians who should have access to adequate resources to input the necessary information in a timely manner
QOF2	5.1	Association for the study of obesity	No
QOF2	5.1	Boehringer Ingelheim	No. We welcome every opportunity for patients to have a review of their anticoagulation treatment so that all treatment options can be assessed.
QOF2	5.1	British Holistic Medical Association	Impact on workload
QOF2	5.1	British Medical Association	Anticoagulation services are only provided by GPs where this has been commissioned as part of an enhanced service. These services are not commissioned in many areas.
QOF2	5.1	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	No
QOF2	5.1	Daiichi Sankyo UK	Nil
QOF2	5.1	Individual comment	No
QOF2	5.1	Individual comment	No experience in this area
QOF2	5.1	Individual comment	No
QOF2	5.1	Individual comment	Lack of ability to say in stable people review only needs to be every 2 or 5 years, Lack of ability to point out NOACS
QOF2	5.1	Individual comment - Consultant Cardiologist	Education and motivation
QOF2	5.1	Individual comment - Consultant Cardiologist	Education and motivation
QOF2	5.1	Individual comment - GP	No
QOF2	5.1	Individual comment - GP	As for GP1 above.

ID	Proforma question no.	Stakeholder organisation	Comment
QOF2	5.1	Individual comment - GP	Lack of time resource of primary health care team
QOF2	5.1	Individual comment - GP	Those on warfarin are managed and monitored in 2dry care. This marker if adopted should only be considered for those on NOACs/DOACs prescribed in primary care
QOF2	5.1	Individual comment - GP	Is it needed as a separate item?, as falls under "medication review"
QOF2	5.1	Liverpool LA public health team	No
QOF2	5.1	London Borough of Redbridge	No
QOF2	5.1	London Diabetes Strategic Clinical Network	No experience in this area
QOF2	5.1	NHS Employers	Workload is an important factor to consider.
QOF2	5.1	NHS England	Would need to define what a quality review would include – eg adherence, otc medication, TTR if on warfarin etc
QOF2	5.1	NICE	It is not very clear what is meant by this. TTR for people on warfarin is perhaps the intention, but adherence to NOACs is also important (the much shorter half-life of these drugs compared to warfarin means that if a single dose is missed anticoagulation is compromised). Does it also mean ensuring that people with AF are not offered aspirin monotherapy solely for stroke prevention (CG180 rec 1.5.15)? Are LMWHs included in this?
QOF2	5.1	Nightingale Valley Surgery.	Again I feel that this should be an individual decision pt. based rather than target driven and thus not allowing us to treat the pt. individually.
QOF2	5.1	Primary Care CVD Leadership Forum	Would need to define what a quality review would include – eg adherence, otc medication, TTR if on warfarin etc

ID	Proforma question no.	Stakeholder organisation	Comment
QOF2	5.1	Public Health England	Would need to define what a quality review would include – eg adherence, otc medication, TTR if on warfarin etc
QOF2	5.1	RCGP	The RCGP suggests the following barriers to implementing the care described by this indicator: 1.This will be time consuming and if nothing has changed since the decision to anticoagulate or not has made perhaps it would be deemed unnecessary, although it will be difficult to know this without doing a review (RM) and advice to define what a quality review would include – eg adherence, otc medication, TTR if on warfarin etc. (Individual comment) This is likely to become a box-ticking exercise. (RCGP Overdiagnosis Group) 2.This would involve the pathology laboratory and practice working together. (Individual comment) 3. It is unclear what the quality outcome measures are defined as for quality anticoagulation other than adequate INR readings within the target range and severe bleeds. Anticoagulation IT systems such as INR star are separate from GP Clinical systems with limited ability to electronically data interchange (EDI) using structured data so the GP's capacity to provide comparative data is restricted and may require manual searching for results. (Individual comment)

ID	Proforma question no.	Stakeholder organisation	Comment
QOF2	5.1	Royal College of Nursing	Primary care staff need to be trained to be able to explain the benefits of anticoagulant therapy and need for compliance.
QOF2	5.1	Somerset CCG	This should happen routinely if people are requiring frequent INR checks – those who do are assessed as labile INRs will be reviewed for a NoAC, and/or anticoagulation removed.
QOF2	5.1	Stroke Association	There are problems with integration between primary and secondary services providing anticoagulation to AF patients. This is a symptom of there not being a standardised care pathway for anticoagulation services. There are also unacceptable variations in access to these services across the country.
QOF2	5.1	The AntiCoagulation Self-Monitoring Alliance (ACSMA).	No. All AF patients on anticoagulation therapy should already receive an annual review as a matter of routine clinical practice. However, the need for and quality of anticoagulation should be reviewed more frequently than once every 12 months. For example, paragraph 1.5.12 of CG180 makes recommendations for assessing anticoagulation control with vitamin K antagonists that describe a more continuous monitoring and assessment process.
QOF2	5.1	The British Heart Foundation	Consistency of quality of consultations could be supported by the use of validated tools to support joint decision making.
QOF2	5.1	Thrombosis UK	Primary care will need to access data.
Question 5.2: Do you think there are potential unintended consequences to implementing / using this indicator?			
QOF2	5.2	AntiCoagulation Europe (ACE)	All patients who are taking any anticoagulant therapy for AF related stroke prevention should be made aware of new treatments available and opportunities to

ID	Proforma question no.	Stakeholder organisation	Comment
			self –monitor their INR levels if on VKA's. Not all people are aware of the suite of new oral anticoagulants now available and the review should be an opportunity to discuss options, important if there are compliance/adherence issues or, other factors which could influence which treatment would best suit needs of patients
QOF2	5.2	Association for the study of obesity	No
QOF2	5.2	Boehringer Ingelheim	No. We welcome every opportunity for patients to have a review of their anticoagulation treatment so that all treatment options can be assessed.
QOF2	5.2	British Holistic Medical Association	No comment
QOF2	5.2	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	No
QOF2	5.2	Daiichi Sankyo UK	Nil
QOF2	5.2	Individual comment	No experience in this area
QOF2	5.2	Individual comment	No
QOF2	5.2	Individual comment - Consultant Cardiologist	Manpower needs
QOF2	5.2	Individual comment - Consultant Cardiologist	Manpower needs
QOF2	5.2	Individual comment - GP	No
QOF2	5.2	Individual comment - GP	Yes. Patients on warfarin are reviewed regularly at the anticoagulation clinics. From my own figures I know that it is exquisitely rare for someone taking warfarin not to attend. If GPs and their staff are taken away from doing what matters, to focus instead on this issue then patients inevitably suffer.
QOF2	5.2	Individual comment - GP	Increased deaths in anticoagulated patients due to bleeding
QOF2	5.2	Individual comment - GP	stress
QOF2	5.2	Liverpool LA public health team	No

ID	Proforma question no.	Stakeholder organisation	Comment
QOF2	5.2	London Borough of Redbridge	No
QOF2	5.2	London Diabetes Strategic Clinical Network	No experience in this area
QOF2	5.2	NHS Employers	With the workload issues and other possible issue, these reviews may not take place.
QOF2	5.2	Nightingale Valley Surgery.	As always we will end up treating the numbers and the target and not the pt.
QOF2	5.2	RCGP	The RCGP feels there are two potential unintended consequences to implementing / using this indicator: 1. Possible confusion and irritation of patients who are brought back every year to consider whether they should continue to have an agreed treatment when the evidence hasn't changed. (Individual comment) This may be an unnecessary reminder of their stroke risk every year and could be seen to over-emphasise the risk, resulting in miserable, frightened patients. (Individual comment) 2. Increasing the burden of administration and on anti-coagulant services. The use of newer anti-coagulants would be increased with a greater side effect profile being detected. (Individual comment)
QOF2	5.2	Somerset CCG	No
QOF2	5.2	Stroke Association	Given that many patients are only anticoagulated after they present at hospital, GPs are often not responsible for the management of AF patients. This is a result of a lack of integration between primary and secondary care anticoagulation services and can be highly dangerous. If, for example, an AF patient's anticoagulation is being managed by a clinic and not

ID	Proforma question no.	Stakeholder organisation	Comment
			by their GP, the transfer of data can be slow or non-existent. An AF patient's INR reading can vary widely, even over the course of a single day, particularly if they are taking medication to manage other conditions they may have, such as cancer, which can have a major effect on the effectiveness and stability of anticoagulants. If INR data is not timeously shared between those responsible for managing patients, delays and misdiagnosis could occur. If, as is possible, an emergency situation arises out of an extreme change in INR and it is not effectively managed, this could be costly not only in terms of the patient's health, but in monetary terms to the health service.
QOF2	5.2	The AntiCoagulation Self-Monitoring Alliance (ACSMA).	No
QOF2	5.2	Thrombosis UK	No
Question 5.3: Do you think there is potential for differential impact (in respect of age, disability, gender and gender reassignment, pregnancy and maternity, race, religion or belief, and sexual orientation)? If so, please state whether this is adverse or positive and for which group.			
QOF2	5.3	AntiCoagulation Europe (ACE)	People with cognitive challenges should have representatives that are aware of the full range of anticoagulation therapies available. VKA monitoring requires blood sampling and in many community settings(care homes), venous sampling is carried out where options could include using near testing devices or a DOAC which does not need to be monitored in the same way.
QOF2	5.3	Association for the study of obesity	No
QOF2	5.3	Boehringer Ingelheim	No.

ID	Proforma question no.	Stakeholder organisation	Comment
QOF2	5.3	British Holistic Medical Association	see 1.3
QOF2	5.3	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	No
QOF2	5.3	Daiichi Sankyo UK	Nil
QOF2	5.3	Individual comment	No experience in this area
QOF2	5.3	Individual comment	No
QOF2	5.3	Individual comment - Consultant Cardiologist	Yes – by social class and language barrier
QOF2	5.3	Individual comment - Consultant Cardiologist	Yes – by social class and language barrier
QOF2	5.3	Individual comment - GP	As for GP1 above.
QOF2	5.3	Individual comment - GP	don't know
QOF2	5.3	Liverpool LA public health team	No
QOF2	5.3	London Borough of Redbridge	No
QOF2	5.3	London Diabetes Strategic Clinical Network	No experience in this area
QOF2	5.3	Nightingale Valley Surgery.	No.
QOF2	5.3	RCGP	The RCGP cannot identify a potential for differential impact except to note that anti-coagulant monitoring involves good patient literacy and memory unless someone else takes joint responsibility. (Individual comment)
QOF2	5.3	Somerset CCG	No
QOF2	5.3	Stroke Association	We have mentioned the increased risk of stroke and its relationship with socioeconomic inequality. Part of the management of AF may include INR reading self-monitoring. As described earlier, INR readings are absolutely crucial for those treating people on anticoagulants to give an indication of the viscosity of blood and its likelihood of clotting. To self-monitor, patients require INR monitoring strips which have been available on NHS subscription since 2002. However, evidence suggests that an increasing

ID	Proforma question no.	Stakeholder organisation	Comment
			number of CCGs are refusing to allow NHS prescribing of test strips, or were imposing limits on the number of strips prescribed per year.[12] Patients – particularly those who travel or whose INR readings are often unstable – need to self-monitor on a more regular basis than that on which testing strips are prescribed, if they are prescribed at all. This can lead to patients buying their strips from the open market – often at quite considerable cost. Those from lower socioeconomic groups would find this challenging, if not impossible, and the management of their condition could be diminished as a result. If CCGs do not find it necessary to provide test strips then they should be providing NOACs. This is not happening universally despite them being NICE approved.
QOF2	5.3	The AntiCoagulation Self-Monitoring Alliance (ACSMA).	No
QOF2	5.3	Thrombosis UK	No
Question 5.4: Do you have any general comments on this indicator?			
QOF2	5.4	Association for the study of obesity	No
QOF2	5.4	Bayer plc	Bayer plc supports the development of this indicator. It is important that people have a review of the need for and the quality of anticoagulation control every 12 months.
QOF2	5.4	Boehringer Ingelheim	This indicator is especially important where a patient's anticoagulation is poor or uncontrolled.
QOF2	5.4	British Holistic Medical Association	Patients requiring regular blood tests will be seen regularly by someone linked with the practice so this would be relatively easy to introduce.

ID	Proforma question no.	Stakeholder organisation	Comment
QOF2	5.4	British Medical Association	This is unsuitable as a quality indicator for GPs who are only responsible if the service has been commissioned from them, which it is not in many areas.
QOF2	5.4	Cheshire and Merseyside Directors of Public Health, Champs Public Health Collaborative	It appears to be a good idea as it can be part of annual review for people with AF especially for those not on warfarin.
QOF2	5.4	Daiichi Sankyo UK	Again, the level of exception reporting should be monitored.
QOF2	5.4	Individual comment	Annual review of medications in general is considered good practice although this has been removed from QOF
QOF2	5.4	Individual comment	No experience in this area
QOF2	5.4	Individual comment	sensible
QOF2	5.4	Individual comment - Consultant Cardiologist	Useful
QOF2	5.4	Individual comment - Consultant Cardiologist	Useful
QOF2	5.4	Individual comment - GP	Useful improvement on existing QOF.
QOF2	5.4	Individual comment - GP	The current AF indicators are fine, they are doing the job – please leave them alone.
QOF2	5.4	Individual comment - GP	The more targets the more burnout?
QOF2	5.4	Individual comment - GP	The quality of anticoagulation is not in the hands of a single organisation; the patient, the anticoagulant clinic and the labs all play a part so it is an indicator that cannot easily be monitored or changed by the component parts of the system…therefore inherently unworkable
QOF2	5.4	Liverpool LA public health team	It appears to be a good idea as it can be part of annual review for people with AF especially for those not on warfarin.
QOF2	5.4	London Borough of Redbridge	No

ID	Proforma question no.	Stakeholder organisation	Comment
QOF2	5.4	London Diabetes Strategic Clinical Network	No experience in this area
QOF2	5.4	NHS Employers	The purpose of this indicator is unclear. Is it an AF review or an anti-coagulation review? Is there a guideline that recommends an annual review of anti-coagulation therapy?
QOF2	5.4	NHS England	NHS England strongly welcome this indicator as warfarin dosing is often sub therapeutic and this significantly diminishes that increases the risk of stroke. This indicator will help embed routine review of the time in therapeutic range and encourage adherence support, dose adjustment and review of treatment options.
QOF2	5.4	NICE	We agree that, if an anticoagulant is prescribed, there should be at least an annual review of the need for it and the quality of anticoagulation. But see comments in 5.1 above.
QOF2	5.4	Nightingale Valley Surgery.	5.4 as per above.
QOF2	5.4	Primary Care CVD Leadership Forum	We strongly welcome this indicator as warfarin dosing is often sub therapeutic and this significantly diminishes that increases the risk of stroke. This indicator will help embed routine review of the time in therapeutic range and encourage adherence support, dose adjustment and review of treatment options.
QOF2	5.4	Public Health England	We strongly welcome this indicator as warfarin dosing is often sub therapeutic and this significantly diminishes that increases the risk of stroke. This indicator will help embed routine review of the time in therapeutic range and encourage adherence support, dose adjustment and review of treatment options.
QOF2	5.4	RCGP	The RCGP has the following general comments:

ID	Proforma question no.	Stakeholder organisation	Comment
			1.Include a review of the risks and benefits for this group of patients - not just '… the need and quality of anticoagulation.' (Individual comment) 2. This indicator is reasonable but not as a face-to-face review. This is part of medication reviews that should already be happening by phone/in person/remotely. (Individual comment) 3. It may become just a tick box exercise, with not much true discussion behind it, although GPs do support a review where there is evidence of a problem. E.g. less than 50% time in appropriate INR range, or hospital admission with bleed etc. (Individual comment) 4. This indicator will help embed routine review of the time in therapeutic range and encourage adherence support, dose adjustment and review of treatment options. (Individual comment) 5. The RCGP feels that an annual review to discuss risks/benefits of anticoagulants is a good idea. It provides an opportunity to reassess the risks/benefits of anticoagulation and allow patients to make an informed choice that may be to reduce their medications. However, this should form part of a normal medication review that should cover these issues.

ID	Proforma question no.	Stakeholder organisation	Comment
			Those on warfarin are already attending clinics whose purpose is to assess the quality of anticoagulation. Further monitoring is duplication of effort and a waste of resources. (RCGP Overdiagnosis Group)
QOF2	5.4	Roche Diagnostics Ltd	We welcome the addition of this indicator, as a formal measure of the review that should occur as part of routine practice. However, to encourage improvements in primary care service provision, we propose that the indicator should measure a twice-annual review as a minimum. Moreover, the wording should be more detailed and cover the goals of treatment (e.g. time in therapeutic range for warfarin), consequences of treatment (e.g. renal function tests for those on new oral anticoagulants) and monitoring options. Suggested alternative wording: "..who have a review of the need, quality, goals and consequences of anticoagulation, including monitoring options, in the preceding 12 months."
QOF2	5.4	Royal College of Nursing	Expansion of hospital based anticoagulation services to provide community outreach clinics and domiciliary provision may be helpful
QOF2	5.4	Stroke Association	We welcome this indicator. It is essential that AF patients are provided with regular reviews of their medication.
QOF2	5.4	The AntiCoagulation Self-Monitoring Alliance (ACSMA).	We would like the proposed indicator around review to be extended as follows: "…who have had a review of the need for and quality of anticoagulation, <u>including the options for anticoagulation,</u> in the preceding 12 months. <u>Patients who wish to self-monitor their INR level should be given the opportunity to do so, provided they are capable of self-monitoring.</u>"

ID	Proforma question no.	Stakeholder organisation	Comment
QOF2	5.4	Thrombosis UK	We welcome this indicator but think the agreed standard of quality of anticoagulation should be included to clarify

Appendix B: Equality impact assessment

Protected characteristics		
• Age	• Pregnancy and maternity	• Sex
• Disability	• Race	• Sexual orientation
• Gender reassignment	• Religion or belief	

Note:

1) The characteristic of marriage and civil partnership is protected only from unlawful discrimination. There is no legal requirement to consider the need to advance equality and foster good relations.

2) The definition of direct discrimination includes less favourable treatment of someone associated with a person with a protected characteristic, such as the carer of a disabled person.

Socioeconomic factors

The relevance and nature of socioeconomic factors will vary according to the quality standard topic. They may include deprivation and disadvantage associated with particular geographical areas, or other geographical distinctions (for example, urban versus rural).

Other definable characteristics

Certain groups in the population experience poor health because of circumstances distinct from – though often affected by – sharing a protected characteristic or socioeconomic factors. The defining characteristics of groups of this sort will emerge from the evidence (although a quality standard topic will sometimes explicitly cover such a group). Examples of groups identified are:

- looked-after children
- people who are homeless
- prisoners and young offenders.

Indicator Equality Impact Assessment

Development stage: Consultation

Topic: Atrial fibrillation and pulse checking

1.1 Have any potential equality issues been identified during consultation, and, if so, what are they?
No equality issues impacting have been identified at this stage, although atrial fibrillation is more common in men than women, and the prevalence increases with age.

1.2 Have any population groups, treatments or settings been excluded from coverage by the indicators at this stage in the process. Are these exclusions justified – that is, are the reasons legitimate and the exclusion proportionate?
The indicators are relevant to people with, or at an increased risk of, atrial fibrillation and reflect the scope of the quality standard and clinical guideline on which they are based**.**

1.3 Do any of the indicators make it more difficult in practice for a specific group to access services compared with another group? If so, what are the barriers to, or the difficulties with, access for the specific group?
Indicator GP1 attempts to identify people who may be at an increased risk of atrial fibrillation. Stakeholders highlighted that it may be difficult to take a full pulse measurement in people with physical disabilities and movement disorders. Comments also highlighted that these indicators are dependent on people regularly attending review, but some groups (such as people with learning disabilities and mental health problems) may be less likely to attend regular reviews. Indicator QOF2 focuses on discussions with people who have atrial fibrillation. Consultation comments highlighted people with cognitive problems and those who do not speak English may find it difficult to understand these often clinically complex discussions, and therefore reasonable adjustments should be made.

1.4 Is there potential for the indicators to have an adverse impact on people with disabilities because of something that is a consequence of the disability?
Consultation comments on indicator GP1 highlighted that it may be difficult to take a full pulse measurement in people with physical disabilities and movement disorders.

Completed by lead technical analyst Paul Daly using the equalities impact form presented to committee in June 2016

Date 5 May 2017

Approved by NICE quality assurance lead _____

Date_____