



Public Health  
England

Protecting and improving the nation's health

**1. Please tick the categories that apply to your proposal.**

- ☐ It involves amending the eligible population.  
☐ It involves amending an existing component of the risk assessment.  
☒ It involves introducing a new component to the risk assessment.

**2. Please provide a short summary describing your proposed change**  
[max 200 words]

*[Please be sure to clearly state what your change or addition is e.g. to introduce a lung function test]*

To introduce a mandatory pulse check, to assess of the presence of an irregular pulse that may indicate underlying atrial fibrillation (AF), as a separate component rather than building it into the guidance linked to the Blood Pressure Check.

We are anecdotally aware that some local authorities do not include pulse checks in as part of their programme and do not intend to do so unless mandated.

**3. Please state which strategic health priority in the NHS outcome framework or the public health outcome framework the proposed change supports**

[max 200 words]

*[Please identify up to three priorities]*

**NHS Outcomes Framework:** This would contribute to Strategic Priority 1. Preventing people dying prematurely. 1.a Potential years of life lost (PYLL) from causes considered amenable to healthcare. Under 75 mortality rate from cardiovascular disease (PHOF 4.4)

**Public Health Outcomes Framework:** This would contribute to the Domain: Healthcare and Premature Mortality. 4.04ii Under 75 mortality rate from cardiovascular disease considered preventable (Persons)

Atrial Fibrillation is identified in the Cardiovascular Disease outcomes Framework as part of the family of Cardiovascular disease and a priority focus area for the CVD and Stroke Strategic Clinical Networks. NICE Guidance CG180 (June 2014) advocates routine pulse checks to support early detection and treatment of arrhythmias to prevent AF related stroke.

<b>4. Please identify which of the programmes objectives the proposed change supports [please tick]</b>	
<input checked="" type="checkbox"/>	To promote and improve the early identification and management of the individual behavioural and physiological risk factors for vascular disease and the other conditions associated with those risk factors.
<input type="checkbox"/>	To support individuals to effectively manage and reduce behavioural risks and associated conditions through information, behavioural and evidence based clinical interventions.
<input checked="" type="checkbox"/>	To help reduce inequalities in the distribution and burden of behavioural risks, related conditions and multiple morbidities.
<input type="checkbox"/>	To promote and support appropriate operational research and evaluation to optimise programme delivery and impact, nationally and locally.
<b>5. How will the proposed change support the(se) objective(s)?</b>	
<p>AF increases the risk of stroke by five times, and contributes to 20% of strokes RCP Sentinel Stroke National Audit Programme, April – June 2014). Routine pulse checks would improve the early identification of physiological risk factors for vascular disease.</p> <p>Routine pulse checks support the Making Every Contact Count (MECC) ambitions of the 5 year forward view to promote early detection and intervention to prevent AF-Related Stroke</p>	
<b>6. What is the evidence for the clinical effectiveness of the proposed change?</b>	
<p>NICE Guidelines.</p> <p>There is evidence of a detection gap of approximately 18% in terms of the number of people in the UK who have AF but in whom it is undetected. (Fitzmaurice DA, 2007, as cited by The Route Map for Change &amp; the European Atlas on the Prevention of AF-Related Stroke, 2014)</p> <p>Many people who develop AF will either have no symptoms or not seek help/review (25-30%). However, many of them will have a significant stroke risk; discovering it 'after the event' is too late in terms of avoiding death or significant disability.</p> <p>Opportunistic screening for AF (pulse checks) in those aged 65 years and older is seen to be cost effective rather than relying on patients to present with symptoms (Health Technology Assessment, 2005 – The SAFE study)</p> <p>Screening of people over the age of 65 years as part of seasonal flu vaccination clinics have been effective and economical at detecting AF in parts of the UK. Gordon et al, 2012 as cited by The Route Map for Change &amp; the European Atlas on the Prevention of AF-Related Stroke, 2014)</p>	

BHF Arrhythmia Care Co-ordinator project evaluation published on NHS Evidence <https://arms.evidence.nhs.uk/resources/qipp/957441/attachment>

BHF Integrated Care Project evaluation interim findings in Lanarkshire reported activation of healthcare professionals and GPs as part of the implementation of the AF intervention and management programme. This resulted in an increase in routine pulse checks carried out by GPs and healthcare professionals and the recorded prevalence of AF in the area is thus rapidly increasing, for e.g. from 1.3% to 1.5% within the first 12 months.

The estimated actual prevalence levels for the demographic are around 2%. Pulse checks are therefore helping diagnose AF in the population with plans for early intervention and management which also has cost savings implications due to stroke prevention, management as well as QALY.

## **7. What is the evidence of cost effectiveness of the proposed change?**

<https://arms.evidence.nhs.uk/resources/qipp/957441/attachment>

The above link to the Arrhythmia Care Co-ordinator project evaluation, also highlights the cost analysis and impact of early detection and effective management of AF. Health and social care costs of stroke are approximately £4.38 billion a year (49%). Informal care costs are estimated to be £2.42 billion a year (27%). Productivity losses (i.e. income lost) due to care, disability and death are estimated to be approximately £1.33 billion (15%). Benefit payments total approximately £841m (9%). (Saka et al. 2009. Cost of stroke in the United Kingdom. Age and Ageing)

In 1994 it was estimated that approximately 1 in 20 patients (5%) with AF will have a stroke (AF investigators, Cited by Lines, 2014). Therefore, diagnosing AF and taking steps to reduce stroke risk will be cost effective both financially (Health/Social Care) and in terms of reducing morbidity, mortality and suffering.

It is estimated that AF and related morbidities such as stroke and vascular dementia add up to costing the NHS over 2.2 billion each year with an additional burden on social care (PHE, 2015) – This burden could be greatly reduced by targeted screening for AF and subsequently offering effective anti-coagulation therapies.

Targeting AF and managing the stroke risk with anti-coagulation is considered one of the top five most important interventions to reduce life expectancy inequalities across England (Lines , 2014)

Evidence of pulse checks with the flu clinics across Dorset initiative (approximately 85% sign-up from GP surgeries.)

Atrial Fibrillation Investigators (1994) Risk factors for stroke and efficacy of antithrombotic therapy in atrial fibrillation. Analysis of pooled data from five randomized controlled trials. *Arch Intern Med*;154:1449–57;

Lines C (2014) Atrial Fibrillation: Burden of disease and the impact of an effective prevention programme. Public Health England

Please return this completed form to:  
ESCAP secretariat  
Email: [nhshealthcheck.mailbox@phe.gov.uk](mailto:nhshealthcheck.mailbox@phe.gov.uk)

South East
<b>8. Please provide an outline of how this would change current practice</b> i.e. what would frontline professionals delivering the NHS Health Check need to do that isn't already a part of the programme?
Routine pulse checks to detect arrhythmias.
<b>9. If you are proposing a new component to the programme, please describe the effective treatment and management systems that are exist and are available.</b>
This is not a new component, but it is emphasising the importance of mandating the check rather than guidance as part of the BP check
<b>10. Please state whether you feel the change will have a negative, neutral or positive impact on health inequalities and on the nine protected characteristic groups and why.</b> [please tick, <i>max 200 words</i> ]
<input type="checkbox"/> Negative <input type="checkbox"/> Neutral <input checked="" type="checkbox"/> Positive
[Why...] Great volume of early detection and treatment, to support AF-related stroke prevention
<b>11. Please name a local authority that has already adopted this proposed change to their delivery of the NHS Health Check programme.</b>
Manchester City Council
<b>12. Please list any relevant references</b>
Included above.

**For completion by the ESCAP secretariat**

<b>13. Proposal to be shared with ESCAP</b>
Yes
<b>14. ESCAP feedback</b>
ESCAP members observed that pulse is already taken as part of the blood pressure assessment in the NHS Health Check as set out in the programme's best practice guidance. The group agreed to strengthening the primary care management section of the best practice guidance to reflect NICE guidance on the management of atrial fibrillation if detected by the pulse check. Therefore, ESCAP recommended that this proposal should not progress to stage 2.

Please return this completed form to:  
ESCAP secretariat  
Email: [nhshealthcheck.mailbox@phe.gov.uk](mailto:nhshealthcheck.mailbox@phe.gov.uk)