1.4 million people in England are estimated to have atrial fibrillation (AF) (2.5% of the total population). There is significant variation between practices in the proportion of their patients with AF who remain undiagnosed. AF is a major risk factor for stroke and a contributing factor to one in five strokes. Treatment with an oral anticoagulant medication (e.g. warfarin) reduces the risk of stroke in someone with AF by two thirds.

**AF Strokes: Outcome after discharge in people NOT anticoagulated before their stroke in CCG**

<table>
<thead>
<tr>
<th>Source: SSNAP 2017 (May not add to 100% due to rounding)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely independent: 18%</td>
</tr>
<tr>
<td>No significant disability despite symptoms from the stroke: 0%</td>
</tr>
<tr>
<td>Slight disability, unable to carry out all usual activities, but able to look after own affairs without assistance: 18%</td>
</tr>
<tr>
<td>Moderate disability, needing some assistance, but able to walk independently: 36%</td>
</tr>
<tr>
<td>Moderately severe disability, unable to walk or care for self without assistance: 27%</td>
</tr>
<tr>
<td>Severe disability, bedbound and needing constant nursing care and attention: 0%</td>
</tr>
<tr>
<td>Dead: 0%</td>
</tr>
</tbody>
</table>

**Case finding of AF in CCG**

GRASP-AF is a free software tool that GP practices can use to help identify and improve the management of patients with AF.

**AF Strokes in CCG**

AF is a major risk factor for stroke and a contributing factor to one in five strokes. Treatment with an oral anticoagulant medication (e.g. warfarin) reduces the risk of stroke in someone with AF by two thirds.

**Undiagnosed AF in CCG**

Nationally 19% of eligible patients do not receive anticoagulation. This includes excepted patients, but some practices except far fewer than others.

**Number of AF patients anticoagulated in CCG**

Nationally 19% of eligible patients do not receive anticoagulation. This includes excepted patients, but some practices except far fewer than others.
**Key Messages on Case Finding**

**Why do we need to improve our case finding in atrial fibrillation (AF)?**

1. The risk of stroke increases five-fold for people with AF.
2. AF strokes are often more severe with higher mortality and greater disability.
3. AF is a major risk factor for stroke and contributes to one in five strokes.
4. BUT - almost a quarter of people with AF are undiagnosed. They are therefore untreated and at a high risk of premature death and disability.

**What do we need to know?**

1. People with AF are at an increased risk of stroke irrespective of symptoms.
2. People with AF are at an increased risk of stroke even after treatment such as cardioversion or ablation.
3. All people with AF, paroxysmal AF and atrial flutter are at increased risk of stroke and should be assessed for anticoagulation.
4. For most people with AF the benefits of anticoagulation significantly outweigh the risks of bleeding.

**What can practices do to find and treat the missing high risk patients?**

1. Compare recorded prevalence with the expected prevalence of AF for your practice.
2. Use tools such as GRASP-AF to search for codes that suggest probable or possible uncoded AF.
3. Do opportunistic pulse checking in settings where AF more likely to be detected e.g. long term condition clinics, flu clinics and blood pressure checks.
   a. AF incidence increases with age and is significantly higher in people over 65 - they are often asymptomatic.
   b. AF is more likely in people with existing cardiovascular disease including hypertension, diabetes, chronic kidney disease (CKD) and peripheral vascular disease and previous stroke.
   c. AF is more likely in people with chronic obstructive pulmonary disease (COPD).
4. Ensure everyone found to have an irregular pulse is offered a 12-lead ECG to determine the rhythm.

**What can CCGs do to find the missing high risk patients?**

1. Compare recorded and expected prevalence across the CCG to estimate the total number of people with undiagnosed AF.
2. Examine the level of variation in detection rates between practices.
3. Explore and share approaches being used by practices that are more successful in detecting AF.
4. Support practices to audit and improve case finding using local solutions as developed in Bradford for example, or off the shelf tools such as GRASP-AF.
5. Add pulse checking to local enhanced service specifications where appropriate.
6. Ensure all eligible patients receive the NHS Health Check which will systematically detect abnormal pulse rhythms as part of blood pressure measurement.
7. Ensure local practices have access to quality assured ECG interpretation.
8. Explore potential for community pharmacists to offer pulse checking with diagnostic technologies such as AliveCor.
9. Ensure appropriate training in pulse checking for health care assistants.
10. Contact your local AF Academic Health Science Network lead: [https://tinyurl.com/ycenw7lq](https://tinyurl.com/ycenw7lq).

**Glossary**

- **QOF**: Quality and Outcomes Framework
- **NCVIN**: National Cardiovascular Intelligence Network
- **SSNAP**: Sentinel Stroke National Audit Programme
- **GRASP-AF**: Guidance on Risk Assessment and Stroke prevention for Atrial Fibrillation
- **DOAC**: Direct Oral Anticoagulant
- **ECG**: Electrocardiogram
- **CCG**: Clinical Commissioning Group

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Stroke Association partnership with:
Key Messages on Anticoagulation

Why do we need to improve our treatment of atrial fibrillation (AF)?

1. Anticoagulation substantially reduces the risk of stroke in people with AF.
2. BUT many people with AF on warfarin are undertreated and therefore at significant risk of stroke, with the average time in the therapeutic range being around 60% in major studies.
3. AND - only around half of stroke patients with known AF are on anticoagulation treatment at the time of their stroke.

What do we need to know?

1. Everyone with AF, paroxysmal AF and atrial flutter is at increased risk of stroke and should be offered risk assessment with CHA2DS2-VASc.
2. Everyone with AF who also has valvular heart disease should be offered anticoagulation - they do not need a formal risk score as the stroke risk is high.
3. Aspirin and other antiplatelet treatments should not be used for stroke prevention in AF - they are not effective in stroke prevention and increase the risk of bleeding particularly in older people.
4. Risk of falls does not justify withholding anticoagulation - benefits are likely to outweigh risks unless the person is falling on most days.
5. The HAS-BLED tool should not be used to exclude people from anticoagulation - rather it is a tool to identify risk factors than can be modified in order to mitigate the risk of bleeding.
6. For most people with AF the benefits of anticoagulation significantly outweigh the risks of bleeding.
7. Both warfarin and DOACs can be used for anticoagulation in non-valvular AF. Discuss choice of anticoagulants with the individual in order to improve adherence to treatment.

What can practices do to improve stroke risk reduction in AF?

1. Offer stroke risk assessment with CHA2DS2-VASc to all people with non-valvular AF.
2. Offer anticoagulation to adults where CHA2DS2-VASc risk score is 2 or above.
3. Use HAS-BLED to identify risk factors that can be modified in order to mitigate the risk of bleeding - e.g. alcohol, medication and high blood pressure.
4. Keep the quality of anticoagulation under close review by regularly checking that the individual Time in Therapeutic Range (ITTR) of those on warfarin is greater than 65%. Adherence to both warfarin and DOACs should also be regularly checked.

What can CCGs do to improve stroke risk reduction in AF?

1. Use QOF data to estimate how many people with AF in the CCG are not anticoagulated.
2. Check the Sentinel Stroke National Audit Programme (SSNAP) results published quarterly to check what proportion of people with known AF who are admitted with a stroke have been treated with preventive anticoagulation.
3. Examine the level of variation in anticoagulation rates between practices.
4. Explore and share approaches being used by practices that are more successful in treating AF.
5. Support practices to use tools such as GRASP-AF and Warfarin Patient Safety Audit Tool to audit and improve anticoagulation.
6. Develop a consensus statement with local clinicians in line with NICE guidance on the role of DOACs in anticoagulation for AF, taking into account evidence of effectiveness and cost-effectiveness, multimorbidity and patient preference.
7. Ensure a robust local pathway for prescription and monitoring of warfarin and DOACs.
9. Explore the potential for community pharmacists to offer adherence support to people on anticoagulants.
10. Contact your local AF Academic Health Science Network lead: https://tinyurl.com/ycenw7lq.

These key messages were developed by practising GPs, nurses and community pharmacists in the Primary Care CVD Leadership Forum in collaboration with the Stroke Association and the RCGP.

The National Cardiovascular Intelligence Network (NCVIN) in Public Health England brings together epidemiologists, analysts, clinicians and patient representatives to use data and information to improve outcomes.