

Atrial Fibrillation Case Finding, and Healthcare Inequalities

Thursday 14th September 2023
13:00 – 14:00



Agenda: Atrial Fibrillation: Effective case-finding and highlighting healthcare inequalities in NWL

Agenda Item	Speaker	Time
Welcome & Update on AF in NWL	Dr Shazia Siddiqi and Dr Sadia Khan , Primary Care and Secondary Care Co-Chairs, NWL AF Working Group	10mins
AF Case Finding	Zainab Khanbhai , Senior Cardiothoracic Surgical Pharmacist, Royal Brompton Hospital	15 mins
AF Healthcare Inequalities	Tom Clutterbuck , Innovation Advisor, Imperial College Health Partners	15 mins
Q&A	Lead by Dr Shazia Siddiqi and Dr Sadia Khan	15 mins
Feedback and Close	Chanelle Corena , Senior Innovation Manager, Imperial College Health Partners	5 mins

Housekeeping:



- Please remain on mute and with camera off unless speaking
- Questions? Enter into the chat, or, during our Q&A section at 13:45 use 'raise hand' function
- Please note we will be recording this meeting

Atrial Fibrillation in NWL

Dr Shazia Siddiqi and Dr Sadia Khan



Current detection and management of **Atrial fibrillation (AF)**



NWL CVD AF Plan

- Improve detection of atrial fibrillation and ensure appropriate stroke risk reduction through anticoagulation
- Detect 85% of expected prevalence



QOF – Atrial Fibrillation

Indicator	Points	Achievement thresholds
AF001 The contractor establishes and maintains a register of patients with atrial fibrillation.	5	—
AF006 The percentage of patients with atrial fibrillation in whom stroke risk has been assessed using the CHA2DS2-VASc score risk stratification scoring system in the preceding 12 months (excluding those patients with a previous CHADS2 or CHA2DS2-VASc score of 2 or more)	12	40–90%
*AF008. Percentage of patients on the QOF Atrial Fibrillation register and with a CHA2DS2- VASc score of 2 or more, who were prescribed a direct-acting oral anticoagulant (DOAC), or, where a DOAC was declined or clinically unsuitable, a Vitamin K antagonist	12	70-95%

*Please note AF008 has recently replaced AF007, in the 23/24 QOF Indicators.

How is NWL performing?

	Aim	Objective	Target	Actual (Jan-23)
Atrial Fibrillation	Improve detection of atrial fibrillation and ensure appropriate stroke risk reduction through anticoagulation	Detect 85% of expected prevalence	85% (1.4%)*	65% (1.1% actual vs 1.7% estimated)
		Ensure 90% of patients with AF to have a CHADVASC assessment in the last 12 months (QOF AF006)	90%	84.27%
		Ensure 90% of those with a score of ≥ 2 , to be on anticoagulation, or, where a DOAC was declined or clinically unsuitable, a Vitamin K antagonist (QOF AF008)	90%	86.76%

*Target and actual are expressed as quarterly increases. Target of 40% over 5 years equates to a 2% increase per quarter.

Initiating medication

- For patients commencing treatment for AF: subject to the criteria specified in the relevant NICE technology appraisal guidance:
 - Clinicians should use edoxaban where this is clinically appropriate.
- If edoxaban is deemed not clinically appropriate for the specific patient, then consider rivaroxaban, then apixaban or dabigatran, and this should be clearly documented in patients' notes

Reviewing medication

- Existing patients already established on an alternative DOAC for AF, should continue on their current DOAC (provided they are not experiencing adverse events of concern and provided their current DOAC is not contraindicated)

DOAC Dosing

	DOAC	Dosing	Renal Dose Adjustments
1	Edoxaban	<p>60mg once daily – can be taken with or without food.</p> <p>Reduce dose to 30mg once daily if at least one of the following: CrCL 15 - 50 mL/min; body weight \leq 60 kg; concomitant use of ciclosporin, dronedarone, erythromycin, or ketoconazole</p>	<p>CrCL > 100 mL/min: Edoxaban should only be used in patients with high creatinine clearance after a careful evaluation of individual thromboembolic and bleeding risk, use apixaban in preference to edoxaban</p> <p>CrCL 80- 100mL/min: The benefit and safety of edoxaban is uncertain, consideration may be given to an alternative</p> <p>CrCL 50-80mL/min: No dose adjustment necessary</p> <p>CrCL 15-50mL/min: 30mg once daily</p> <p>CrCL <15mL/min: Use not recommended</p>
2	Rivaroxaban	<p>20mg once daily with food</p> <p>(NB. Doses lower than 15mg may be taken without food)</p> <p>For patients with NVAf who undergo percutaneous coronary intervention (PCI) with stent: <u>15mg once daily</u> with a P2Y12 inhibitor (such as clopidogrel) for a maximum of 12 months</p>	<p>CrCL 50-80mL/min: No dose adjustment necessary</p> <p>CrCL 30 - 49mL/min:</p> <ul style="list-style-type: none"> • 15mg once daily • Plus PCI with stent: 10mg once daily with a P2Y12 inhibitor <p>CrCL 15 -29mL/min:</p> <ul style="list-style-type: none"> • Use with caution (15mg once daily) • PCI with stent: Use with caution (10mg once daily) <p>CrCL <15mL/min: Use not recommended</p>

DOAC Dosing

3	Apixaban	<p>5mg twice daily – can be taken with or without food</p> <p>Reduce dose to 2.5mg twice daily if at least two of the following: elderly ≥ 80years; body weight ≤ 60kg; creatinine ≥ 1.5 mg/dL (133 micromole/L)</p>	<p>CrCL 30-80mL/min: In the absence of other criteria for dose reduction (age, body weight), no dose adjustment is necessary</p> <p>CrCL 15-29mL/min:</p> <ul style="list-style-type: none"> • 2.5mg twice daily <p>CrCL <15mL/min: Use not recommended</p>
4	Dabigatran	<p>Dabigatran capsules must be swallowed whole. They can be taken with or without food.</p> <p>Body weight <50 kg: No dose adjustment is necessary but close clinical surveillance is recommended</p> <p>For 18 – 74 years: 150mg twice daily For 75 -79 years: 110mg-150mg twice daily <i>select appropriate dose after risk of bleed and thrombosis is assessed</i> For 80 years and over: 110mg twice daily</p> <p>Concomitant use of Verapamil: 110mg twice daily - In this situation dabigatran and verapamil should be taken at the same time</p> <p>For patients with gastritis, esophagitis or gastroesophageal reflux or at increased risk of bleeding: the appropriate dose should be selected (i.e. 150mg twice daily versus 110mg twice daily) after risk of bleed and thrombosis is assessed</p>	<p>CrCL 50-80mL/min: No dose adjustment necessary</p> <p>CrCL 30-50mL/min : <i>Consider 110mg twice daily if patient at high risk of bleeding</i></p> <p>CrCL <30mL/min: Use contraindicated</p>

PCI= percutaneous coronary intervention

Resources

Please [click here](#) or visit

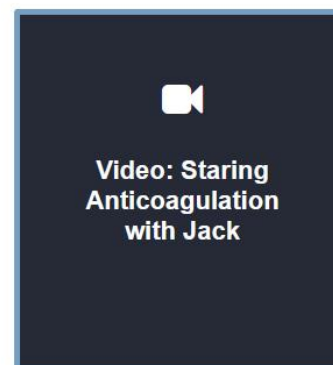
imperialcollegehealthpartners.com

[/resource/atrial-fibrillation/](#) where we

have collated clinical and patient resources for staff to access across NWL.

We have also linked the ICB Cardiology webpage, where

future resources will be updated.



AF Case Finding

Zainab Khanbhai

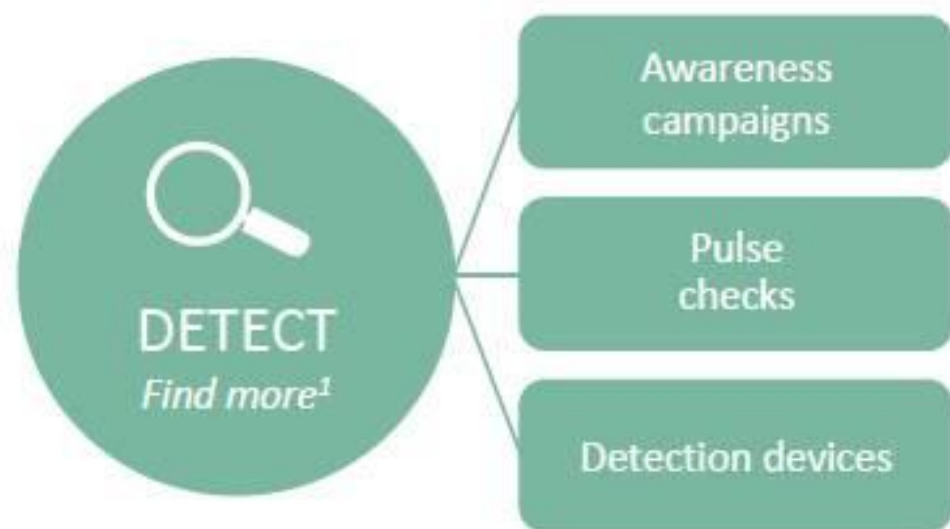
Capture AF Lead, Senior Pharmacist – Cardiothoracics
Royal Brompton and Harefield Hospitals



Background

- Atrial Fibrillation (AF) is the most common heart rhythm abnormality
- There are approximately 890,000 people who are living with diagnosed AF in England (1.6% general population)
- Prevalence increases with age from 0.7% in people aged 55-59 years to 18% in those older than 85
- AF is the leading cause of embolic stroke

DETECT: A national initiative to find individuals with undiagnosed AF who are at risk of NVAF-related stroke¹



- Early detection allows initiation of anticoagulation therapy to prevent strokes in clinically indicated patients²
- The ambition for PHE is to **detect 85% of expected individuals with AF by 2029**³
- Opportunistically pulse checking at-risk individuals (e.g., >65 years of age) to detect an irregular pulse is an appropriate approach^{4,5}



Up to 1/3 of individuals with AF may be undiagnosed; there are an estimated 422,600 undiagnosed individuals in England alone⁶

NVAF, non-valvular atrial fibrillation; PHE, Public Health England

1. NHS London Clinical Networks. AF Toolkit: Detect, Protect and Perfect. 2017. Available at: <http://www.londonscn.nhs.uk/wp-content/uploads/2017/06/detect-protect-perfect-london-af-toolkit-062017.pdf> Access date March 2022
2. AHSN Network. Available at: <http://www.ahsnnetwork.com/about-academic-health-science-networks/national-programmes-priorities/atrial-fibrillation/> Access date March 2022
3. PHE. Health matters: preventing cardiovascular disease. Available at: <https://www.gov.uk/government/publications/health-matters-preventing-cardiovascular-disease/health-matters-preventing-cardiovascular-disease> Access date March 2022
4. Taggar JS, et al. Eur J Prev Cardiol 2016;23:1330–6;
5. NICE. Atrial fibrillation: diagnosis and management (2021) NICE guidance NG196. Available at: <https://www.nice.org.uk/guidance/ng196> Access date March 2022
6. Sustainability and Transformation Partnership Level Size of the Prize infographic and NHS Health Check factsheet: England Size of the Prize. Available at: <https://www.healthcheck.nhs.uk/commissioners-and-providers/data/size-of-the-prize-and-nhs-health-check-factsheet> Access date March 2022

NHS initiatives highlight the potential clinical and cost-saving impact of early AF detection and diagnosis¹

1. The diagnosis and treatment gap in England

 AF	GP-registered population with AF	983,300
	Estimated GP-registered population with undiagnosed AF	422,600
	GP-registered high-risk AF patients (CHA ₂ DS ₂ -VASc ≥2) not anticoagulated	177,800

2. The burden in England: First ever CVD events

Coronary heart disease	128,750
Stroke	66,450
Heart failure	48,350

3. The opportunity: Potential events averted and savings over 3 years by improving treatment in AF



14,220 strokes



Up to
£241.6 million saved

CVD: cardiovascular disease

1. NHS Health Check. Reducing heart attack and stroke: Sustainability and Transformation Partnership Level Size of the Prize infographic and NHS Health Check factsheet: England Size of the Prize. Available at: https://www.healthcheck.nhs.uk/commissioners_and_providers/data/size_of_the_prize_and_nhs_health_check_factsheet. Access date March 2022

Capture AF Service Objectives



Improve the detection of newly diagnosed AF – DETECT¹



Improve anticoagulation prescribing in people with diagnosed AF – PROTECT¹ and PERFECT¹



Facilitate robust and timely referral to a specialist centre



Reduction in AF related strokes

Capture AF Model

Community pharmacist
bespoke online training*
package on AF

1. Community pharmacist to identify eligible patients

2. Perform Kardia monitor, complete PharmOutcomes
tool, refer to virtual AF clinic

3. Specialist AF pharmacist triages referrals, ECG review by
cardiologist, patient booked into virtual AF clinic

Workshops*:

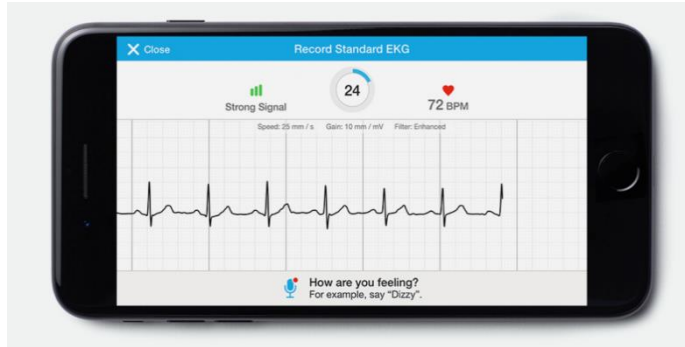
AF aetiology and management, using the Kardia
monitor,*†‡ PharmOutcomes form, and
communication skills

Over 65 years old with one or more of
the following risk factors:

- Coronary heart disease (angina, previous MI, CABG/stents in the past)
- Diabetes
- Hypertension
- AF
- Heart failure (currently on heart failure medicine e.g. long term diuretics)
- Stroke/TIA
- Peripheral artery disease

- Consent
- Enter into PharmOutcomes:
 - Patient demographics
 - CHA₂DS₂-VASc score
 - AliveCor Kardia Mobile*†‡ to record patients' ECG
 - Anticoagulation/antiplatelets
 - Side effects and compliance with anticoagulation

Kardia Monitor



Linked to smartphone via app

ECG trace in 30s

ECG analysis provided immediately

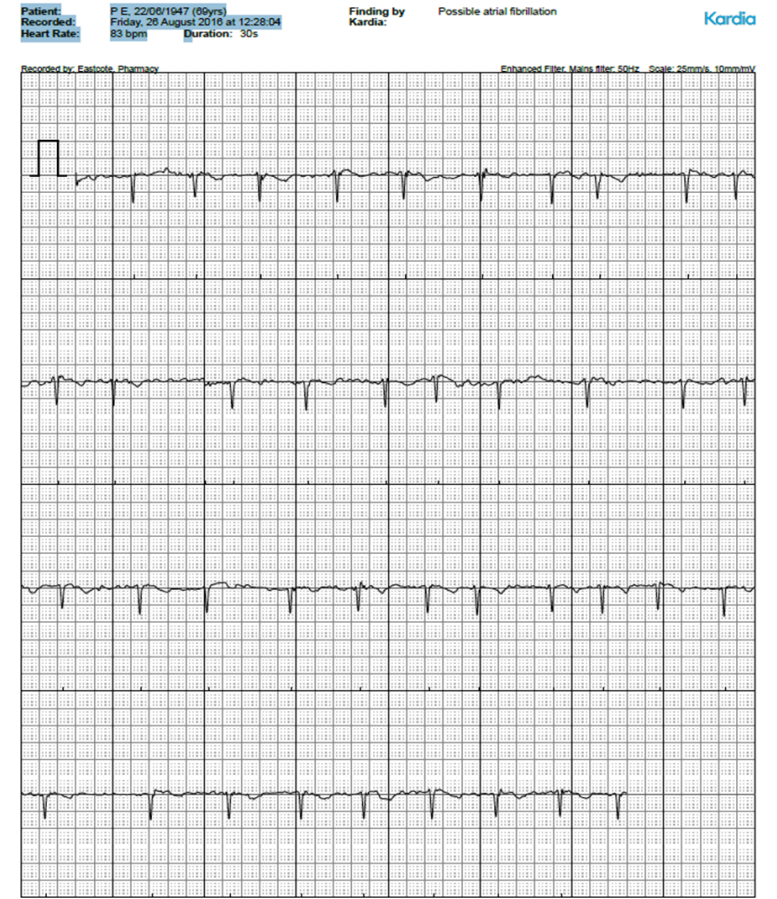
Portable

Cheap

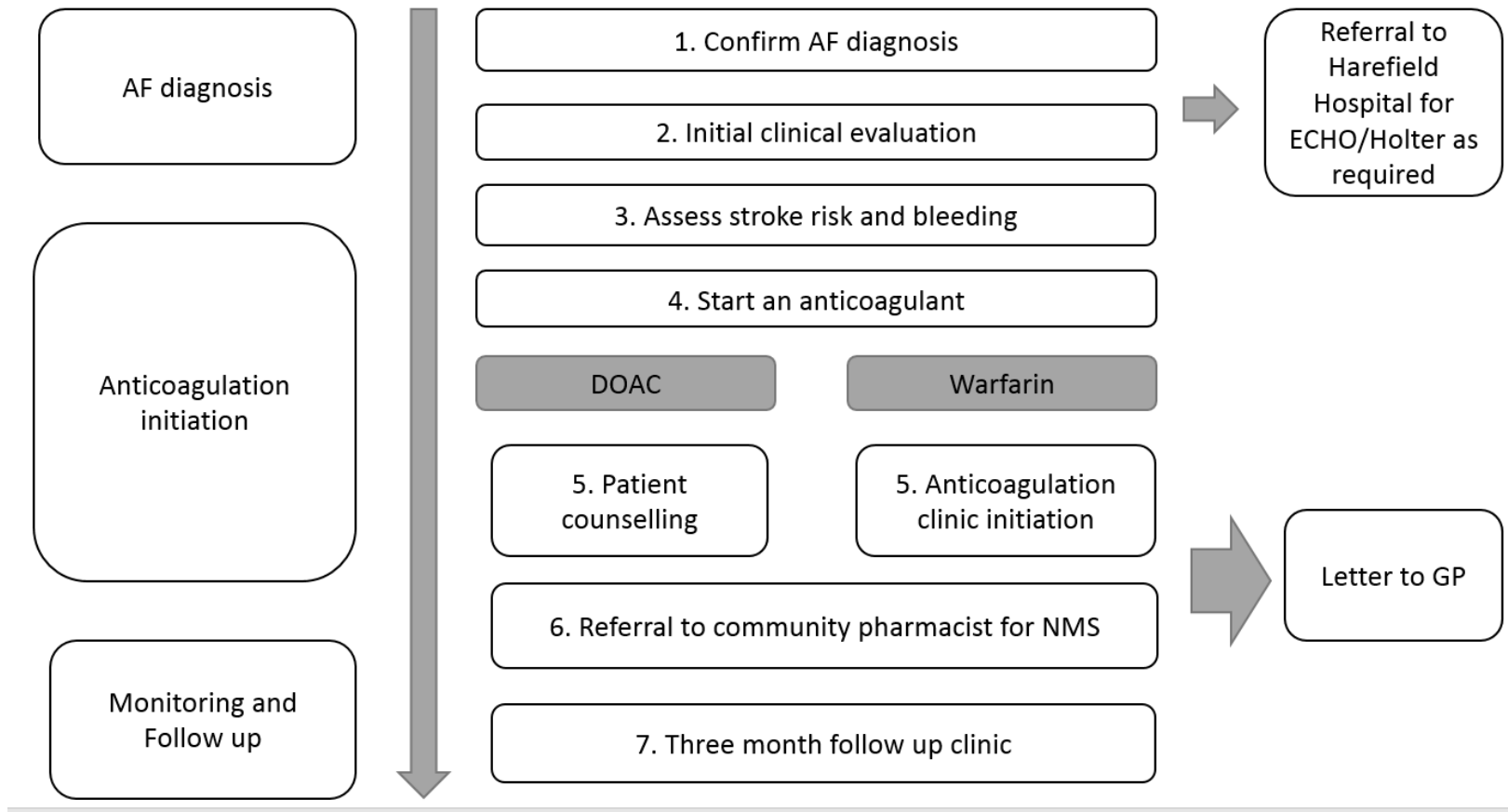
Easy to use

PDF of ECG trace which can be emailed directly

Long battery life



AF management pathway



Impact of Capture AF -Detection

Number of new AF

56

65 years plus with one risk factor for AF

Number of strokes saved

2 per annum¹
1 life saved

Year 1 Savings made
from strokes prevented

Medical:
£37,482

Medical and
social care
cost:
£47,454

Capture AF – Protection

23

Known AF not on an anticoagulant



13

Antiplatelet and anticoagulant review



- Dose adjustment: - 5
- Warfarin to DOAC: - 14

Optimisation of anticoagulant



2.4

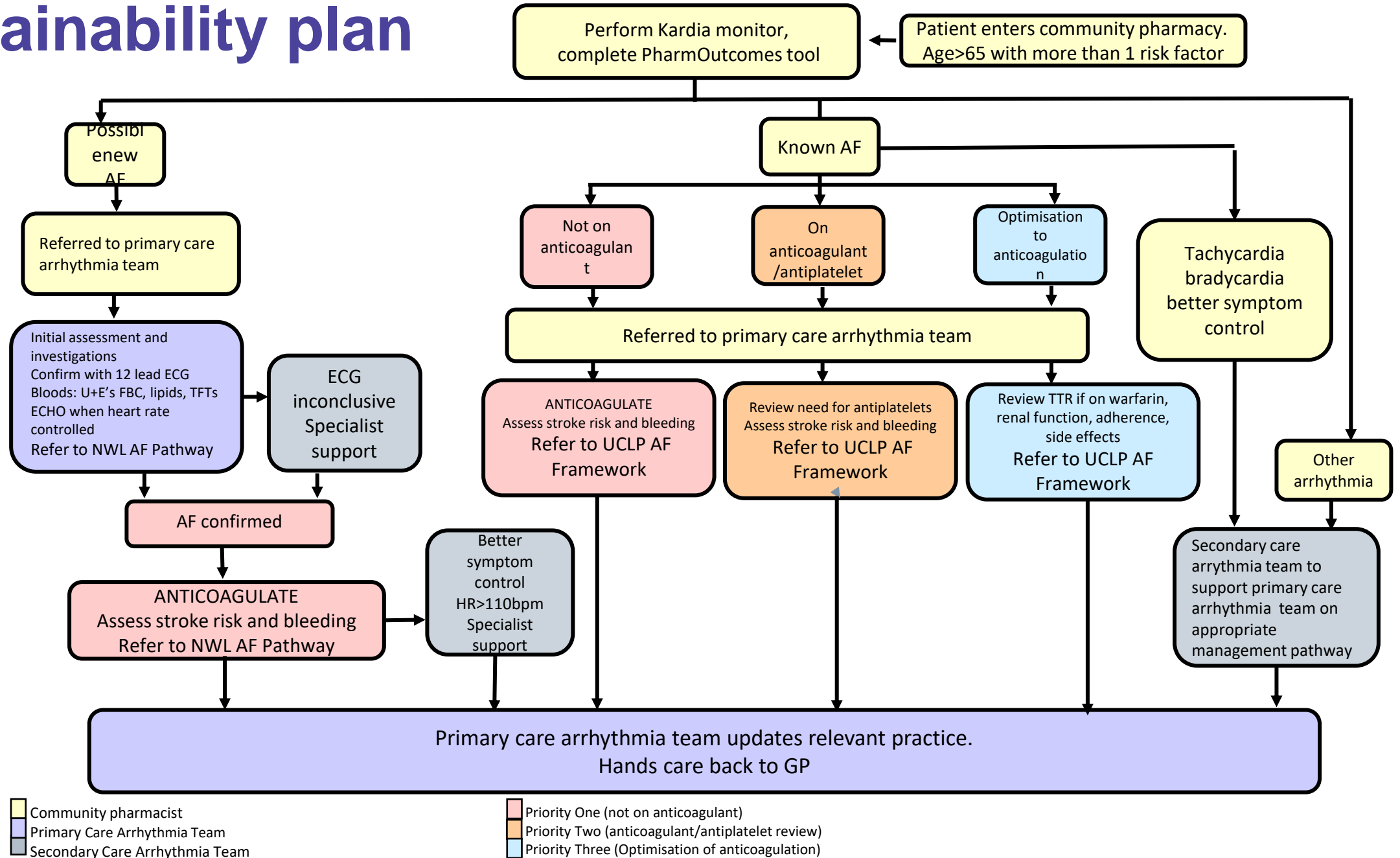
strokes saved per annum

1

life saved

Medical: £32,284,
Medical and Social Care:
£53,829

Sustainability plan



Insights from InHIP: an inequalities focus on AF in NWL

ICHP InHIP Project Team



Project at a glance

- ICHP has been working on behalf of North West London ICS to deliver InHIP. We have focused on tackling health inequalities for those in North West London with Cardiovascular disease, specifically Atrial Fibrillation.
- We have taken a Clinical Effectiveness approach, aiming to support local teams with data analysis, clinical and patient engagement to identify existing inequalities and inform interventions.



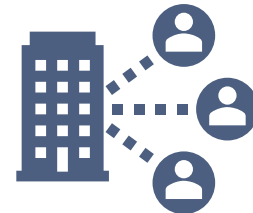
Our **clinical area / specific healthcare inequality**

- Atrial fibrillation (AF) access, experience and/or outcomes



Our **Core20PLUS population**

- Populations living in NWL areas with higher deprivation measured by IMD score



Our **InHIP team**

- Data analyst
- Patient and public involvement and engagement (PPIE)
- Project management



Our **NICE-approved innovation**

- Use of Direct Oral Anti-Coagulants (DOACs) to prevent AF-related strokes

Question for reflection - based on the insights presented today, is there one action you can take to improve treatment of AF in your practice?

Data Insights – Prevalence of Atrial Fibrillation in NWL

Key points

- The **percentage of patients with AF in NWL who are undiagnosed is estimated to be at 27%**. Expected prevalence is calculated from a study based in Sweden¹. It should be noted that this study accounts for age & gender, but not ethnicity.
- The **percentage of the total estimated AF population who are undiagnosed is at roughly 50% for patients of non-White ethnicity**. By contrast, only 5% of White patients with AF are estimated to be undiagnosed.
- When stratified by age, **a lot of the differences between ethnic groups can be seen in the over 60 group**. According to the expected prevalence figures, all patients over 60 who have undiagnosed AF are non-White.

Further insights

- As expected, the diagnosed and expected prevalence increases with age. However, **patients aged between 20 and 60 have a much higher estimated likelihood of being undiagnosed with AF** (over 50% compared to ~5% for the over 80s).
- Both diagnosed and expected prevalence is higher in men than women. However, **the estimated percentage of patients with AF who are undiagnosed is at 35% for men and only 13% for women**.
- According to the expected prevalence figures, **all patients aged under 60 with undiagnosed AF are men**. Over 60% of men under 60 are estimated to be undiagnosed

Data Insights – Direct Oral Anti-Coagulation Prescriptions

Key points

- Of the total known AF population (35,165 patients):
 - **63% have had a DOAC prescription** in the last 6 months, **7% have had a Warfarin prescription** in the last 6 months
 - **8% have had a DOAC/Warfarin prescription that is over 6 months old**
 - **21% have had no history of DOAC/Warfarin prescription**
- **67% of White patients** have had a DOAC prescription in the last 6 months, compared to **57% of non-White patients**.
- Levels of DOAC prescription appear to increase with IMD deprivation decile, **indicating that those in the least deprived areas are more likely to be prescribed DOACs**.

Further insights

- **Rates of DOAC prescription increase substantially with age**. Patients aged under 60 may also be more likely to discontinue treatment.
- **Rates of Warfarin prescription appear to be high (14%) for those patients aged 40-59 who are female or non-White**.
- **Non-White patients aged under 60 have a higher rate of Warfarin prescription than their White counterparts**. Additionally, non-White patients aged over 60 are more likely to have no history of DOAC/Warfarin prescriptions.
- **Men under 60 seem to be more likely to discontinue treatment**, with 13% having their most recent DOAC/Warfarin prescription over 6 months ago.

We spoke to clinicians in NWL's most deprived areas about the challenges and opportunities in improving treatment of AF

- The goal of these interviews was to understand the factors driving the trend observed that patients living in more deprived areas are less likely to be prescribed DOACs for treatment of AF.
- We specifically sought out clinicians based in PCNs with higher deprivation (measured by IMD score).

Clinician challenges with AF treatment



Transient, dynamic patient population – with patients that don't access healthcare regularly or communicate with their healthcare provider



Missed diagnoses and/or limited early detection



Capacity challenges – which lead to time constraints in appointments, challenges in building rapport and trust with patient and inability to follow up or check in with patient



Lack of clinician education around AF

Delay in responses for cardiology opinion

“We have a transient population that turns over quickly [...] you may have contacted 20% of the people and it looks like you haven't done anything because of that constant shift”

“Prioritising AF as an issue and incentivising it with payment can be the only way some of the clinicians pay attention in my PCN because they are so tight on time and they have other initiatives that they want to run”

Patient challenges with AF treatment

(Based on clinician views)

Language barriers and cultural norms – influencing preferences and ability to understand treatment options, especially when reliant on family members



Varying levels of trust in the NHS and big pharma

“There are a number of patients that just won’t take medication [...] and COVID-19 made that worse, because there is a big mistrust of big pharma and the government”



Habit and aversion to change in medication / routine



Lack of health education – poor understanding of the benefits / risks of treatment can lead to cynicism and reticence

‘one patient who we could not get onto a DOAC [...] for eight, 7-8 years because his social event was [the warfarin clinic ...] having his INR measured and sitting in the cafe and having a cup of tea’



Lack of consistency in GP/healthcare provider (e.g. with locum model) – may see someone different every time, have to repeat their ‘story’, feel rushed into treatment or lack trust in clinical opinion

Enablers to increase prescriptions of DOACs

(Based on clinician's recommendations and previous experiences/initiatives)



Patient (and clinical) education and awareness campaign – a public health campaign similar to those that have been done in diabetes to improve understanding and clarify the importance in stroke prevention



Community support – from nurses to key community members (such as religious leaders) to be trained and supported to promote AF checks (etc) in the community



More time for clinicians to personalise approach – so clinicians can call patients individually, follow-up and have more in-depth conversations to explain benefits of DOACs (the ease/convenience vs warfarin) and build trust



Regular reviews of AF patients (by clinical pharmacist if possible) – to ensure all AF patients (where appropriate) are offered DOACs, or encouraged to switch from warfarin. Also, make it best practice for GPs to check heart rate and offer DOACs to any newly-diagnosed AF patients.



Translation and awareness-raising of translation services if they exist – to encourage patients to approach their GP and encourage autonomy so patients are not reliant on family members

“I'm going to just remind everyone to check people's pulses when they're doing their blood pressures. So then, hopefully we'll catch a few more.”

“[The patient] needed that really slowed down conversation and we booked that in with the elderly care team. We had to book an interpreter, so all those things take time”

“I think having a target which is achievable, realistic and meaningful drives doctors.”

Next steps

We want to thank everyone who has contributed to this work. We are now continuing the project by supporting PCNs covering the most deprived areas of NWL with DOAC optimisation, and ensuring the insights generated are shared with the ICS to inform future projects.

Question for discussion:

1. Based on the insights presented today, is there one action you can take to improve treatment of AF in your practice?

Questions for local reflection and action:

1. Does your PCN have dedicated resource to monitor and review AF patients?
2. Are there any local organisations or community members who could be approached to reach underrepresented groups in your area?
3. Are the resources you share with patients accessible for diverse communities?

Panel Q&A



CVD Champions 2023/24

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To get involved in ICHP's CVD education series



Give us feedback on what topics you think we should cover in this format by answering our survey.

For further information and/or to get involved with the ICHP CVD education series please contact:

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NWL Webinar on AF Case Finding

