

Podiatrists Identifying Irregular Pulses AF Strategy Meeting 16th May 2019

Linda Hicks, Podiatrist CDDFT

Kate Mackay AF Programme Lead AHSN - NENC





Diabetes Podiatry & Detection of AF

- ❖ It was identified that podiatrists were in an ideal position to opportunistically identify irregular pulses during diabetic foot checks.
- ❖ All patients with diabetes should have an annual foot check which includes palpation of pedal pulses www.nice.org/NG19
- ❖ A 3 month pilot (Jan-March 2016) was conducted by the podiatry department County Durham & Darlington NHS Foundation Trust (CDDFT) and has been part of the wider AF programme run by Academic Health Science Network for NE & Cumbria in conjunction with Northern England Clinical Networks.
- ❖ Podiatrists & Foot care Technicians when carrying out pedal pulse checks use a hand held Doppler to listen to the quality of the pulse.
- ❖ Extra training was provided & staff were encouraged to listen for irregularities, staff were advised to listen to the pulse for at least 30 seconds.



Using Doppler to check Pedal Pulses





Training Included

- ❖ Listening for irregularities, pulses must be listened to for at least 30 seconds
- ❖ If an irregular pulse was identified in a patient with no AF diagnosis an appointment was made with the GP for a 12 lead ECG
- ❖ Podiatrists in CDDFT use System 1 (S1) for GPs on S1 a task is sent to the GP for non S1 practices a standard letter is sent.
- ❖ Patients are informed & provided with an information leaflet, this is a leaflet that has been ratified by North East Diabetes Clinical Network so all podiatry departments are using the same leaflet.
- ❖ The template on (S1) is ticked, this is read coded to assist with data extraction.

Podiatry Department

Detection of an irregular pulse

Today during your diabetes foot check, we detected an irregular pulse in your foot. Please make an appointment with your GP, so the irregularity can be investigated further.

There are a lot of reasons why somebody could have an irregular pulse and it is important that it is investigated, because in some people this is due to an abnormal heart rhythm called atrial fibrillation (AF). Untreated AF can cause a stroke in some people but this can be reduced by correct treatment, usually with blood thinning agents.

It is recommended that the detection of an irregular pulse needs further testing. Your GP will be informed that we have detected an irregular pulse today.

This leaflet was produced by County Durham & Darlington NHS Foundation Trust based upon the work of the Northern Diabetes Footcare Network

Production date: November 2018

Review date: November 2021.

Responsibility for review: Louise Nelson

Leaflet reference PIL/CG/0615

Version 1.0

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CDD Podiatry Mandatory Assessment

Patient	
Name: <u>Mr Mickey Mouse-TestPatient "Mick"</u>	NHS Number: _____
Address: <u>1 Fern Court</u>	Date of Birth: <u>01 Jan 1931</u>
<u>Bracken Hill Business Park</u>	
<u>Peterlee, SR8 2RR</u>	
Telephone: <u>0191666666</u>	Mobile Tel.: <u>07979555666</u>
Done By	
Name: _____	Date: _____

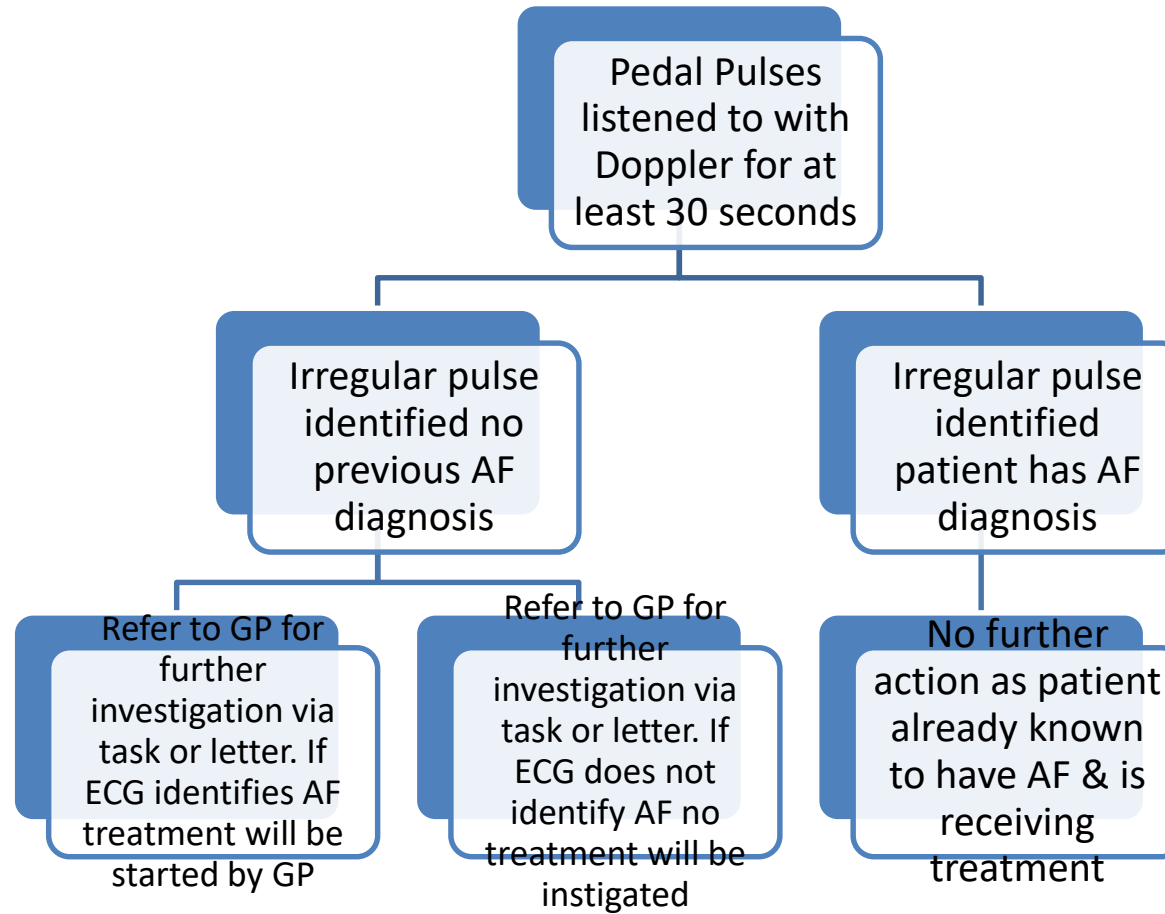
Mandatory Vascular and Neurological Assessment

Palpation

- | | | | |
|--|--------------------------|---|--------------------------|
| O/E - left dorsalis pedis normal | <input type="checkbox"/> | O/E - Right dorsalis pedis normal | <input type="checkbox"/> |
| O/E - left dorsalis pedis abnormal | <input type="checkbox"/> | O/E - Right dorsalis pedis abnormal | <input type="checkbox"/> |
| Left dorsalis pedis pulse absent | <input type="checkbox"/> | Right dorsalis pedis pulse absent | <input type="checkbox"/> |
|
 | | | |
| O/E - Left posterior tibial pulse normal | <input type="checkbox"/> | O/E - Right posterior tibial pulse normal | <input type="checkbox"/> |
| O/E - Left posterior tibial pulse abnormal | <input type="checkbox"/> | O/E - Right posterior tibial pulse abnormal | <input type="checkbox"/> |
| Left posterior tibial pulse absent | <input type="checkbox"/> | Right posterior tibial pulse absent | <input type="checkbox"/> |

O/E - irregular pulse (new) **Only tick if not previously diagnosed**

10g monofilament sensation left foot	<input type="checkbox"/> 10g monofilament sensation L foot normal	10g monofilament sensation right foot	<input type="checkbox"/> 10g monofilament sensation R foot normal
Tick one	<input type="checkbox"/> 10g monofilament sensation L foot abnormal		<input type="checkbox"/> 10g monofilament sensation R foot abnormal





Results of the Pilot

- ❖ 5000 patients had their feet checked
- ❖ 10 patients with previously unknown AF were detected
- ❖ If all patients with diabetes in England had their pedal pulses checked as part of the annual review screening for an irregular pulses 6800 people could be detected with AF.
- ❖ If all these people were correctly anticoagulated, 340 AF-related strokes could be prevented as well as saving the NHS £7.9M



Spreading the word

- ❖ Academic Science Network North East & Cumbria produced a leaflet - Diabetes Podiatry & Atrial Fibrillation Save a Life, Stop a Stroke.
- ❖ College of podiatry have developed guidance, all podiatrists who are members have access to this.
- ❖ Podiatric detection of AF www.scpod.org



The COLLEGE
of PODIATRY



Spreading the Word

- ❖ Via North East Diabetes Clinical Network which is attended by Podiatrists from all North East NHS Trusts.
- ❖ Some Podiatry Departments have limited access to Dopplers so were provided with AliveCor as there were a few false positives which were identified during manual palpation of pulses.





**Academic Health
Science Network**
North East and North Cumbria



Podiatry & Atrial Fibrillation

Save a life, stop a stroke

11th of September – 7pm



Speakers



Linda Hicks
Advanced Podiatrist



Martin Fox
Vascular Specialist Podiatrist

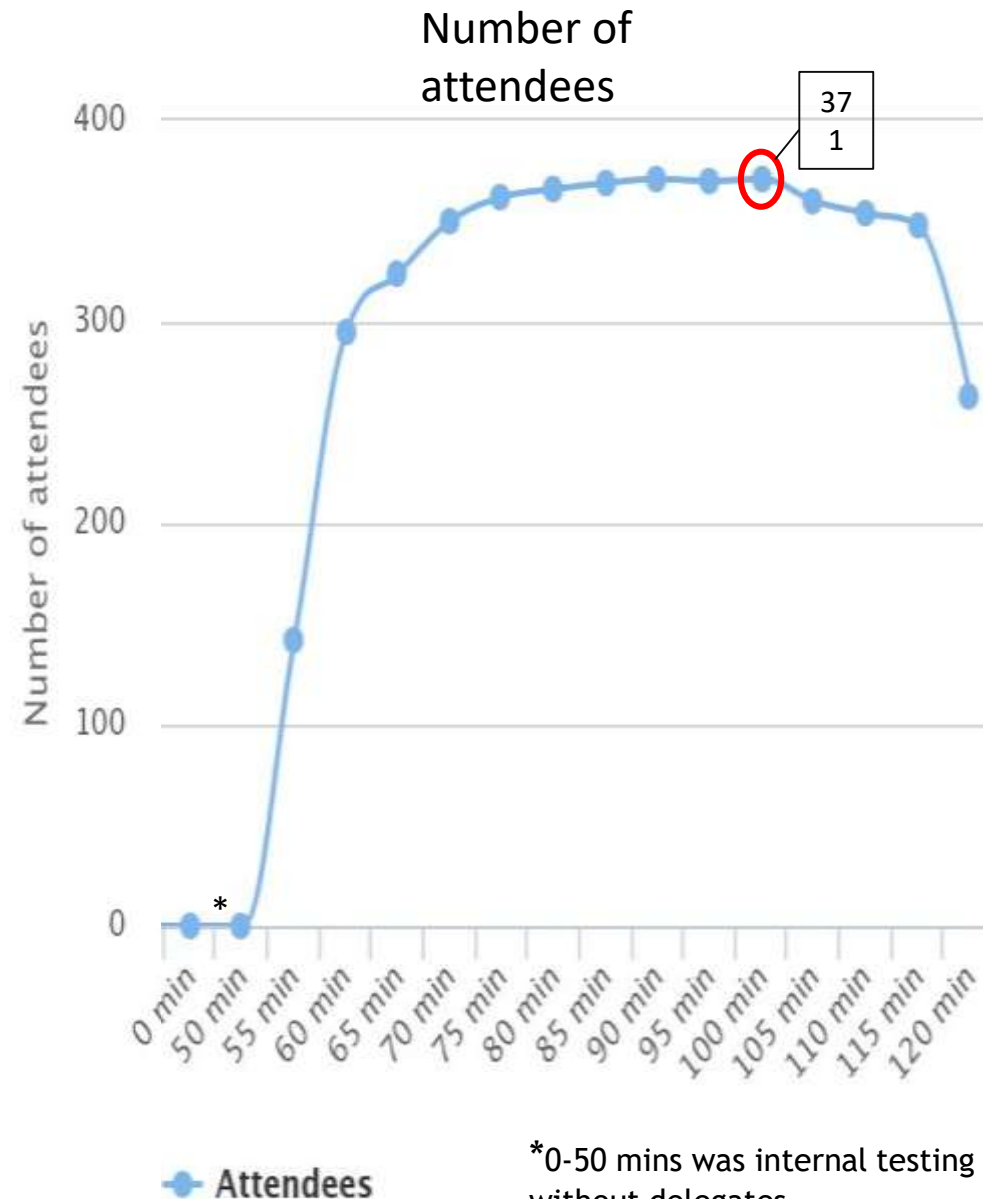


Kate Mackay
AF Programme Lead

Attendance Metrics

Total overall attendees: 407

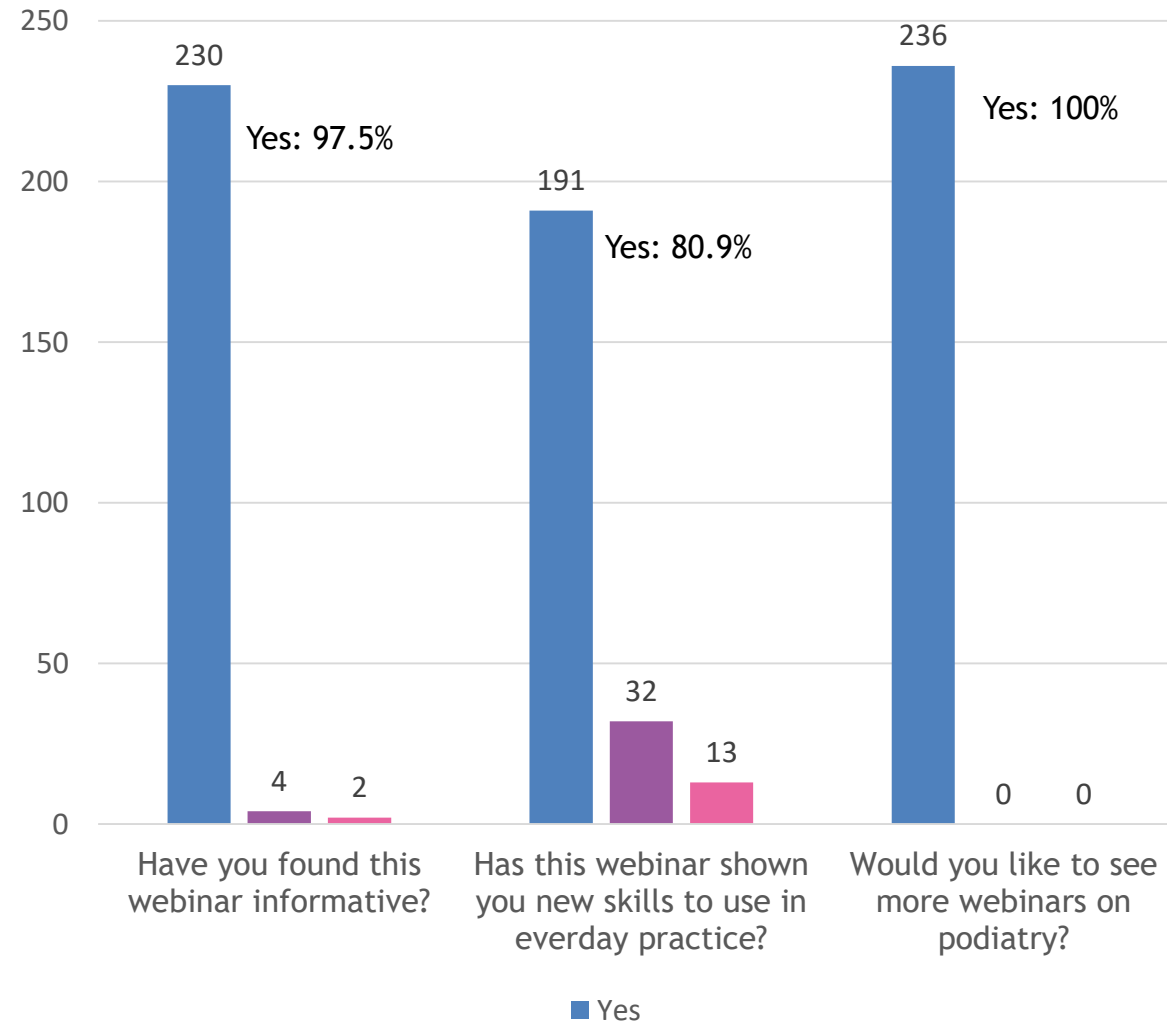
Peak number of attendees at one point: 371



*0-50 mins was internal testing without delegates.

End of webinar survey

Number of surveys completed:
236
58% of attendees





Masterclass On The Foot in Diabetes Conference Harrogate November 2018





Poster Presentation



Helping you prevent
diabetes heart disease kidney disease stroke & dementia



Cardiovascular Disease Prevention Conference 2019: Saving Hearts and Minds Together

Manchester 14 February 2019



Linda Hicks, Advanced Podiatrist, Podiatry Department, County Durham and Darlington NHS Foundation Trust
Kate Mackay, AF Programme Lead AHSN NENC

Save A Life, Stop A Stroke

Diabetes Podiatry and detection of Atrial Fibrillation (AF)

AF is a heart condition that commonly displays no symptoms.

Without treatment those living with AF are at an increased risk of a stroke.

Costing the NHS on average **£23,315** per patient

Patients with diabetes have their pulse checked

as part of their annual foot check review to detect the presence or absence of a foot pulse to prevent diabetes complications.

AIM

To increase the diagnosis of AF using foot pulse checking during patients diabetes annual foot review.

METHODOLOGY

A three-month pilot

January 2016 - March 2016 was conducted by County Durham and Darlington NHS Foundation Trust and has been part of a wider AF Programme run by the Academic Health Science Network for the North East and North Cumbria (AHSN NENC) in conjunction with the Northern England Clinical Networks.

During the initiative, 45 podiatrists were trained to spot heart irregularities, using a Doppler.

Any patient detected with an irregular pulse was referred to their GP for a 12-lead ECG to confirm diagnosis.

RESULTS

5,000

Diabetic patients had their feet pulse-tested

10

Patients with previously unknown AF were detected, indicating that one new case of AF could be identified for every 500 patients.

With 1 in 20 patients, either untreated or inappropriately treated, having an AF-related stroke, two patients each year would be prevented from having an AF-related stroke.

CONCLUSIONS

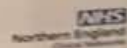
The pilot has been so successful that the work continues in County Durham and Darlington, and is being spread locally via the Northern Diabetes Footcare Network.

If all patients with diabetes, in England, had their pulse checked as part of the annual review screening for an irregular pulse...

6800 people could be detected with AF

If all these people were correctly anticoagulated, 340 AF-related strokes could be prevented

...as well as saving the NHS **£7.9M**



10 year cardiovascular disease ambitions for England

Atrial fibrillation (AF)



85%

of the expected number of people with AF are detected by 2029

90%

of patients with AF who are already known to be at high risk of a stroke to be adequately anticoagulated by 2029

High blood pressure



80%

of the expected number of people with high blood pressure are diagnosed by 2029

80%

of the total number of people already diagnosed with high blood pressure are treated to target as per NICE guidelines by 2029

High cholesterol



75%

of people aged 40 to 74 have received a formal validated CVD risk assessment and cholesterol reading recorded on a primary care data system in the last five years by 2029

45%

of people aged 40 to 74 identified as having a 20% or greater 10-year risk of developing CVD in primary care are treated with statins by 2029

25%

of people with Familial Hypercholesterolaemia (FH) are diagnosed and treated optimally according to the NICE FH Guideline by 2024

The ambitions are underpinned by the need to do more to reduce health inequalities

Reduce the gap significantly in amenable CVD deaths between the most and least deprived areas by 2029