

## REAL STORIES:

### **Ian Clark, 62, North West London**

I was visiting a client in 2012 and suddenly thought I was having a heart attack. The client called 999 for an ambulance. When the ambulance arrived, they took me to see a registrar in A&E who said that I had atrial fibrillation. I was in complete shock because I didn't know what it was. She told me it's an irregular heartbeat, lots of people have it and you will get attacks from time to time.

I felt dreadful. Really, really bad as it felt like I could die at any point. I was living in fear. The ongoing feeling was of complete and utter exhaustion and being totally drained. It's far worse than the worst jetlag. You do not have the energy to do anything at all.

To know that there is something dreadfully wrong with your heart is awful and all you want to do is collapse into a corner.

Three days after being in A&E I went to my GP. The nurse there gave me an ECG and while doing it she ran out and came back with the doctor and they thought I was having a heart attack! It turned out I wasn't but they booked me to see a cardiac specialist at the Harefield Hospital in North West London, who was amazing. She put me on anti-coagulants to treat my condition.

During this whole period, I constantly thought I was going to die and that was massively draining and stressful. I had 37 medical appointments in three months.

Six years on after the diagnosis, the reality is that I am living a normal life. Two years ago, I even went white water rafting in Costa Rica!

### **Bryan, 74, has had AF since age 30 and had a heart attack five years ago. Brighton**

I was swimming when I suddenly couldn't breathe. My wife was right there so she pulled me out of the pool. I went to the Dr and he gave me some pills to take immediately. He said if I get strong pain to call an ambulance. I went home and after a few hours I had a strong pain and they happened to be passing by and collected me within minutes. They put me into the ambulance and they started work on me in the ambulance immediately. Fortunately, the ambulance quickly took me to my local hospital which was also luckily a cardiac specialist department. It was very frightening and scary at the time.

Since then my life has changed dramatically. I am very tired often and this has changed my entire sense of self. I need to lay down and sleep during the day. I used to be very active and travelled a lot but since then I'm not anymore and that has been very depressing for me. I also have to take a battery of pills at key times and they make me very tired as they slow my heart down.

If the AF had been detected when I was younger it's possible I could have gone on to live a very normal life with the correct treatment. That's very annoying as if I had used one of these devices earlier then my life today would be very different.

I would urge everyone to know their pulse and find out whether they have Atrial Fibrillation.

email and not into the app. NHS.net is a secure national email service which enables the safe and secure exchange of sensitive and patient identifiable information within the NHS. A health care professional will add information about the ECG outcome to the patients' local electronic health record. None of your personal information is added to the app or stored on the smart phone.

#### **Will my data be shared on Alivecor Kardia?**

The Alivecor Kardia app is designed for personal or professional use. The patient's health care professional will have created their own Kardia account and will use the 'guest' function to take a trace. This ensures that none of the patient's personal information is ever shared with AliveCor, only an anonymous ECG trace.

All ECG traces taken in the EU using an AliveCor Kardia device are uploaded into the AliveCor servers in Germany. Each ECG has a unique ID and cannot be tied back to the user's account.

All data is encrypted during transfer and at rest with AES encryption.

#### **Does Alivecor Kardia meet all relevant regulatory requirements?**

Alivecor's Kardia Mobile is CE marked and designated as a Class IIa medical device. Furthermore, it is approved by the FDA for medical use in the USA. It meets the requirements of EU data protection law and are HIPAA compliant in the USA. Any user data that leaves the EU is de-identified, complying with EU medical device regulations regarding security and privacy.

#### **How are the benefits calculated?**

Using NHS figures, optimal treatment of high risk patients with atrial fibrillation within three years averts 14,220 strokes and this equates to £241.6 million saved. Using the 6,000 devices distributed by the AHSNs throughout England its estimated that 130,000 cases of AF will be identified – cases that would have gone otherwise undiagnosed. Optimal treatment of those 130,000 new cases of AF would prevent up to 3,650 strokes and save up to £88m per year in health and social care costs

#### **How many patients need to have their pulses checked?**

NHS figures indicate that 1 in 100 people under 65 years old and 1 in 71 people over 65 years have AF so this means to find 25 people you have to test 2,500.

#### **What are the symptoms for AF?**

AF may be present in people with symptoms such as palpitations, dizziness, blackouts and/or breathlessness but can also be found incidentally during routine examination in approximately one third of people who have no symptoms. Some people may have intermittent symptoms, making it difficult to detect and subsequently diagnose the underlying rhythm of AF.

#### **How many are going to each region?**

Helen W to identify

#### **Where will they be used?**

In participating GP practices, pharmacies and NHS community clinics across England.

#### **How many patients do you think will benefit?**

In the next two years around 130,000 cases of AF will be identified – cases that would have otherwise have gone undiagnosed