

# Steve MacAleese

## Remote Cardiac Monitoring

### QARDIO

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Welcome to a  
healthier you



# Atrial fibrillation and stroke

**1.3M**

People are diagnosed with AF in the UK This number is increasing

This exceeds the number of people living in **Birmingham**



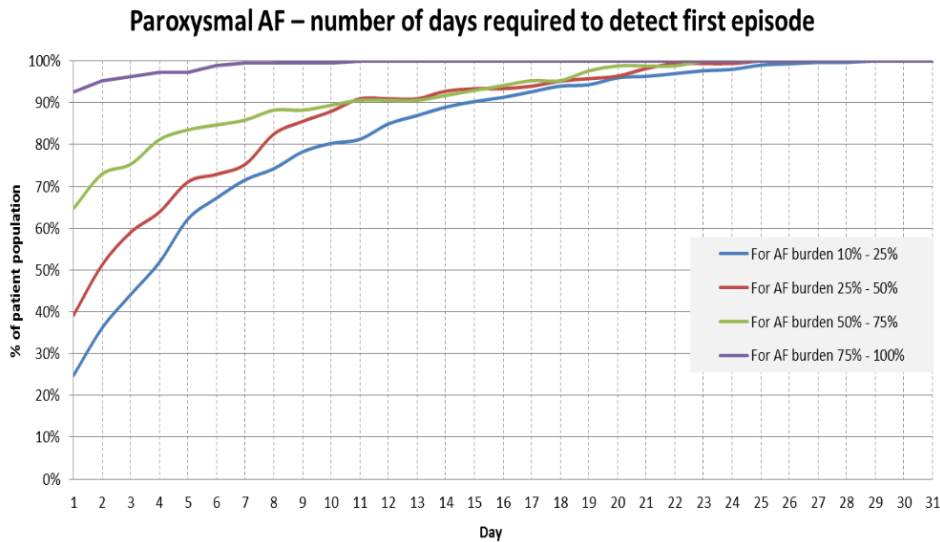
Stroke cost • NHS: **£3 bn** per year • Loss of productivity: **£4 bn** per year

In the UK  
**every 18 min**  
someone suffer from  
an AF-related stroke

This equals to  
**30 000**  
AF-related strokes / year

**80%**  
of AF patients  
are asymptomatic

# 30 days monitoring required for low burden AF patients



Data supplied by Medical Algorithmics (2012) from 6721 recording sessions of up to 31 days duration.

- 30 days' monitoring required for effective AF diagnosis in all but the highest burden AF patients

...BUT...

- Mean times to diagnosis are far lower
  - AF burden 10%-25%: 6.15 days
  - AF burden 25%-50%: 4.83 days
  - AF burden 50%-75%: 3.48 days
  - AF burden 75%-100%: 1.23 days

...SO...

- Telemetry and real-time analysis can achieve the diagnostic yield of 30 day monitoring with a >6x improvement in monitoring time, cost and throughput

# Current continuous monitoring options

Up to 14 Days  
monitoring



**Holter**  
48 Hours  
£ 1500-£2500



**Wearable patches**  
14 Days  
£200-£300 / patient

More than 14 Days with  
remote monitoring



**ILR**  
3 Years  
£1000 / patient



**PPM**  
Continuous  
£2000



**QARDIOCORE**  
Unlimited  
£450

# Revolutionary ECG Monitoring



- ✓ Continuous EKG/ECG
- ✓ Skin temperature
- ✓ Activity tracking
- ✓ Heart rate
- ✓ Heart rate variability
- ✓ Respiratory rate

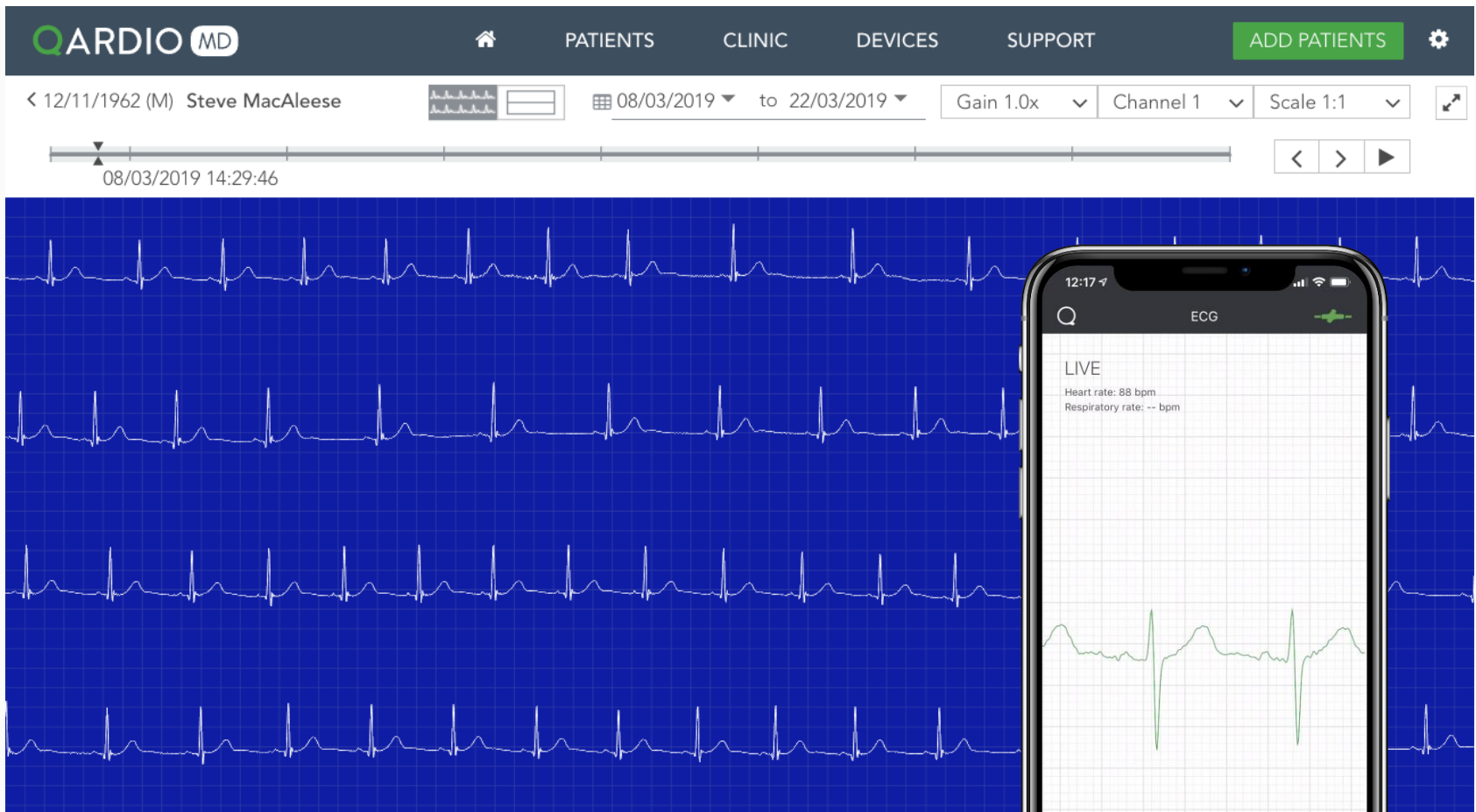
# QardioCore Disruptive technology



Uncomfortable  
Limited monitoring time (48h)  
Low diagnostic yield – 30%

Comfortable  
Unlimited monitoring time  
Max diagnostic yield – 100%

- ✓ Reusable hardware
- ✓ Reduce set up time
- ✓ Unlimited downloadable reports and in cloud analysis
- ✓ No skin preparation and no consumables



# Lead I trace quality equals 12-lead ECG monitor

- QardioCore is clinically validated
- Medically accurate
- Accurately identifies rhythm disorders as a standard 12 lead ECG monitor

Comparison of accuracy and diagnostic validity of a novel non-invasive electrographic monitoring device with a standard 12-lead ECG recording device.

Craig S. Barr, MD Russells Hall Hospital, NHS Foundation Trust United Kingdom

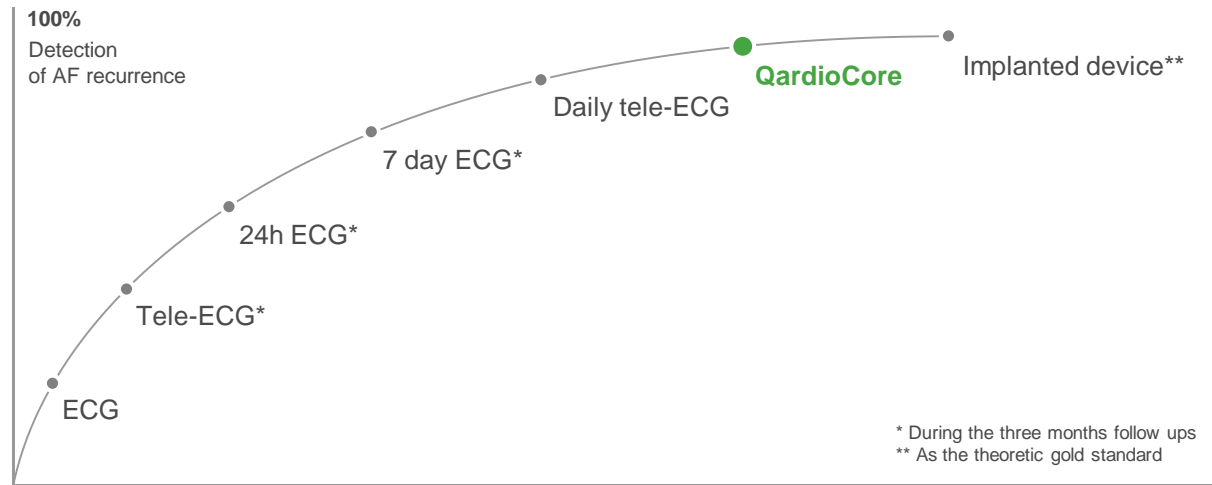
## Side by side comparison of lead I traces

85 participants (median age 65, 67% male, 3% female) wore a 12 lead ECG monitor and QardioCore ECG wireless monitor. ECG traces were compared side by side.





# QardioCore low cost maximum yield



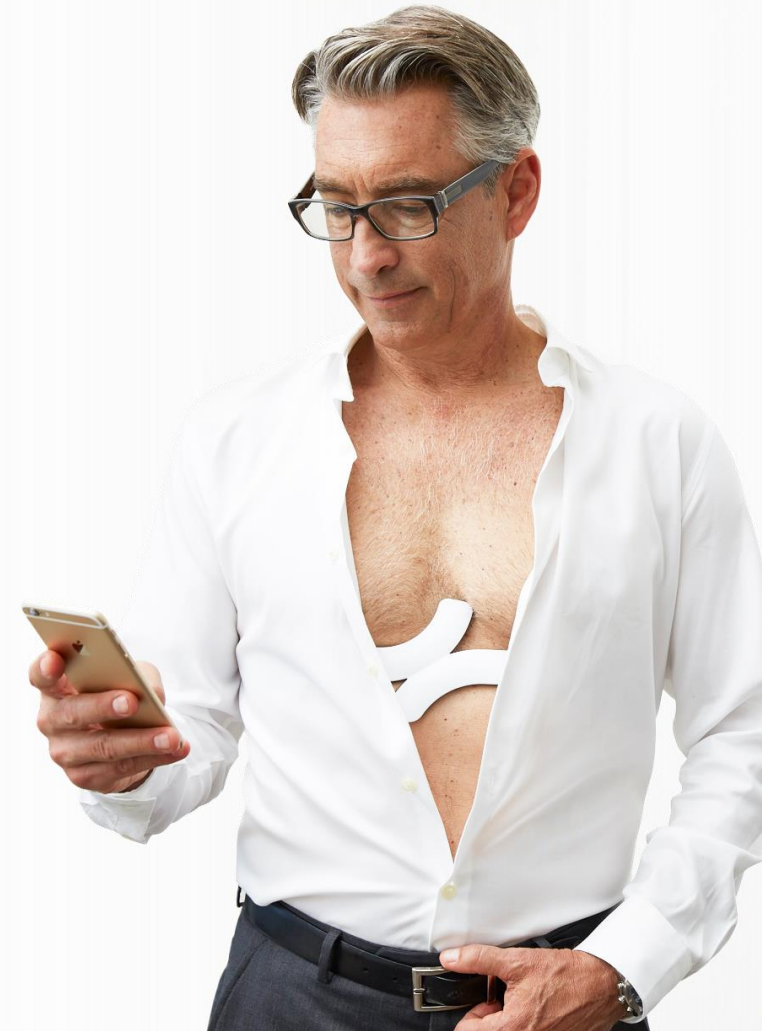
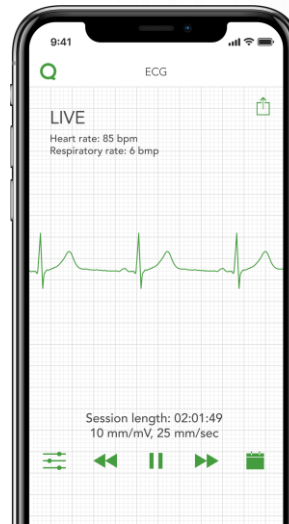
QardioCore highest diagnostic yield of any non-implantable at a 1/3 of the Holter cost

Brignole M, Vardas P, Hoffman E, Huikuri H, Moya A, Ricci R, Sulke N, Wieling W, Auricchio A, Lip GY, Almendral J, Kirchhof P, Aliot E, Gasparini M, Braunschweig F, Botto GL.

Indications for the use of diagnostic implantable and external ECG loop recorders. Europace 2009;11:671–687.

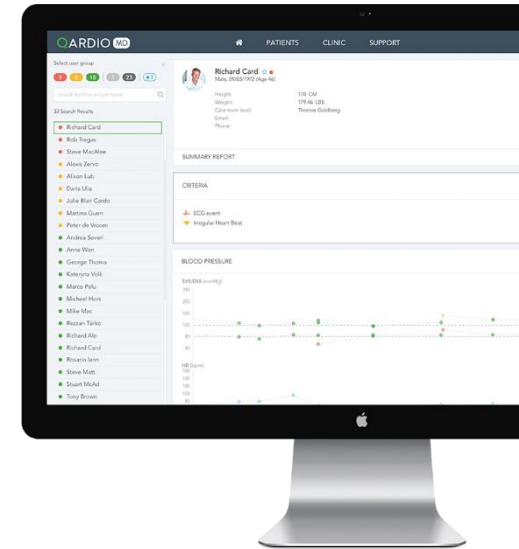
# QardioCore AF detection for stroke prevention

- ✓ Reduce hardware cost
- ✓ No skin prep or consumables
- ✓ Unlimited wear and monitoring time
- ✓ Cloud based solution



# BP and weight remote monitoring also available ...

**QARDIO MD**  
Monitoring Service



Thank you! Any Questions?

Steve MacAleese