

Further investigation is required to understand the impact of race on AF prevalence and outcomes.

Conflict of Interest Nil

43 A PATIENT CENTRED EVALUATION OF INNOVATIVE AMBULATORY ECG MONITORING

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Introduction Ambulatory ECG Holter monitoring has historically been the conventional method through which symptom and arrhythmia are correlated for diagnostic purposes. Holter recorders (e.g. SpaceLabs) have traditionally comprised a 3-lead ECG with attached wires to a wearable console. The innovation of device components has enabled smaller, wearable technology to be a reality and this has been developed into several novel, single-use devices. The older systems have multiple disadvantages including patients failing to return them on time, which in turn can reduce available units for other patients. The units are expensive and additionally, the quality of the ECG tracings is often poor. The latest technologies on the market have designed a single channel patch designed for comfort, duration of wear, non-impact to daily living and most importantly accuracy of recordings. We formulated this study to evaluate the patient's perspective on a sample of these devices.

Method 250 patients were randomly selected from the Barts Heart Centre outpatient cardiology clinics between October 2018 and February 2019. No exclusions were made with regards to age, gender or reason for referral and written consent was given by each patient. Patients were selected to receive patches from either Bardy,

Technomed and Zio, in addition to Spacelabs (our control group). Technomed, Zio and Spacelabs were fitted to 50 patients, and Bardy were fitted to 100 where 50 of these tapes were analysed at Barts using the Bardy software, and full disclosure was reviewed on all tapes analysed by the selected companies to ensure quality control. Patients were asked to complete a feedback form. The feedback forms included 9 questions (table 1.1) with the opportunity to give qualitative feedback in a comments section. Statistical analysis was performed using a one-way ANOVA with Bonferroni correction.

Results We received feedback from 80.8% of patients, a total of 202. (Zio 38, Bardy 76, Technomed 38 and Spacelabs 50). The main focus of the feedback was patient experience which can be visualised by the mean and Standard error results from questions 3, 4, 7 and 9 shown in graph 1.1. Results demonstrated significant differences between all four devices when comparing the size and shape, comfort, practicality and returning method, $P \leq 0.0001$.

On Bonferroni correction significant differences were seen specifically between Spacelabs and the three new patches, with the most noticeable difference between Spacelabs and Bardy and Spacelabs and Technomed (Spacelabs Vs Technomed Mean 4.3 ± 1.34 and 5.7 ± 0.8 , $P \leq 0.0001$ and Spacelabs Vs Bardy Mean 4.3 ± 1.34 and 5.5 ± 0.95 , $P \leq 0.0001$). There were no significant differences between Zio, Bardy and Technomed.

Conclusion Our data shows patients have a preference for miniaturised ambulatory ECG monitoring compared with the conventional Holter monitor which is used in most UK hospitals. Further analysis incorporating an evaluation of data accuracy in addition to a cost-effective analysis would be required in order to make the case for switching to new patch technology in the future.

Conflict of Interest NA

Abstract 43 Table 1

		Please circle from poor (1) to Great (6) or N/A						
		1	2	3	4	5	6	N/A
1	Ease of application (time taken for appointment)							
2	Location of application (discrete, comfortable)							
3	Size and shape of device (too big, sticks out)							
4	Comfort of device (heavy, painful, awkward, catches on clothing etc)							
5	Adhesiveness (Did it stay on for intended duration)							
6	Ease of use (pressing button/diary)							
7	Practicality (could you work, exercise etc)							
8	Removal (did it hurt, cause any reactions)							
9	Returning method (post, in person etc)							