Results Female master athletes demonstrated significantly increased absolute and indexed right ventricular dimensions compared to sedentary controls, with the greatest increases in basal and longitudinal measurements. Athletes also demonstrated a significantly larger right atrial area. Athletes had increased longitudinal RV systolic function based on TAPSE. There was no significant difference in RV fractional area change between athletes and controls. None of the study group revealed regional wall motional abnormalities or dyskinetic RV segments (table 2).
Conclusions Female master athletes continue to demonstrate echocardiographic features of cardiac adaptation into their later years. Chronic endurance exercise is associated with increased right heart size, but no obvious evidence features of arrhythmogenic right ventricular cardiomyopathy. Larger studies including cardiac magnetic resonance scanning for fibrosis and cardiac monitoring are required to identify potential subclinical features of adverse RV remodelling.
Conflict of Interest None

165 LOGISTICAL DEMAND OF RUNNING A HIGH-VOLUME MRI SERVICE FOR PATIENTS WITH CARDIAC IMPLANTABLE ELECTRONIC DEVICES: FINDINGS FROM A 'ONE-STOP' SERVICE MODEL

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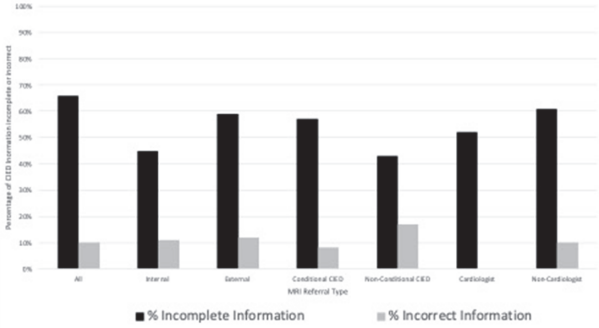
Introduction Patients with cardiac implantable electronic devices (CIEDs) should have access to Magnetic Resonance Imaging (MRI) when needed. Patients are still less likely to be referred and hospitals may not provide a service. A major barrier is reducing the logistical demand required at scale for a safe service. We aimed to quantify the logistical requirements of a high-volume Cardiac Device-MRI service.
Methods A single centre retrospective audit of a high-volume Cardiac Device-MRI service in a tertiary cardiac imaging unit in the UK. Six months of consecutive referrals from September 2020 were reviewed for patient and CIED details and barriers met. Referrals were sorted by source, indication, MR-Conditional labelling and referrer specialty.
Results 116 MRIs (48% cardiac, 52% non-cardiac) were performed on CIED patients in six months (table 1). 53% were external referrals, 11% inpatient and 25% were suspected malignancy. Referrers were 47% cardiologists and 53% other specialty. Time from referral to scan was 15 days (interquartile range, IQR: 8 – 32). There were no complications.70% of referrals contained complete CIED details and 34% identified the CIED MR labelling. 17% were referred with incorrect MR-Conditional labelling and 8% with incorrect non-MR Conditional labelling. 7 additional days were required to obtain complete CIED details, 10% had delays over 2 weeks (0-145 days). A cardiac physiology department was contacted for 54%, involving 2 departments in 27%. For cancer referrals, obtaining correct details took 1 day longer compared to other referrals and required 2 extra emails to maintain provision within the national time to treatment targets of 62 days. Missing data was similarly present in referrals from Cardiologists and non-Cardiologists (59% versus 61% respectively). The non-Cardiologists recorded more incorrect CIED details (8% vs 0%) (figure 1).



Abstract 165 Figure 1

Abstract 165 Table 1

	All MRI Scans Performed (%)	Internal Referral (%)	In-patient MRI (%)	Cardiac MRI (%)
PPM	55	52	56	60
ICD	23	32	30	32
CRT – D	12	16	14	8
Conditional CIED	52	46	60	63
Referred by Cardiologist	47	66	33	100

External referrals required 17 days (11 – 42), compared to 14 (6 -35) days for internal referrals to obtain CIED information. Missing data was similarly present in external and internal referrals (67% versus 64%), and 35% required 3 or more repeat discussions with referrers after initial referral. Patients with non-MR Conditional CIED took 14 days longer to obtain complete referral details than MR-Conditional CIEDs. Even when referrers were aware of non-MR Conditional labelling, 41% required further discussion between patient and referrer regarding risks and benefits of MRI scanning.
Conclusions Both cardiology and non-cardiology referrers of patients with cardiac implantable electronic devices to MRI incorrectly classify MR-Conditional labelling. There is a large logistical burden to maintaining an MRI service for patients with CIEDs and may explain why some patients are not referred for MRI when required. An online referrals platform is under development to streamline this process, and institutional registration is available at www.mrimypacemaker.com.
Conflict of Interest Nil

166 CT CORONARY ANGIOGRAPHY VERSUS CT FRACTIONAL FLOW RESERVE: A SINGLE CENTRE EXPERIENCE

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Background Computerised tomography coronary angiography and fractional flow reserve (CTCA and CT-FFR) are non-invasive diagnostic tools for the detection of flow limiting coronary artery stenoses. Although their negative predictive values are well established, there is a concern that the high sensitivity of these tests may lead to overestimation of coronary artery disease (CAD) and unnecessary invasive coronary angiography (ICA). We compared the positive predictive value (PPV) of