Results Out of the 60 participants approached, 45 expressed interest. Among the remaining 15, 15 participants completed the dietary assessment, and 21 underwent grip strength and QoL evaluation. The average age of the group was 70.4±6.8 years. Mean EQIndex was significantly greater in the study participants when compared to age- and sex-matched controls (0.902±0.131 vs. 0.767±0.026, p<0.001). Analysis revealed no significant difference between the participants’ current protein intake and the calculated recommended values based on bodyweight. However, the mean grip strength of the participants was significantly lower than the age- and sex-matched 50th centile values.

Conclusion Despite high perceived QoL, strength of the participants was below corresponding UK values. Future studies are needed to confirm this finding in a larger population, however additional efforts should focus on incorporating resistance training to enhance muscle function and support improved strength in this population attending exercise programmes.

26 PREOPERATIVE OPTIMISATION OF PATIENTS AWAITING LUNG RESECTION IN CARDIOTHORACIC SURGERY: UNLOCK THE POTENTIAL OF CARDIAC REHABILITATION AND DIVERSIFY
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Background Patients undergoing lung resection often receive care from within a Cardiotoracic Speciality. Cardiac Rehabilitation Services typically receive referrals for patients pre or post cardiac surgery but do not routinely refer patients undergoing thoracic surgery. Patients undergoing lung resection often present with poor baseline physical activity and high symptom burden. It was hypothesised that a 2-4 week preoperative rehabilitation programme consisting of high-intensity interval training (HIIT) and inspiratory muscle training (IMT) could improve preoperative pulmonary function to optimise patients with operable lung cancer awaiting surgical lung resection.

Aim To investigate the feasibility and efficacy of utilising an existing Cardiac Rehabilitation Service to deliver preoperative rehabilitation in patients awaiting surgical lung resection.

Methods 142 patients entered the preoperative face-to-face rehabilitation programme. Pre and post intervention pulmonary function tests were measured alongside patient uptake, programme completion, HIIT attainment and patient or clinician reported adverse events in a 2 year retrospective service evaluation.

Results Preoperative lung function measures improved significantly pre and post rehabilitation; PiMAX mean increase 1.144cmH20 (p<0.001, 95% CI 0.558-1.730cmH20), FEV1, mean increase 0.064 litres (p<0.001, 95% CI 0.032-0.096 litres),% predicted FEV1 mean increase 2.79% (p<0.001, 95% CI 1.599-3.978%). A poorer preoperative baseline physical activity status was associated with a significantly increased risk of mortality at 12-months post-surgery HR 1.92 (p=0.001, 95% CI 1.33-2.77). No serious adverse events occurred during preoperative rehabilitation with 100% uptake and 73% completion rates. 43% of patients were unable to achieve HIIT targets in the programme.

Conclusion A 2-4 week combined HIIT and IMT preoperative programme can improve pulmonary function for patients awaiting surgical lung resection. Existing Cardiac Rehabilitation programmes could be a viable referral pathway for lung cancer patients to access rehabilitation programmes in the future. Further research is needed to establish the cost effectiveness of these interventions prior to implementation.
Conclusion Despite recommendations, not a single PAD patient in this cohort was offered CR, with none achieving objectively measured MVPA participation recommendations. A large proportion presented with unhealthy lifestyles in terms of tobacco exposure, sedentary time and BMI; all adversely impacting major CVD risk factors. Whilst most were prescribed antiplatelet medications, yet a large cohort were not optimally managed for blood pressure and lipids. These findings support a call to action for CR provision in this patient population at very high CVD risk. CR provides an essential intervention in addressing all aspects of lifestyle and risk factor management to reduce recurrent cardiovascular events.

Background Cardiac Rehabilitation (CR) can reduce cardiovascular mortality and improve health related quality of life. In the United Kingdom patient uptake of CR remains low (52%), falling well short of the target in the 2019 NHS Long-term plan (85%). Mobile health (mHealth) technologies, offering biometric data to patients and healthcare professionals, may bridge the gap between patient discharge from hospital and in-person supervised exercise and physical activity (PA) advice. Early intervention could lead to improved CR uptake and enable patients to engage in regular long-term physically active lifestyles quicker.

Aim This randomised controlled trial (RCT) will evaluate the feasibility of mHealth technology when incorporated into a structured home-based walking intervention, in people with recent myocardial infarction.

Methods This is a feasibility, assessor blinded, parallel group RCT. Participants will be allocated to either CR standard care (control group) or CR standard care + mHealth supported exercise counselling (mHealth group) (figure 1). The trial was approved in the UK by the Northwest – Greater Manchester East Research Ethics Committee (22/NW/0301) and is registered on ClinicalTrials.gov: NCT05774587. Feasibility outcomes include; the number of patients approached, screened and eligible; the percentage of patients that decline CR (including reasons), agree to CR and consent to being part of the study; the percentage of patients that enroll in standard CR and reasons for drop out; and the percentage of participants that complete clinical, physical and psychosocial outcomes to identify a suitable primary outcome for a future definitive trial. Device derived data will be downloaded using manufacturers’ software and processed in R (R Core Team, Vienna, Austria) using the open-source GGIR software package (http://cran.r-project.org). Qualitative data will be thematically analyzed and coded using NVivo V.12TM software. Strengths and limitations The MOTIVATE-CR+ intervention may increase the uptake of CR by supporting patients to become physically active between discharge and the start of supervised CR and allowing patients that recently experienced a myocardial infarction to co-design a personalized and progressive walking programme with the support of a clinical exercise physiologist. The intervention also enables participants to communicate regularly with a clinical exercise physiologist and gain feedback on the exercise sessions they complete.

Abstract 28 Figure 1 Schematic of the experimental design. Abbreviations: CR; cardiac rehabilitation, n; number, CS; counselling session