patients who did not undergo angiography with troponin levels above the ULN (figure 1D). On cox regression analysis, following adjustment for demographic and clinical factors, including troponin level, angiography was associated with a 39% reduction in mortality during follow-up (hazard ratio 0.61, 95% CI 0.42–0.89, \( p = 0.01 \)).

**Conclusion** Above the ULN, higher troponin levels were associated with higher mortality. Within the normal range, this was not the case. While angiography was not common in patients presenting with AF, the likelihood of angiography increased at higher troponin levels. In cases where angiography was not performed, there was a direct relationship between troponin levels above the ULN and mortality; this was not evident where angiography was performed. Following adjustment for troponin level, angiography was associated with a significant reduction in mortality. The risk of mortality in patients presenting with AF may be mediated by CAD. Clinical trials are warranted to clarify the investigation and treatment of CAD in patients presenting with AF with elevated troponin levels.

**Conflict of Interest** No conflicts of interest
with atrial fibrillation (AF); however, this has not yet been widely adopted within the National Health Service (NHS). We assessed the feasibility of utilising an established NHS cardiac rehabilitation programme in the management of AF, and examined the effects of this intervention on exercise capacity, weight, and psychological health.

Methods Patients with AF were invited to participate in an established 6-week cardiac rehabilitation programme, composed of physical activity and education sessions, organised through Sheffield Teaching Hospitals NHS Foundation Trust, between April 2016 to July 2018. At the start of the programme, patients were weighed and measured, performed the 6-minute walk test (6MWT), completed the Generalised Anxiety Disorder Questionnaire (GAD-7; scoring 0–21, higher scores indicating higher anxiety levels), and the Patient Health Questionnaire (PHQ-9; scoring 0–27, higher scores indicating higher depression levels). Measurements were repeated on completion. Analyses were performed using IBM SPSS (24). Continuous variables expressed as mean ± SEM, and normality of distribution assessed using the Shapiro-Wilk test. Paired continuous data were compared with paired t test or Wilcoxon signed rank test, and unpaired continuous data with independent sample t test or Mann-Whitney U tests, as appropriate. Tests were 2-tailed. P<0.05 was considered statistically significant.

Results Seventy-seven patients were invited to join the programme. Of these, 22 patients (28.5%) declined participation prior to initial assessment, whilst 22 (28.5%) accepted and attended the initial assessment, but subsequently failed to attend the programme. In total, 33 patients (43%) completed the entire programme (63.9 ± 1.7 years, 58% female, BMI 33.9 ± 1.3 kg/m², mean left atrial size 5.1 ± 0.2 cm). Pertinent demographics are summarised in table 1. On completion, enrolled patients covered longer distances during the 6MWT (389.5 vs. 447.9 metres, p<0.0001; a 15% improvement), had lower GAD-7 scores (4.12 vs 2.65, p=0.035), and lower PHQ-9 scores (5.0 vs. 3.42, p=0.04). Patient weight was unchanged on completing cardiac rehabilitation (102.1 kg vs. 101.6 kg, p=0.49) (Image 1 & 2). Compared to patients that completed the entire programme, those who attended the initial assessment but failed to complete the programme (n=22) had significantly higher weight and BMI (respectively, 115.6 kg vs. 102.1 kg, p=0.047; 37.9 ± 2.0 vs. 33.9 ± 1.5 kg/m², p=0.047), covered a shorter distance during the 6MWT (318.8m vs. 389.5m, p<0.01), had higher PHQ-9 scores (9.87 vs. 5.0, p=0.037), and higher GAD-7 scores (7.53 vs. 4.12, p=0.047).

Conclusion Enrolling patients with AF into an established NHS cardiac rehabilitation programme is feasible, with nearly half of those invited completing the programme. This resulted in improved 6-minute walk test, and reduced anxiety and depression levels, in the short term. Severe obesity, high anxiety and depression levels, and lower initial exercise capacity
may be barriers to enrolling patients with AF into exercise-based cardiac rehabilitation; a holistic approach that targets these factors may result in improved clinical outcomes.

Conflict of Interest None to declare.