Aim To implement a pathway change to reduce waiting times for MI/PCI patients (discharge to 1st assessment); in order to meet KPI NACR standard 6.

Method A service improvement project was undertaken to implement and review current waiting times. The clinical team highlighted barriers and established a coordinated response to the new pathway. The CR team transitioned from the old pathway (post discharge call (1-5 days) and 1st assessment 2-3 weeks later), to completing the 1st assessment (1-5 days post discharge) and being invited to complete their functional capacity test at an additional date (two part assessment). The new pathway was implemented 1st April 2023.

Results Data analysed 1-month prior and 3-month post pathway implementation March–June 2023, for comparison the same time frame for the previous year was analysed (Figure 1). A total of 437 patients were analysed in these time periods. A reduction of median 20 days post pathway implementation was achieved.

Conclusion Service evaluation has allowed us to implement and measure the impact of a pathway change for assessment wait time for patient’s post-MI/PCI. The new pathway has been effective and impacted wait times for patients receiving 1st assessment at CR at UHL, aligning with BACPR core standards 2023 stating; upon receipt of referral those eligible shall be contacted within 5 working days, also facilitating NACR accreditation.

Background Resistance training (RT) for improving muscular strength is a fundamental part of the exercise component in Cardiac Rehabilitation (CR) protocols for post-open-heart surgeries. Although very early postoperative RT is safe and feasible, many delays start until after four weeks. It is evidenced that such delays can significantly affect the efficacy of CR outcomes.

Aim For patients receiving valve replacement surgery, this study aimed to investigate the effect of very early resistance training (2 days postoperatively) on functional capacity, either when combined with aerobic training or compared to aerobic training alone. Additional clinical measures included the effects on the Electrocardiograph (ECG) P-R interval and resting heart rate (RHR).

Methods 40 male valve replacement surgery patients (20-30 years) were randomly allocated into two equal groups: Group...
Abstracts

A received aerobic and very early resistance training (6 exercises targeting upper limbs, lower limbs, neck and back done till volitional fatigue with 9-12 repetitions/exercise) three sessions per week for one month and Group B received aerobic training only for the same frequency and time. The primary outcome was functional capacity, assessed using a six-minute walk test (6MWT). Secondary outcomes were P-R interval and RHR, both assessed using a resting ECG.

Results Functional capacity (118.50 ± 6.75m vs 41.75 ± 6.75m for groups A and B respectively) and P-R intervals (30.05 ± 3.21ms vs 11.65 ± 3.21ms for groups A and B respectively) showed significant improvements in both groups (p=0.001 and 0.02, respectively) with greater changes in group A. However, there were no between-groups improvements in RHR (p=0.75).

Conclusion Very early resistance training combined with aerobic is generally safe and effective for patients after valve replacement surgery, however, potential gender variations and a larger sample-sized study should be conducted in future research. Also, different research designs with RT as a standalone intervention might still be needed.

18 BREAKING BARRIERS TO HEAL HEARTS: ROLE OF PROTECTED CHARACTERISTICS IN IDENTIFYING HEALTH INEQUALITIES IN CARDIAC REHABILITATION

1J McAllister*, 1SJ Singh, 1,2CL awson. 1University of Leicester, UK; 2University Hospitals Leicester NHS Trust, UK

10.1136/heartjnl-2023-BACPR.16

Background There is growing recognition of the importance of addressing health inequalities and providing equitable healthcare. A crucial input is recording of the 9 protected characteristics (PC’s), introduced by the Equality Act 2010. PC data can identify diversities in cardiac populations, highlighting those under-represented and at higher risk of heart disease, enabling cardiac rehabilitation (CR) programmes to make tailored adjustments to service provision and monitor impact. Historically, recording of PC’s lacks accuracy and completeness, resulting in poor quality data and misleading outlooks on health inequalities.

Aim Explore the recording and completeness of PC’s in CR.

Methods Data from National Audit of Cardiac Rehabilitation (NACR) was used to review PC’s, Jan 2014 - Dec 2022, inclusive of all initiating events.

Results Sample size n= 865,207 (28.4% female, median age 68 years). NACR records four out of nine PC’s: age, gender, ethnic group and marital status. Evidence of data incompleteness within three categories, with data missing, not known or not stated. Gender (1.9% missing in whole cohort) saw a decrease in missing data since 2014, Ethnic group and marital status (24.6% and 38.7% missing respectively) saw no reduction in the volume of missing data over the past 8 years. All three of these PC groups have seen an increase in missing data over the past 3 years since 2019/2020 (table 1).

Conclusion The absence of 5 PC categories, missing PC data and lack of response options provides an unclear picture of health inequalities in CR. Audits must update PC categories and response options regularly, and clinicians must ensure complete documentation to provide an accurate, useful data source.

19 BREAKING BARRIERS TO HEAL HEARTS: DIFFERENCES IN BASELINE CHARACTERISTICS BETWEEN WHITE AND SOUTH ASIAN POPULATIONS WHO STARTED CORE CARDIAC REHABILITATION

1J McAllister*, 1SJ Singh, 1,2C Lawson. 1University of Leicester, UK; 2Cardiac Rehabilitation, University Hospitals Leicester NHS Trust, Glenfield Hospital, UK

10.1136/heartjnl-2023-BACPR.17

Background South Asian individuals are at higher of risk heart disease compared to White British, however are under-represented in cardiac rehabilitation (CR) despite its proven benefits. Reduced attendance and completion rates of CR are seen in eligible South Asian populations, increasing risk of recurrent cardiac events. Comparing South Asian (Indian, Pakistani, Bangladeshi, Other Asian) and White (British, Irish, Other White) populations will provide an overview of socio-demographics, to better inform strategic approaches to increasing uptake and completion.

Aim Compare characteristics of South Asian and White populations who started core CR in UK.

Methods Statistical analysis (via StataBE v17) on National Audit of Cardiac Rehabilitation (NACR) data was performed to compare characteristics of South Asian and White populations who started core CR between Jan 2014 – Jan 2023. Chi-squared tests for categorical data, and Wilcoxon rank-sum for continuous variables were used to check if observed frequencies matched expected outcomes. Initiating events were: myocardial infarction (MI), percutaneous coronary intervention (PCI/PPCI) and coronary artery bypass (CABG).

Results Sample size n= 269,258 (White population: female, 25.7%, median age 66 years, South Asian population: female 19.9% and 60 years, table 1). Results revealed statistically significant (p<0.001) differences in: age, sex, index of multiple deprivation, marital status, employment status and number of co-morbidities. South Asian population were more likely to start CR than White population (55.5% and 54.7% respectively p<0.001) however are less likely to complete CR (71% and 77% respectively, p<0.001).

Conclusion NACR data identifies significant differences between populations in multiple socio-demographics including;

Abstract 18 Table 1 Missing data for protected characteristics recorded in NACR since January 2014

<table>
<thead>
<tr>
<th>Protected Characteristic</th>
<th>2019/2020</th>
<th>2020/2021</th>
<th>2021/2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing Data (%)</td>
<td>n=865,207</td>
<td>n=105,207</td>
<td>n=84,490</td>
</tr>
<tr>
<td>Age (mandatory field)</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gender</td>
<td>16,808 (1.9)</td>
<td>1237 (1.2)</td>
<td>1345 (1.6)</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>213,129 (24.6)</td>
<td>23,614 (22.5)</td>
<td>21,723 (25.7)</td>
</tr>
<tr>
<td>Marital Status</td>
<td>335,208 (38.7)</td>
<td>38,739 (36.8)</td>
<td>33,780 (40.0)</td>
</tr>
<tr>
<td>Disability</td>
<td>Not recorded</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gender Reassignment</td>
<td>Not recorded</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pregnancy/Maternity</td>
<td>Not recorded</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Religion/Belief</td>
<td>Not recorded</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td>Not recorded</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Heart 2023:109(Suppl 5):A1–A15

A10

Heart first published as 10.1136/heartjnl-2023-BACPR.15 on 6 October 2023. Downloaded from http://heart.bmj.com/ on October 18, 2023 by guest. Protected by copyright.