By the end of 12 months, 22% (495/2,220) people were rechallenged and (re)initiated on a statin with 2% (51/2,220) receiving a non-statin lipid lowering therapy. Personalise care adjustments were coded for 10% (220/2,220), 5% (110/2,220) declined treatment and 22% (480/2,220) removed from the CVD registers or practice list.
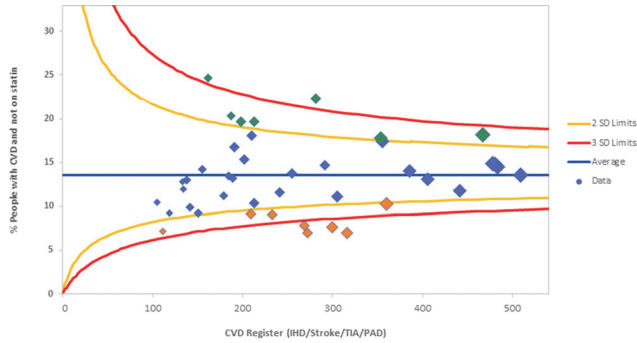

Figure 2. Percentage of people with CVD and not on a statin at 12 months of clinical pathway initiative for 42 practices. The has been reduced from 20% range 9.5% - 31.4%) to 13.4% (range 7% to 24.7%).

Abstract 200 Figure 2 Percentage of people with CVD and not on a statin at 12 months of clinical pathway initiative for 42 practices. The has been reduced from 20% range 9.5% - 31.4%) to 13.4% (range 7% to 24.7%).

Conclusion A new CPI has established a new service model with a collaborative patient centred approach of secondary care specialist and primary care workforce working together in improving lipid lowering therapy by 24% for people living with CVD and not on a statin. This will prevent 49 CVD events in Redbridge in the next five years. Extrapolating these results for NEL would prevent 458 CVD events over a 5-year period, addressing the NHS long term plan ambition for reducing 150,00 premature CVD deaths by 2029.

Conflict of Interest None

| 201 | **EXPLORING THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY AND COVID-19 INFECTION IN A YOUNG, NON-HOSPITALIZED COHORT IN THE UNITED KINGDOM** |

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Background Regular moderate-intensity exercise offers numerous health benefits. However, little is known about the prevalence of COVID-19 infection, illness duration and its association with cumulative physical activity among non-hospitalized young individuals.

Aim We aimed to investigate the risk of COVID-19, and the relationship between illness duration and physical activity in a non-hospitalized cohort of young individuals in the United Kingdom.

Methods We evaluated individuals aged 14-35 who attended a cardiac screening organized by the charity Cardiac Risk in the Young (CRY) between July 2021 and November 2021. Participants completed a novel COVID-19 questionnaire that collected information on demographics, infection status, symptoms, and illness duration (<1 week, 1-4 weeks, 4-12 weeks and >12 weeks). Individuals were classified as recreational athletes, elite athletes, or sedentary individuals. In

Abstract 201 Table 1 Demographics of cohort

| Variable	Category/Summary	Negative	Positive	Overall	OR	P-value	95%CI low	95%CI high
		3043(79.7%)	777(20.3%)	3820				
Age	Mean/SD	21.19/6.79	20.93/6.07	21.12/6.64	0.980	0.258	0.945	1.015
	Median (Q1-Q3)	18(15, 27)	19(16, 25)	18(15, 27)				
	Min-Max	14-36	14-36	14-36				
BMI	Mean/SD	23.34/4.89	24.12/4.90	23.48/4.83	1.068	**<.001**	1.035	1.103
	Median (Q1-Q3)	22.44(19.9, 25.9)	23.39(20.5, 26.8)	22.60(20.06, 26.03)				
	Min-Max	13.36-55.25	14.40-45.90	13.36-55.25				
Sex	Women	1107(36.3%)	250(32.4%)	1357 (35.5%)	1			
	Men	1935 (63.5%)	521(67.6%)	2456 (64.3%)	1.202	**0.032**	1.016	1.421
Ethnicity	White	2789(91.65%)	707(90.99%)	3496(91.5%)				
	Asian	89(2.92%)	23(2.96%)	112 (2.93%)				
	Black	53(1.74%)	11(1.42%)	64 (1.68%)				
	Other	112(3.68%)	36(4.63%)	148 (3.87%)				
	BAME vs. White				1.087	0.555	0.824	1.434
Group type	Sedentary	495(16.24%)	112(14.53%)	607 (15.89%)	1			
	Recreational	1331(43.67%)	302(39.17%)	1633 (42.76%)	0.772	**0.003**	0.650	0.916
	Elite	1222(40.09%)	357(46.30%)	1579 (41.35%)	0.762	**0.024**	0.602	0.965
MET Category	A (0 METs)	440 (14.44%)	105(13.62%)	545(14.27%)	1			
	B (<500 MET-min/week)	91(2.99%)	12(1.56%)	103 (2.70%)	0.554	0.070	0.292	1.049
	C (500-999 MET-min/week)	128(4.20%)	25(3.24%)	153 (4.01%)	0.820	0.417	0.508	1.324
	D (1000-1499 MET-min/week)	149(4.89%)	37(4.80%)	186 (4.87%)	1.078	0.722	0.712	1.633
	E (>1500MET-min/week)	2240(73.49%)	592 (76.78%)	2832 (74.16%)	1.122	0.330	0.890	1.414
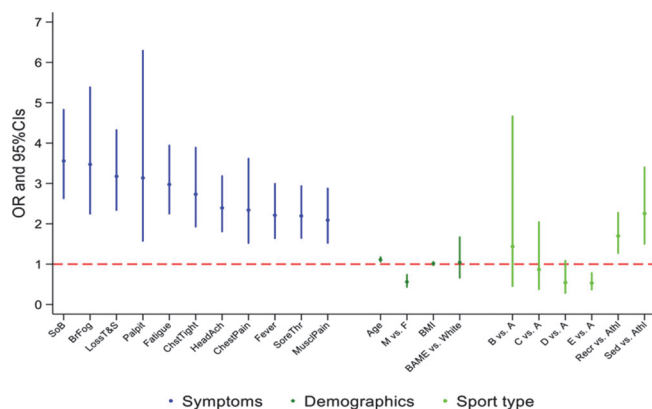
Figure 1 The effect of the available variables on the duration of the disease in COVID-19 positive participants.

*A,0 (sedentary); B, <500 METS-min/week; C, 500-999 METS-min/week; D, 1000-1499 METS-min/week; and E, ≥1500 METS-min/week. Athl: elite athletes; Recr: recreational athletes; Sed: sedentary participants

Abstract 201 Figure 1 The effect of the available variables on the duration of the disease in COVID-19 positive participants
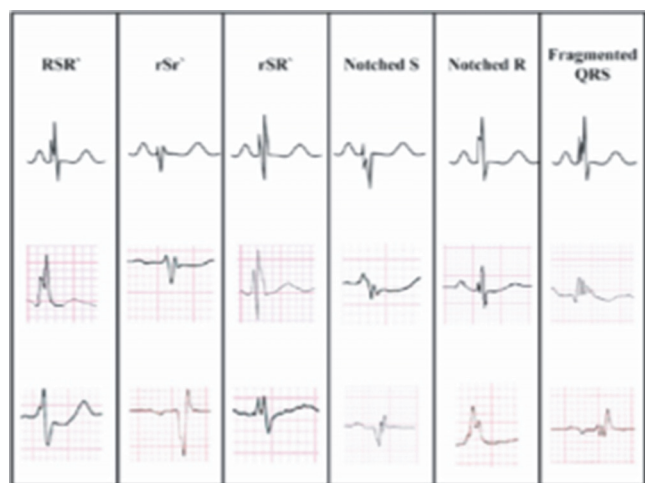
Abstract 202 Figure 1 Patterns of QRS fragmentation adapted from Das et al.

addition, measures of physical activity (PA) were calculated using metabolic equivalents (METS) per minute per week, based on PA type, frequency, and intensity. This facilitated classification into five categories: A,0 (sedentary); B, <500 METS-min/week; C, 500-999 METS-min/week; D, 1000-1499 METS-min/week; and E, ≥1500 METS-min/week. Logistic and ordered logistic regressions were employed to understand the effects of all available variables on the risk of infection and illness duration.

Results 3820 individuals were evaluated (mean age, 21 ± 7 years; 64% male, 91% white) and 771 (20%) tested positive for COVID-19 at least once (table 1 and 2). The risk of infection was higher in men (OR=1.20; 95%CI:1.02-1.42; p<0.032). Age (p=0.258), ethnicity (p=0.555), MET category (p>0.05), vaccination (p=0.168), and smoking status (p=0.597) did not exhibit evidence of associations with risk of COVID-19 infection. 81 (11%) individuals suffered from long-COVID. The presence of dyspnoea (OR=3.56, 95% CI 2.61-4.8), chest pain (OR=2.34, 95% CI 1.51-3.63), chest

tightness (OR=2.73, 95% CI 1.91-3.90), palpitations (OR=3.13, 95% CI 1.56-6.34), fatigue (OR=2.97, 95% CI 2.24-3.96) and fever (OR=2.21, 95% CI 1.62-3.00) were associated with considerably higher chance of longer duration of illness. Men had a shorter illness compared to women (OR=0.56; 95% CI:0.41-0.75; p<0.001). Individuals who engaged in intense exercise (≥1500 METS-min/week) were approximately 50% less likely to have a severe form of the disease than sedentary individuals (OR=0.53; 95% CI: 0.35-0.79; p=0.002) (figure 1).

Conclusions Our study found that regular moderate to high intensity exercise may have a protective effect against a prolonged illness duration among young, non-hospitalized individuals. Furthermore, men were at higher risk of infection, while women were more likely to experience a longer illness duration. The presence of cardiorespiratory symptoms was associated with a significantly higher illness burden. Our findings underscore the need for continued research into identifying risk factors and effective interventions to mitigate the impact of the pandemic.

Abstract 201 Table 2 The effects of demographics, physical activity, and symptoms on disease duration

	OR	p-value	95%CI low	95%CI high
Men vs. Women	0.561	**<0.001**	0.418	0.753
MET categories				
CATEGORY B vs. A	1.436	0.549	0.441	4.679
CATEGORY C vs. A	0.865	0.743	0.364	2.056
CATEGORY D vs. A	0.544	0.089	0.269	1.098
CATEGORY E vs. A	0.532	**0.002**	0.356	0.795
Recreational vs. Elite athlete	1.698	**<0.001**	1.260	2.288
Sedentary vs. Elite athlete	2.255	**<0.001**	1.491	3.411
Sedentary vs. recreational	1.328	0.185	.873	2.019
Shortness of breath (YES vs. NO)	3.558	**<0.001**	2.614	4.842
Chest pain (YES vs. NO)	2.341	**<0.001**	1.509	3.630
Chest tightness (YES vs. NO)	2.733	**<0.001**	1.914	3.902
Palpitations (YES vs. NO)	3.137	**0.001**	1.561	6.305

Conflict of Interest None

202	**QRS FRAGMENTATION AND LOW QRS VOLTAGES IN VETERAN ATHLETES**

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Background QRS fragmentation (FQRS), characterized by multiple peaks within the QRS, and low voltage QRS complexes (LQRS), are considered adverse risk markers that may indicate underlying myocardial fibrosis and have been implicated in cardiomyopathies. The presence of FQRS and LQRS are often noted in pre-participation screening of athletes, however are not routinely evaluated as part of the '2017 International criteria' guiding ECG interpretation in athletes. We aimed to investigate the prevalence and clinical significance of FQRS and LQRS in a cohort of ostensibly fit veteran athletes (VA).