

# Staying Strong:

evaluation of activities to prevent falls in Hackney



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## Background

In 2019 Anchor Hanover successfully secured a grant from the Hackney Healthy Ideas Fund to carry out a twelve-month project to investigate the role that retirement housing could play in the early intervention of falls.

The fund is an initiative run by Hackney Council and City and Hackney CCG and aims to tackle some of the challenges surrounding primary prevention, including:

1. identifying groups of people who have not experienced a fall but who may be at risk
2. successfully engaging these groups in preventative activities
3. integrating falls prevention activities into local community or social assets

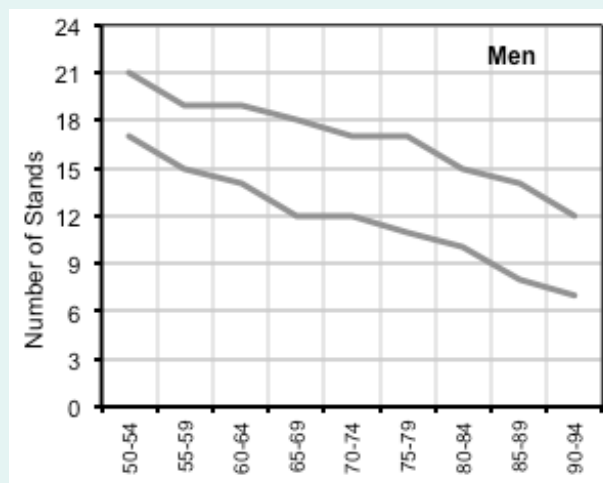
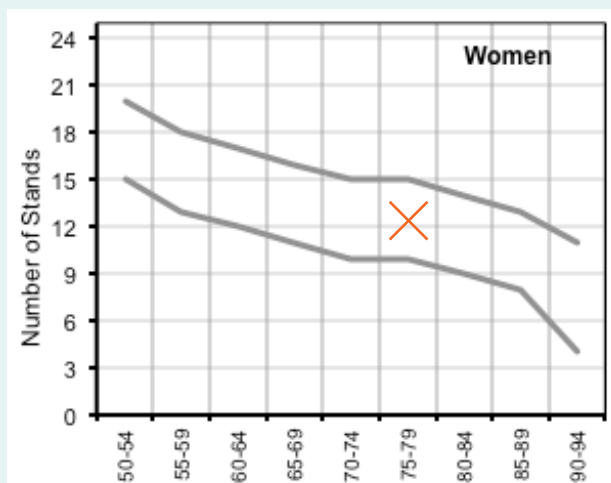
## Our approach

Our approach was based on the Functional Fitness MOT (FFMOT), a person-centred tool that:

- helps participants to understand the importance of physical activity and physical function in older age.
- uses motivational interviewing techniques to help frame discussions and influence behaviour.
- includes validated measures for strength, balance, mobility and risk of falls. These are used to show how each participant compares to their peers, as shown below:

### Example: Chair Rise assessment, female, aged 77

**Test Result:** 12 Stands



When plotted on the graph, the participant is able to see whether they are in the normal range for leg strength for their age and gender.

## What happened?

To focus on primary prevention, we aimed to target residents aged 55-74 living on estates without any care provision on site. Six estates with the highest proportion of residents in this category were identified, and FFMOT events were held here during June and July 2019.

The events were promoted to residents, as well as friends and family over 50, via posters and through face-to-face engagement activities. In total, seventy-seven participants attended and received a FFMOT.

Following this, a series of weekly classes, including T'ai Chi and Nia (a mix of dance, martial arts and yoga), were set up to provide opportunities for residents to exercise in their nearby surroundings and overcome some of the common barriers to participation. Participants who had not attended an FFMOT event were offered a 'mini' FFMOT, which included four of the physical assessments.

Repeat assessments were scheduled for May 2020 to measure any changes to physical function as a result of the original FFMOT or weekly classes. Due to covid-19, however, it was not possible to carry this out.

## Results

In total, **143** people took part in the project in some way. The information collated on individuals varied according to which activities they took part in, as shown in the table below:

	FFMOT events	Classes	Total
<b>Participants</b>	<b>77</b>	<b>66</b>	<b>143</b>
FFMOT conducted	77	9	86
Demographic data collected (Age, gender, place of residence)	77	9	86
History of falls information collected	63	2	65

The following sections set out the results in terms of the three aims of the project.

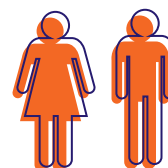
## 1. Identifying older adults who have not fallen but who may be at risk

Overall, the project achieved this aim and reached a significant proportion of the target population. According to the available data, we were able to see that:

**72%** had not experienced a fall in the last 12 month



**59%** were aged under 75



### Assessment results

The baseline assessments provided conclusive evidence of the physical function and level of falls risk among participants and showed positive results overall for balance. The majority of Anchor Hanover residents in particular, however, had worse than average scores in tests for strength, mobility and falls risk.

The following table shows the outcomes for residents only, with age ranges indicated where results vary.

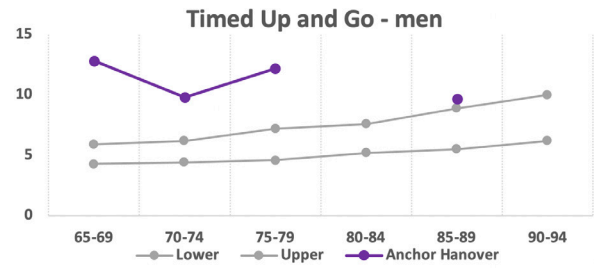
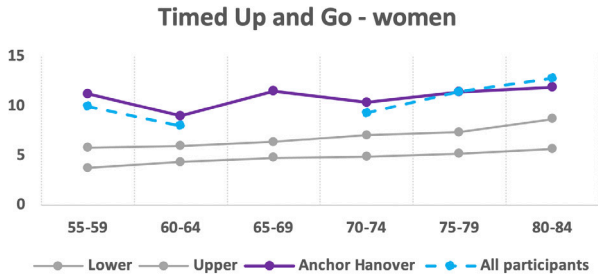
		Better than average	Within average range	Worse than average
<b>Chair rise</b> Measure of leg strength	Women			✓
	Men			✓
<b>One Leg Balance</b> Measure of balance	Women	✓ (66+)	✓ (57 – 66)	
	Men	✓		
<b>Handgrip</b> Measure of body function and risk of falls	Women		✓	
	Men		✓ (76 – 77)	✓ (66 – 76)
<b>Timed Up and Go</b> Measure of mobility and falls risk	Women			✓
	Men			✓

Data was sufficient to compare between women living on Anchor Hanover estates and women living in the local community. This showed an overall improvement in the combined results for three of the four tests (Timed Up and Go, One Leg Balance and Chair Rise), and suggests that Anchor Hanover residents in Hackney represent a frailer than average cohort. This is further substantiated by information collected on individual experiences of falls, which shows that the vast majority of those who had fallen were residents.



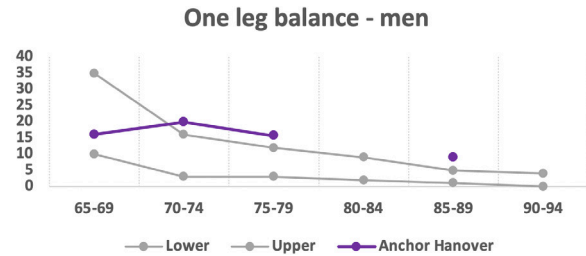
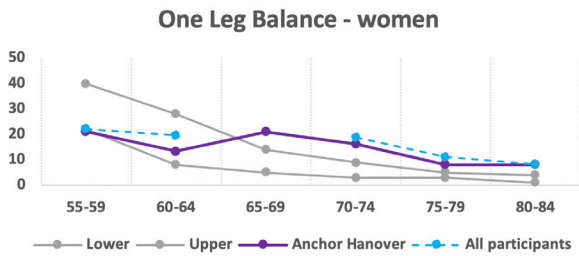
## Timed Up and Go

The higher the score, the frailer the participant. Scores greater than 10 seconds indicate a higher risk group for falls



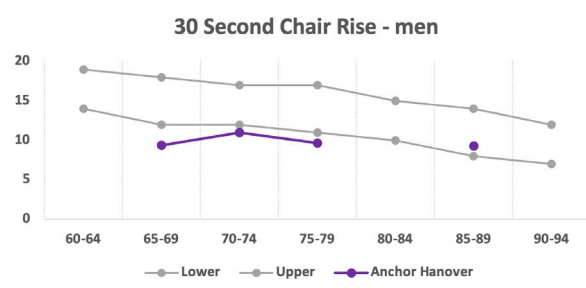
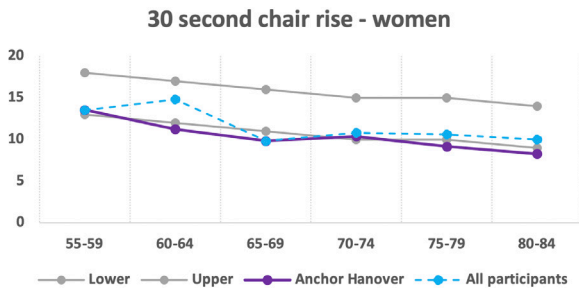
## One Leg Balance

Scores under 5 seconds indicate increased risk of injurious fall



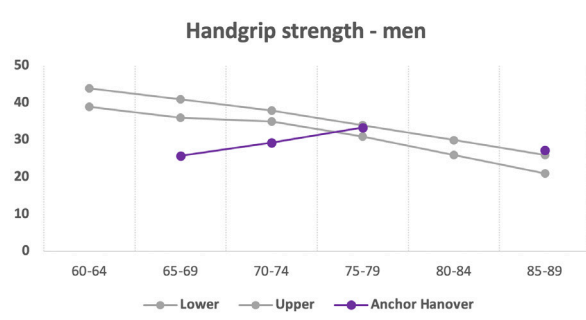
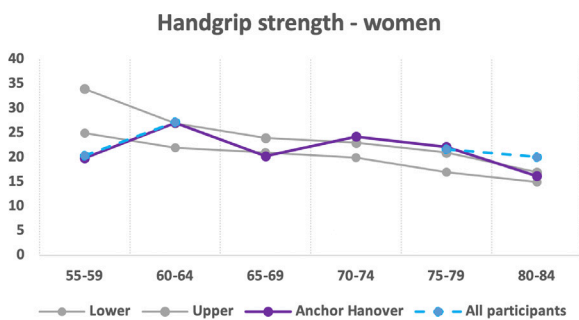
## Chair Rise

The higher the score, the greater a person's lower body strength



## Handgrip Strength

The higher the score, the lower the risk of falls



## 2. Successfully engaging these groups in preventative activities

The project successfully engaged the target audience, both in terms of motivating residents to attend FFMOT events and making longer-term changes to increase exercise.

### FFMOT events

Of the seventy-seven people who attended an FFMOT event, sixty-five were residents. This represents:



**13%** of all Anchor Hanover residents in Hackney perceived to be 'at risk'



**26%** of 'at risk' residents living on estates where FFMOT events were hosted

Results from an interim survey conducted in November 2019 indicate that the FFMOTs were successful in increasing motivation and exercise levels. Of those surveyed:

**52%** attended an FFMOT event as a result of face-to-face engagement



**57%** started a new exercise or increased physical activity after attending an FFMOT event



Monitoring activity has shown that the techniques used to engage participants in events was pivotal to their success. Free lunch and transport were provided to incentivise attendance. However, it was clear from the turn-out at each estate that the main reason for attendance was face-to-face engagement with the Wellbeing Development Manager, who had been door-to-door at each host site to explain the FFMOT and personally invite residents.

Overall, almost half of those spoken to attended as a result of this, with turn-out as high as sixty-six percent on estates where residents were accustomed to this approach.

## Classes

Attendance varied from class to class, with 8-10 participants regularly joining the most popular classes and 2-3 participants at the least popular.

Sixty-six participants were tracked through attendance registers; of these seventeen were regular attendees; and the average attendance rate among this group was seventy-four per cent.

Feedback from interviews highlighted the positive impact that classes had for individual residents. Many spoke of improvements in physical and mental health, including better mood and a decrease in pain:

"D told me her knees are not hurting any more since doing the classes for these few weeks."

**Nia instructor**

"I feel really energised. I felt really sluggish this morning. I'm definitely coming back. I'm going to be a regular."

**Family member of resident**

"That's what I needed. They have chair-based at the other estate. It's boring."

**74 year-old female resident**





### 3. Integrating falls prevention activities into local community or social assets

Despite the high number of Anchor Hanover estates in Hackney with a communal lounge, there were limitations as to which sites could be used to host FFMOT events and exercise classes. Reasons for this included staff availability and the layout of communal spaces. The size and amount of furniture within communal lounges was also problematic but was overcome in rooms where space was available for this to be moved. This did, however, require additional staff resource.

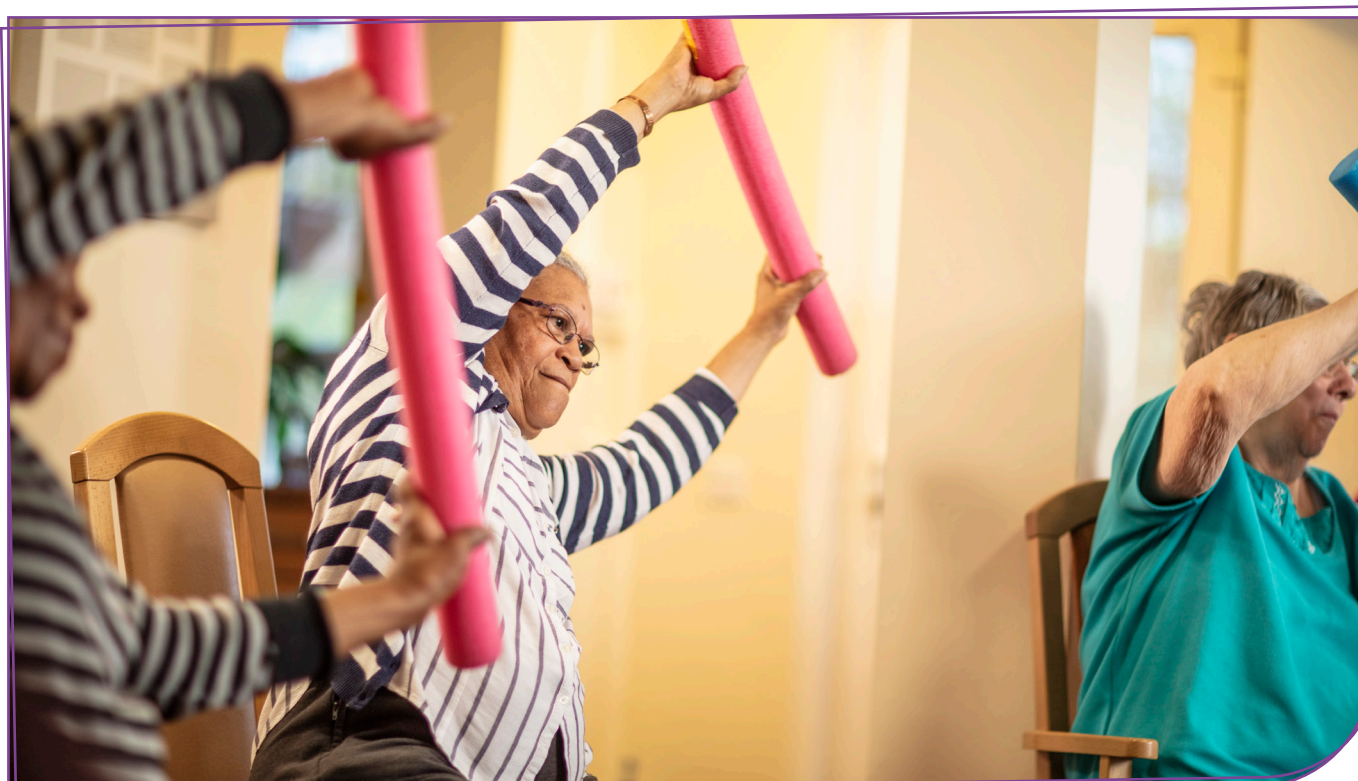
The skills and personal qualities of the instructors and those carrying out engagement activities resulted in significant differences in attendance between classes. As a result of the instructor's activities to promote the class, the most popular session was always well attended by equal numbers of residents and members of the local community. This diversity had a direct impact on the group dynamic and ability to sustain the classes. The enthusiasm and sense of shared ownership led to participants taking a lead in managing the class, and a positive response to the suggestion of introducing a nominal charge to continue classes at the end of the grant-funded period.



High levels of attendance were not the only indicator of success and classes with lower averages still proved to have a significant impact. T'ai Chi, for example, had an average turnout of four residents, but as attendance was so regular among this group, there were some very positive personal outcomes, including weight loss of three-quarters of a stone for one individual. In addition, feedback from participants at almost all locations has highlighted that classes held in communal lounges are the only means of engaging some residents in regular exercise, and many – particularly those who are less mobile – expressed that they would not consider attending a class if it was held elsewhere and travel was required.

A cost analysis of the three classes which were regularly monitored shows that sessions in communal lounges can provide excellent value for money. As two of the core components of the service did not incur any additional expenditure, attendance numbers did not need to be especially high in order to achieve this. The cost of staff time for face-to-face engagement activities has not been factored in and could increase costs in any future roll-out.

Components of weekly exercise	Cost		Amount	Cost
<b>Venue</b>	n/a	<b>Sessions</b>	57	£3,420
<b>Instructor (1.5 hours per session)</b>	£40/hour	<b>Regular attendees</b>	17	£201.18
<b>Staff Time</b>	n/a	<b>Cost per 'regular', per session</b>		£3.53



## Conclusions

Evidence from the project has enabled us to demonstrate the strong role that retirement housing can play in the early intervention of falls. The degree of success in each of the three aims is outlined below:

### Can we identify older adults who have not yet fallen but who may be at risk of a future fall?

The Functional Fitness MOT and history of falls questionnaire proved not only successful in identifying those at risk of a future fall, but also helped to identify the level of risk for each individual, as well as incidences where someone would benefit from referral to secondary prevention services. These results have also highlighted that older adults living in retirement housing in Hackney are at higher risk of falls than those of the same age and gender living in the local community. There is, therefore, a greater need for falls prevention services among this group.

### 2. Can we successfully engage these groups in activities to prevent falls?

FFMOT events hosted within retirement housing can help to raise awareness of the issue of falls prevention and the importance of strength and balance exercise among over 50s.

The number of people who attend weekly classes will vary between locations; but attendance can be significantly increased through face-to-face engagement and personal invitation.

The impact of weekly classes hosted on estates is very high for some individuals and should be taken into consideration as an indicator of success even where overall attendance is low.

### 3. Can falls prevention activities be integrated into local community or social assets?

Not all estates with a communal lounge are appropriate venues for classes and events; in many cases, additional resource is needed set up rooms appropriately .

Classes which are supported well by staff and instructors can deliver excellent results, including regular attendance and value for money.

Classes hosted in communal lounges on retirement estates are the only means of motivating some older people in regular exercise.

