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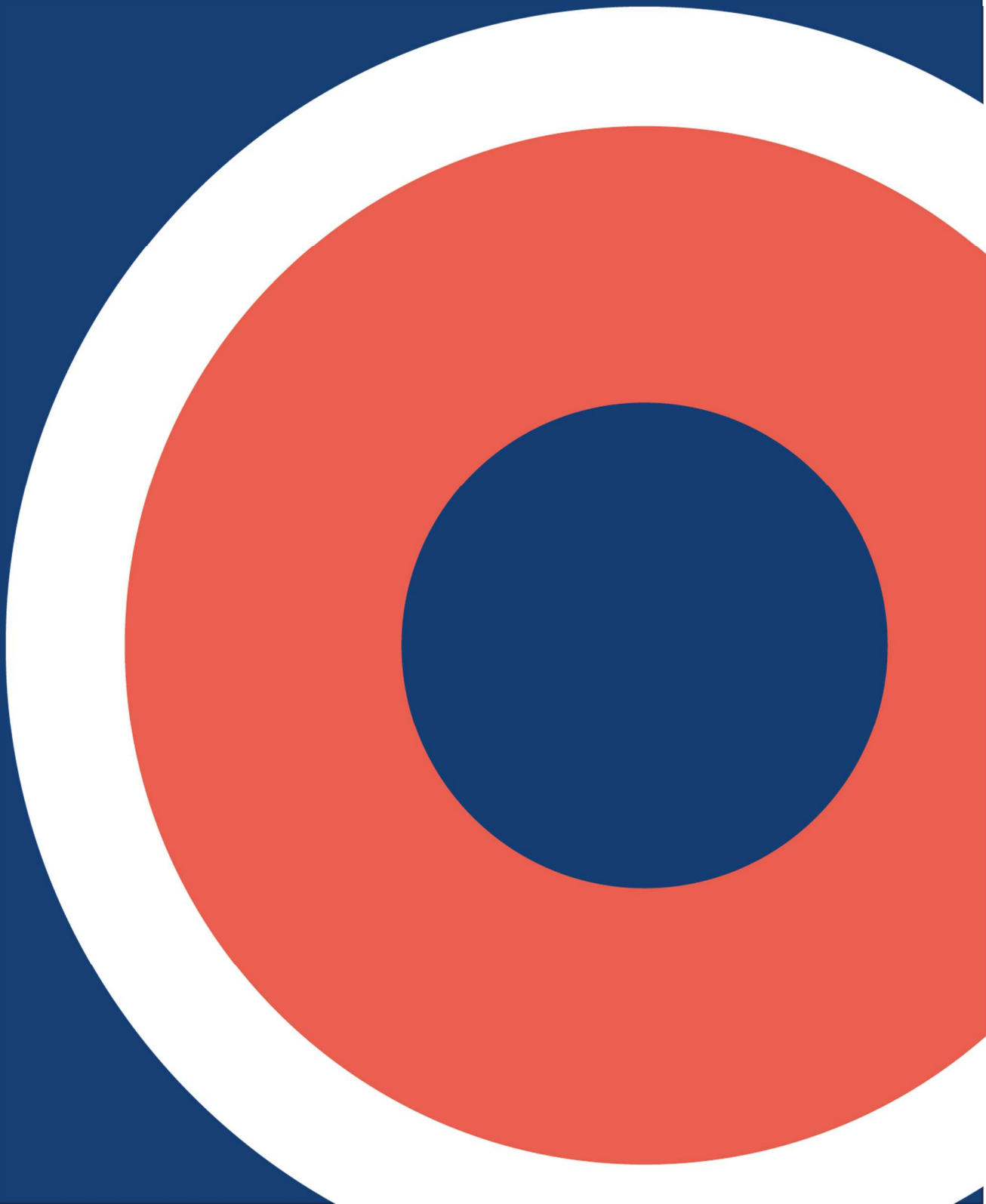
Case Finding for Falls Prevention – 'eFalls' pilot study evaluation report.



Working in collaboration with:

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Additional information

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Executive Summary

Falls are a major cause of preventable harm among older adults, with significant personal, social and financial consequences. This pilot assessed the first real-world implementation of the eFalls risk prediction tool to proactively identify older adults (≥65) at intermediate risk of a fall (resulting in hospital treatment/admission) and offer them an evidence-based, community-delivered strength and balance programme. The work aimed to understand the practicality, acceptability, delivery requirements and learning for potential scale-up across Greater Manchester.

The pilot, delivered in South Wigan Ashton North Primary Care Network (SWAN PCN) in Wigan, demonstrated both the practicality and value of integrating automated case finding with community-based prevention. The evaluation combines findings from routine health data, acceptability questionnaires and qualitative interviews with participating older adults.

It should be noted that this pilot is not an evaluation of the effectiveness of either the eFalls algorithm or the intervention to prevent falls, it is a study of how such a case finding and intervention package can be implemented within the health and social care environment.

Key Findings

Implementation and Reach

The eFalls algorithm identified 1158 older adults aged ≥65 at intermediate risk of a fall in the next 12 months in SWAN PCN.

After applying local exclusions, 740 older adults were contacted by Additional Roles Reimbursement Scheme staff.

198 agreed to attend a face-to-face appointment; 160 attended.

Of those attending, 78% (125/160) accepted referral to community strength and balance classes.

Ultimately 54 participants enrolled and attended at least one session of the strength and balance classes (5% of all initially identified, 43% of those referred to Be Well, representing 75% uptake of the available class places).

Engagement was strongly influenced by trusted GP linked contact, clear messaging and timely relevance to participants' health needs.

Participant Population

The cohort predominantly comprised adults aged 80–89 years, with high multimorbidity (77% had ≥1 long-term condition).

High attendance adherence to the strength and balance classes observed in 37% of the sample and low adherence observed in 19% of sample.

Acceptability

Acceptability of the intervention was high, with all Theoretical Framework of Acceptability (TFA) constructs scoring above the 3.5 threshold.

"Ethicality" scored highest (4.75), reflecting strong support for offering preventative programmes proactively.

Enjoyment, clarity about the purpose of the classes, and perceived benefit were strongly associated with overall acceptability.

Short Falls Efficacy Scale International (FES-I) (N=47) showed a modest improvement in concerns about falling. Although not statistically significant, it is consistent with the small sample and implementation focus of the pilot.

Participant Experience (Qualitative Findings)

Four key themes were identified:

1. Case-finding process

GP linked contact was viewed as credible and trusted.

Understanding of eligibility varied, but timeliness and perceived relevance drove engagement.

2. Motivation to accept the offer

Key motivators included fear of deterioration, recent (non-injurious) falls, loss of strength/balance, desire for independence and need for confidence-building.

3. Intervention factors

Supportive instructors, group camaraderie, accessible community venues and appropriate challenge levels were critical enablers.

Health fluctuations were a barrier to consistent attendance.

4. Perceived benefits & longer-term impact

Participants reported improved strength, mobility, balance and confidence, reduced concerns about falling and improved mood.

Many described adopting new positive behaviours, continuing exercises at home and maintaining a preventative mindset.

The evaluation demonstrated feasibility of collecting and accessing routine data, important for building into future scale-up.

Conclusions

This pilot demonstrates that proactive case finding using eFalls is achievable, acceptable to older adults, and able to connect previously unidentified individuals at an intermediate risk of a fall in the next 12 months, with effective, community-based falls prevention.

The high uptake (78%) once participants attended a face-to-face appointment highlights the value of trusted GP linked engagement. The main challenge is attrition earlier in the pathway, indicating a need for strengthened administrative processes and refined communication approaches.

The work strongly aligns with the priorities of the NHS 10 Year Health Plan and provides system level evidence to support the shift towards preventative, neighbourhood-based models of care.

Key Recommendations

Strengthen PCN administrative capacity and ensure consistent use of Standard Operating Procedures (SOPs) and scripts.
Provide training for Additional Roles Reimbursement Staff in preventative falls-risk communication.
Standardise referral and data capture processes across PCNs and community partners and Secure Data Environments.
Maintain key acceptability drivers: supportive instructors, group-based delivery, accessible local venue and GP linked communication.
Develop a GM-wide model: apply learning from SWAN to inform staged expansion across GM. In particular, ensure appropriate workforce, administrative infrastructure and community capacity are in place before scale-up.

Contents

List of abbreviations

ARC-GM	Applied Research Collaboration Greater Manchester
ARRS	Additional Roles Reimbursement Scheme
CC	Care Coordinator
CfAB	Centre for Ageing Better
eFI	Electronic Frailty Index
EHR	Electronic Health Record
FaME	Falls Management Exercise Programme
FCT	Falls Conversion Tool
FES-I	Falls Efficacy Scale- International
GM	Greater Manchester
GMCA	Greater Manchester Combined Authority
GMCR	Greater Manchester Care Record
GPPAQ	General Practice Physical Activity Questionnaire
IMD	Index of Multiple Deprivation
ICP	Integrated Care Partnership
LOS	Length of Stay
LSOAs	Lower Super Output Areas
NIHR	National Institute for Health and Care Research
OHID	Office for Health Improvement and Disparities
OTAGO	Otago Exercise Programme
PARS	Physical Activity Referral Staff
PCN	Primary Care Network
PIS	Participant Information Sheet
PSI	Postural Stability Instructors
S&B	Strength and Balance
SDE	Secure Data Environment
SOP	Standard Operating Procedure
SWAN	South Wigan Ashton North
SWC	Specialist Wellness Coaches
TFA	Theoretical Framework of Acceptability
UoM	University of Manchester

1. Background to the work.

Falls and fall-related injuries are a common and serious problem for older adults (1). People aged 65 and older have high risk of falling, with 30% of people older than 65 and 50% of people older than 80, falling at least once a year in the UK (2). It is estimated between 5-10% of those who fall sustain serious injury; falls cost the NHS around £2.3 billion a year (3). In the year 2022/23, there were 209,989 emergency hospital admissions due to falls in people aged 65 years and over in England, of which 10,260 were in Greater Manchester (GM) (4).

The 2023 Chief Medical Officer's Report identifies reducing the risk of falls as a national priority (5). The World Guidelines for Falls Prevention (6) recommend opportunistic screening for stratification into low, intermediate and high-risk groups, who are directed to appropriate services. The guidelines provide recommendations for management approaches to be applied for community-dwelling older adults based on their stratified risk:

- older adults at low risk for falls should be offered education about falls prevention and exercise for general health and/or fall prevention.
- older adults at intermediate risk for falls, in addition to the above, should be offered targeted exercise or a physiotherapist referral to improve balance and muscle strength and reduce their fall risk.
- older adults at high risk for falls, should be offered a multifactorial falls risk assessment to inform individualised tailored interventions.

However, integrating case finding and assessment into clinical workflow requires considerable clinician time. This is unfeasible in the time-pressured environment of primary care and can be a major barrier to implementing evidence-based falls prevention pathways. Furthermore, current pathways are largely reactive with services mostly aimed at high-risk individuals who have already fallen which then triggers a response within the system, with interventions aiming to prevent subsequent or multiple future falls put in place. However, this initial fall may have already caused a major physical or psychological injury, and any opportunity for proactive prevention has been missed.

An alternative approach for primary prevention is to identify people at intermediate risk by integrating automated falls risk stratification using risk prediction models based on routine electronic health record (EHR) data. Such a population-based approach aimed at intermediate risk has the potential to transform prevention services, preventing injurious falls for many older adults and maximising their independence. This interaction also creates a valuable point of contact through which individuals can be connected to wider local offers and community-based support, helping to strengthen protective factors and promote wellbeing beyond falls prevention alone.

1.1 Local context and setting.

Fall rates in GM are higher than the rest of the country with six out of the ten GM local authority areas having a higher rate of emergency hospital admissions per 100,000 for falls in people aged ≥65 than the average across England in 2021/22 (4). This translates into GM Integrated Care Partnership (ICP) having the highest rate in England for inpatient spend on injuries to the hip and thigh (7).

This pilot work, funded by the Office for Health Improvement and Disparities (OHID) and the Centre for Ageing Better (CfAB), is a move toward a population health management approach to reducing the risk of falls for people in GM. Harnessing developments with digital data and systems to identify those at risk and provide evidence-based preventative interventions in a community setting.

The South Wigan Ashton North (SWAN) Primary Care Network (PCN) in Wigan was selected as the first area to pilot the case finding work; a decision made due to Wigan having the highest emergency hospital admissions per 100,000 due to falls in people aged 65+ of the ten localities [4]. The SWAN area of Wigan was also an area in which the 'Ageing in Place Pathfinder' was being delivered, a programme with an aim to enhance the quality of life for older residents through community-led partnerships and initiatives. Box 1 provides further information about the SWAN PCN population.

Box 1 SWAN PCN overview

Population Size: ~34,000-35,000 patients. 7 GP practices across 4 sites in South Wigan/Ashton

PCN with an ageing population; predicted significant growth in the 60-79 (↑14%) and 80+ (↑44%) age brackets

Gender: approximately 50%/50% male to female.

Healthy Life expectancy (HLE) is 61.1 years for males and 61.7 years for females – 2.3 and 2.2 years (respectively) below national average figures.

Index of Multiple Deprivation (IMD) - 25.9% of SWAN PCN residents live in top 20% most deprived LSOAs. [8]

1.2 The pilot intervention

The intervention is a falls prevention package aimed at older adults (≥65 years) at intermediate risk (10-25%) of having a fall in the next 12 months resulting in hospital admission. Intermediate risk is computed by the eFalls algorithm based on eHealth records [9]. The intervention includes 2 steps:

1. automated risk stratification and case finding using the eFalls tool implemented on the Greater Manchester Shared Care Record (GMCR) with results transmitted to participating PCNs.

2. evidence-based fall prevention programmes, based on the World Guidelines for Fall Prevention recommendations for people at intermediate risk: education on falls prevention with a focus on potentially modifiable risk factors (e.g. visual impairment, home hazards) with referral to community evidence-based FaME/OTAGO strength and balance classes (see Figure 1 for intervention flow diagram).

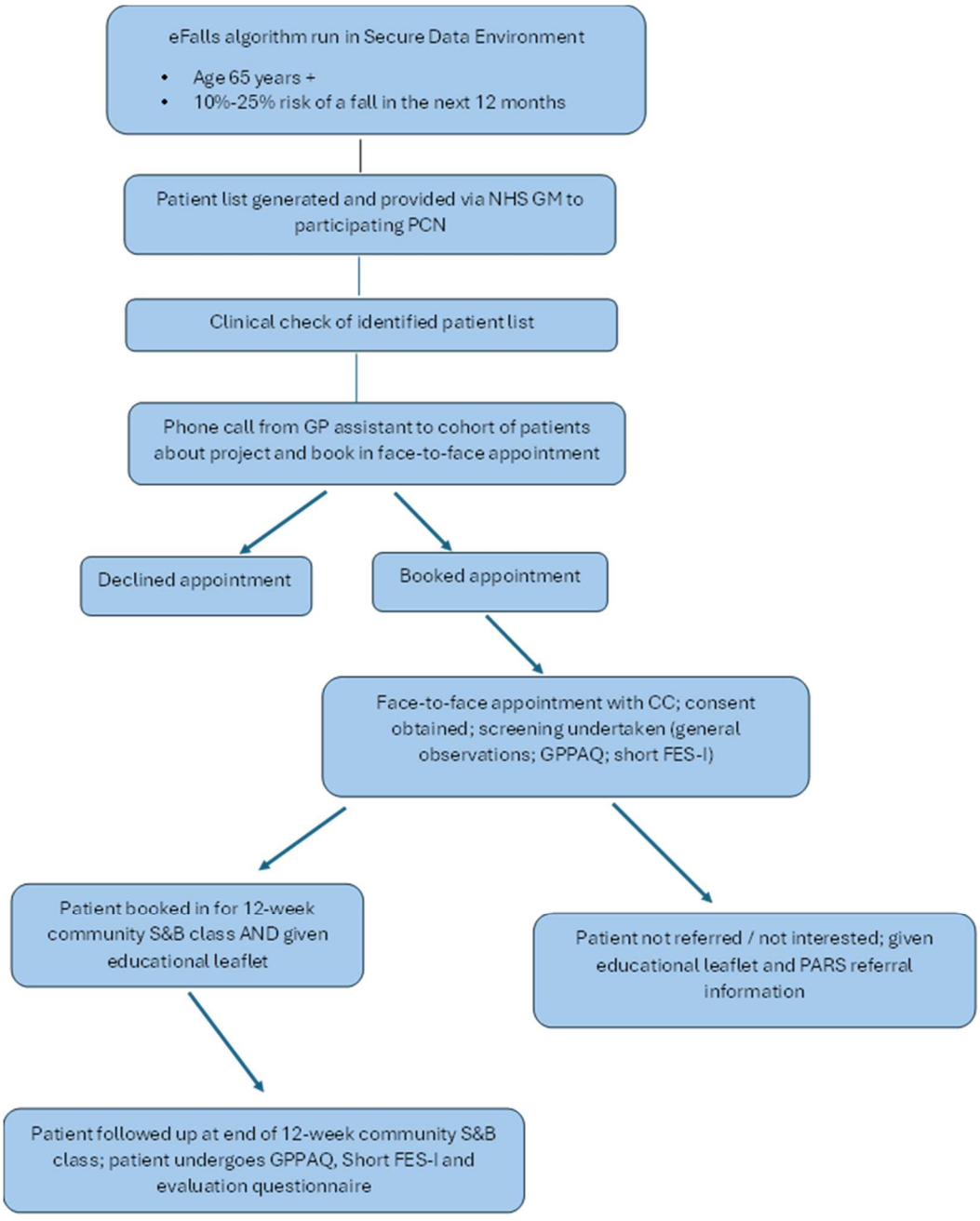

Figure 1. Flow diagram of Case Finding for Falls Prevention pilot intervention project.

1.3 Aim and objectives of pilot work.

The pilot aimed to explore the process and practical considerations of implementing the new eFalls prediction tool within a Primary Care Network (PCN) setting. Specifically, the objectives were to:

•Understand how the eFalls algorithm was run in the Secure Data Environment (SDE) and how data were securely transferred to PCNs.

•Understand and document any additional exclusions applied at PCN and General Practice level.

•Examine how Additional Roles Reimbursement Scheme (ARRS) staff integrated recruitment and intervention delivery into their roles (e.g., contacting patients, organising clinics, conducting assessments and accurately recording data).

•Explore which patients were identified via eFalls and which patients accepted the offer of the intervention.

•Understand the experience of those older adults who were identified and recruited into the pilot project, including barriers and enablers to uptake.

•Gather insight into improvements or changes required for future scale up of work.[1]

1.4 Delivery of pilot.

The eFalls algorithm (see Box 2 for details) was run in the SDE and those older adults (65 years and over) registered at SWAN PCN who were at an estimated 10-25% risk of a fall requiring hospital treatment in the next 12 months were identified. This information was securely transferred to SWAN PCN staff and linked to primary care records to create a cohort list for recruitment to the pilot study.

[1] It should be noted that this pilot is not an evaluation of the effectiveness of either the eFalls algorithm or the intervention to prevent falls, it is a study of how such a case finding and intervention package can be implemented within the health and social care environment.

Box 2 eFalls algorithm

"Our eFalls calculator means that, for the first time, it is possible to proactively identify a person's risk of future falls." — Professor Andrew Clegg, University of Leeds

eFalls is a falls-prediction model that uses routinely collected primary care electronic health record data. Developed by researchers at the Universities of Leeds and Birmingham, with National Institute for Health and Care Research (NIHR) funding, it identifies people at risk of emergency department attendance or hospital admission for a fall or fracture within the next 12 months.

By reducing the need for time-intensive clinical assessment, **eFalls** helps clinicians quickly pinpoint those who may benefit from specialist falls prevention services. The team developed the **eFalls** tool using data from more than 750,000 healthcare records. Of these almost 35,000 people experienced a fall or a fracture resulting in A&E attendance or hospitalisation within 12 months. The accuracy of the tool has been thoroughly tested in two large datasets, containing routinely recorded information on patients from Wales and England, which has shown promising results (Archer et al)

This Greater Manchester pilot is the first global implementation of **eFalls** in routine primary care, using electronic health records to proactively identify older adults at risk.

Personalised care roles within the Additional Roles Reimbursement Scheme (ARRS) were identified as the core workforce to deliver the pilot programme in SWAN PCN, with administrative support as needed. This work was undertaken at PCN level, utilising existing ARRS staff such as GP assistants and Care Co-ordinators to organise the contact lists, set up clinics and appointments, and recruit older adults from the pilot cohort into the falls prevention intervention.

Once individuals were recruited through the PCN, community strength and balance classes were delivered by trained Postural Stability Instructors (PSIs) from the local leisure provider in SWAN, *Be Well*. To test the model properly, a PSI was funded to deliver classes specifically for the pilot. A shortened 12-week programme was chosen to gather insight on implementation within a health and community setting, fully acknowledging this was not the recommended programme dose of at least 24 weeks strength and balance exercises. We agreed that signposting people to existing classes, which already had a waiting list, risked disengagement, so a dedicated pilot offer for a shortened period was necessary.

Be Well describes itself as "*Wigan Council's growing health and wellbeing movement, supporting individuals and families to lead healthier, happier lives. They offer a wide range of activities across seven local leisure centres, at community venues, and in parks and green spaces. They also provide advice and support with a variety of issues, and work in schools and at the heart of neighbourhoods to improve the health and wellbeing of people of all ages. Be Well work in partnership with health and wellbeing services and other organisations*

to address key challenges facing their communities – doing more for those who need them most and giving everyone the opportunity to feel well, live well and Be Well".

Greater Manchester has been progressing the falls prevention agenda for many years. In 2022, the *Greater Manchester Falls Prevention: Delivering Integration and Reconditioning* report [10] was published which highlighted the need for a 'systematic case finding' approach to identify those at risk and provide targeted interventions. This pilot was developed as a direct response to that recommendation, following sustained work with system leaders over several years.

The pilot ran from February to November 2025.

2. Evaluation plan

Researchers from the National Institute for Health and Care Research, Applied Research Collaboration Greater Manchester (NIHR ARC-GM), University of Manchester (UoM) conducted a mixed-methods evaluation of the pilot project on behalf of the Greater Manchester Combined Authority (GMCA).

2.1 Mixed-methods approach

Data sharing agreements were put in place between UoM and GMCA (and its partner organisations) to allow for the following evaluation approach:

Quantitative data - routine data analysis
SDE approval was obtained for this pilot which allows access to pseudonymised datasets for descriptive analysis of routine primary and secondary care data. The primary outcome of interest is the proportion of people at intermediate risk of experiencing a fall who are referred to an evidence-based programme. This was to be identified via bespoke databases designed in-house by SDE team for the pilot work. In addition, analysis of available routine data was planned to include:

- Patient demographics e.g., age/sex/ethnicity
- Diagnoses (multiple long-term conditions), number of medications
- Number of recorded falls / serious falls (resulting in hospital admissions/fractures)
- Emergency Department attendance/hospitalisation
- Hospital outpatient attendances
- Community Health Services – referrals and activity.

Routine pseudonymised data was planned to be complemented with data collected as part of service programme delivery, to support evaluation of fidelity of implementation, e.g. programme uptake and adherence (attendance and duration), concerns–about-falling and other strength and balance measures such as Timed Up and Go and Functional Reach.

Acceptability questionnaire

All older adults participating in the pilot strength and balance classes were given a short questionnaire to complete at the end of the 12-week programme. This questionnaire was designed to gather insight into the acceptability of the pilot intervention and was informed by the 'Theoretical Framework of Acceptability' (TFA) [11] with questions based around seven constructs of acceptability - Affective attitude, Burden, Ethicality, Intervention coherence, Opportunity costs, Perceived effectiveness and Self-efficacy.

For those patients identified for inclusion in this pilot but who declined participation upon initial contact, reasons for not taking up the offer were collected by the Care Co-ordinator.

Qualitative data collection

A purposive sample of older adults who took part in the pilot and had consented to further contact were invited to participate in a face-to-face interview. Interview topics included older adults' experiences, barriers and facilitators to participation in the intervention; understanding the reasons behind acceptance and uptake of offer; expectations of the intervention/programme; impact of the intervention/programme on their quality-of-life, concerns-about-falling/falls risk, independence (see Appendix 1).

Interviews were audio-recorded, fully transcribed and thematic analysis undertaken [12].

2.2 Consent and ethical approval

Participants, who were consented into the study by the PCN Care Co-ordinators, received a 'Participant Information Sheet' (PIS) and a 'Consent to Further Information' form. If the patient did not wish to consent to further contact at that time, they were instructed that details of the team undertaking the evaluation were provided on the PIS if they decided later that they wished to participate.

Due to the nature of the work as a service evaluation, ethical approval from UoM was not required to conduct the work. Data sharing agreements between UoM, GMCA and their partner organisations are in place and SDE approval has been granted.

3. Findings

The following section outlines the key findings from the evaluation of the pilot work and will be organised into the three main sections:

3.1 Delivery of pilot in SWAN PCN including response rates and uptake.

3.2 Overview of the eFalls intermediate risk group using routine data available from primary and secondary care records.

3.3 Participant experience and acceptability of pilot intervention

3.1 Delivery of the pilot

The timeline for the pilot study is outlined in Figure 2; the eFalls algorithm was run in the SDE in early February 2025 and the list of identified patients securely transferred to SWAN PCN. The clinical director at SWAN PCN checked the list for any additional exclusions that might need making (i.e. patient was on end-of-life treatment), and the finalised list was given to ARRS staff to commence telephone contact. PCN staff were provided with Standard Operating Procedures (SOPs) and a script to use when contacting older adults about this intervention.

The script was produced after a number of public engagement events with local older adult groups who stressed the importance of language when talking about their risk of falls. Drawing on best practice for researchers and practitioners when talking to older adults about falls prevention, it was important to ensure the conversations between ARRS staff and participants should focus on stressing the benefits of improving strength and balance rather than a focus on falls [13,14].

Telephone contact with identified patients began in late February to invite them to join the study and the first clinic was run on the 19th of March 2025; 20 clinics over 2 locations were run in total with the last clinic taking place in August 2025. Six strength and balance groups with a maximum intake of 12 patients per group, were run in total over the duration of the pilot, with staggered start and end times. Thus the maximum number of patients that could be accommodated in the classes during the pilot was 72 individuals.

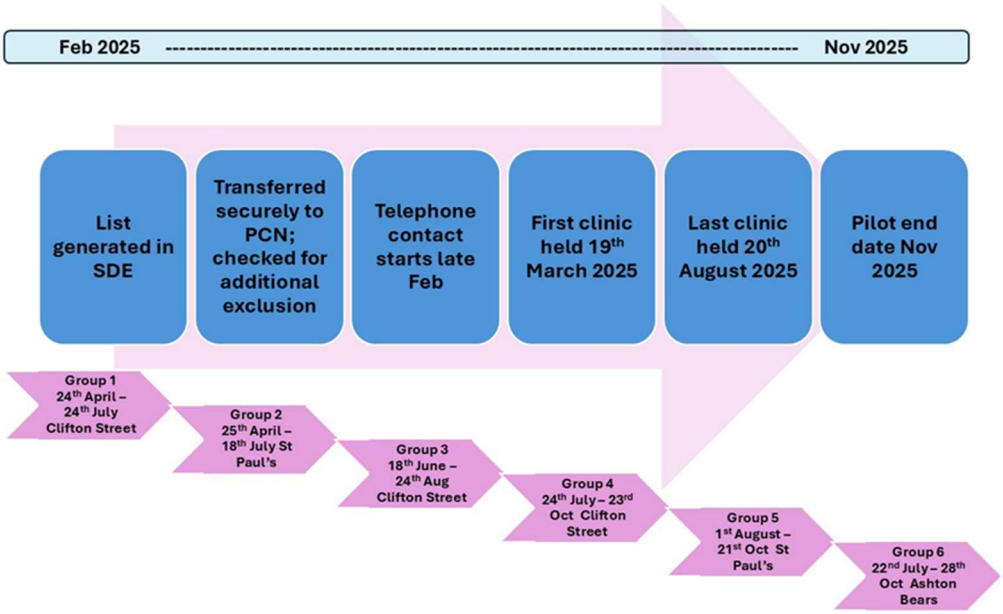

Figure 2 Timeline of pilot study

As outlined in Figure 3, the eFalls algorithm identified 1158 older adults in SWAN PCN who were aged 65 years and over and at an intermediate risk of a fall in the next 12 months. After some exclusion criteria being applied in the SDE, a list of 885 older adults was sent to the clinical director. A further 145 were excluded over the seven GP practices and the reasons for their exclusion are listed in Figure 3; most were housebound, some were already under a falls team, some had recently passed away. These exclusions resulted in a finalised list of 740 older adults to be contacted by ARRS staff. Some 198 people contacted via telephone agreed to come into the clinics for a face-to-face consultation. Of those 198 who agreed over the telephone, 160 attended the appointment and 38 failed to attend.

Of the 160 older adults who attended, 125 accepted the offer of the community strength and balance classes and were referred to *Be Well* for further assessment. At the face-to-face appointment 35 older adults declined the strength and balance offer and the reasons given are included in Figure 3. All 160 attending the face-to-face clinic appointment received an information booklet on falls prevention (Appendix 2)

***Be Well* assessment**: Referrals received from SWAN PCN were processed and recorded on the *Be Well* system by the Central Support Hub. The Specialist Wellness Coaches (SWCs) (who all hold a Postural Stability Instructor qualification) subsequently contacted participants to complete the following:

- Falls Conversation Tool (FCT)
- Health Screening Form

These assessments are used to determine each participant's suitability for the programme, ensuring they do not meet any exclusion criteria and identifying whether an onward referral is required (as indicated through the FCT where appropriate).

A total of 56 participants were recorded as "not participating." This includes individuals who may have met the exclusion criteria, were already engaging in alternative activities, or chose not to take part in the programme. In all cases, coaches discussed the importance of strength and balance exercises, provided guidance on incorporating these into daily routines (including use of the Super 6 leaflet), and shared the Support Hub contact details should participants wish to engage in the programme in the future. A detailed breakdown of the "not participating" category is provided in Table 1. There are missing data on a further 15 people who could not be included in the analysis.

No.	Be Well Codes	No. Participants
1	No response/did not attend	11
2	Waiting investigation	6
3	Ill health	6
4	Supported by another service	1
5	Not suitable	2
6	Referred on to another Be Well programme	
7	Referred to another service	7
8	Not interested in exercise	12
9	Already active	1
10	Other	10

Table 1. *Be Well* reasons for non-participation in pilot intervention.

After assessment by the *Be Well* team, 54 of the referred participants were enrolled into one of the six strength and balance groups. Thus 75% of the available 72 places were allocated.

3.1.1 Response rates and uptake:

There are several potential response rates to consider when thinking about participation and uptake to the pilot study.

In terms of using eFalls to identify older adults at an intermediate risk of a fall in the next 12 months, 1158 older adults were identified when the algorithm was run in SWAN PCN. Fifty-four participants enrolled and attended at least one session of the community strength and balance classes. This might suggest an overall response rate of **5% (54/1158**), but this number would probably be misleading.

We know that additional exclusions (Figure 3) were made to the list of 1158 older adults, bringing the total list due for contact by the PCN to 740 and thus suggesting **7% (54/740)**.

Uptake: if we look at uptake, then once the patient had accepted the face-to-face clinic appointment, the rate of uptake of the strength and balance class was **78%** (**125/160**).

Enrolment: the rate of those enrolled onto, and attending at least one session of the strength and balance classes is **43%** (**54/125**). Since the maximum number of available places in the classes was 72 and 54 were allocated, enrolment into actual places was **75% (54/72)**.

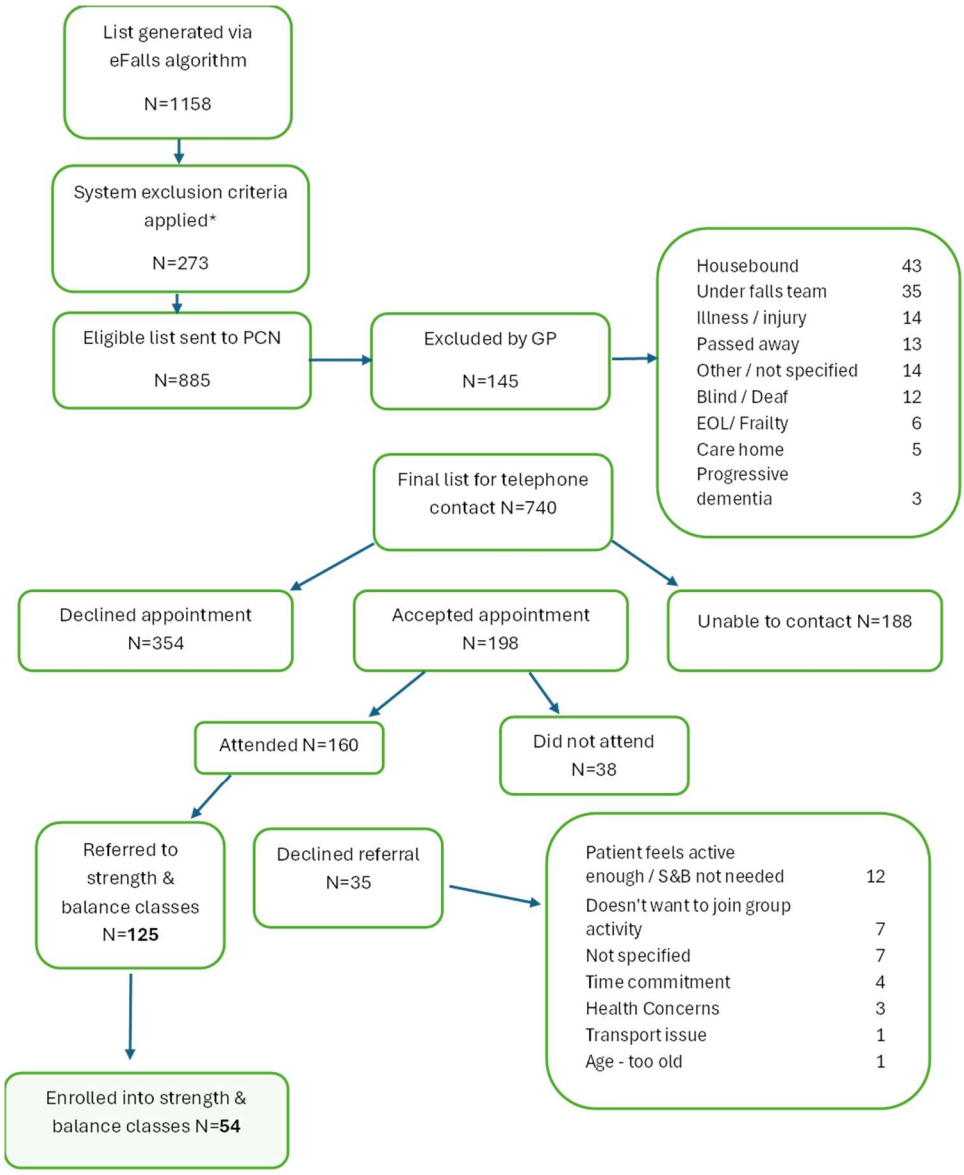

Figure 3 Response rate for the case finding pilot in SWAN PCN

3.2 eFalls intermediate risk group.

1158 older adults were identified as at an intermediate risk when the eFalls algorithm was run in the SDE in February 2025 for the SWAN PCN. Analysis of the primary and secondary care records for this eFalls intermediate risk group show the following population characteristics[2]:

3.2.1 Routine health data.

Age and Sex

Of the 1150 people identified by eFalls and recorded in the SDE dataset, 55% were male and 45% female.

In terms of age, over half were aged 80-89 years old. The proportion of older adults by five-year age bands are as follows: 80-84yrs (28%), 85-89yrs (26%), 75-79yrs (22%), 70-74 yrs (9%), 90+yrs (11%), 65-69 yrs (3%). The breakdown by age and sex is provided in Figure 4.

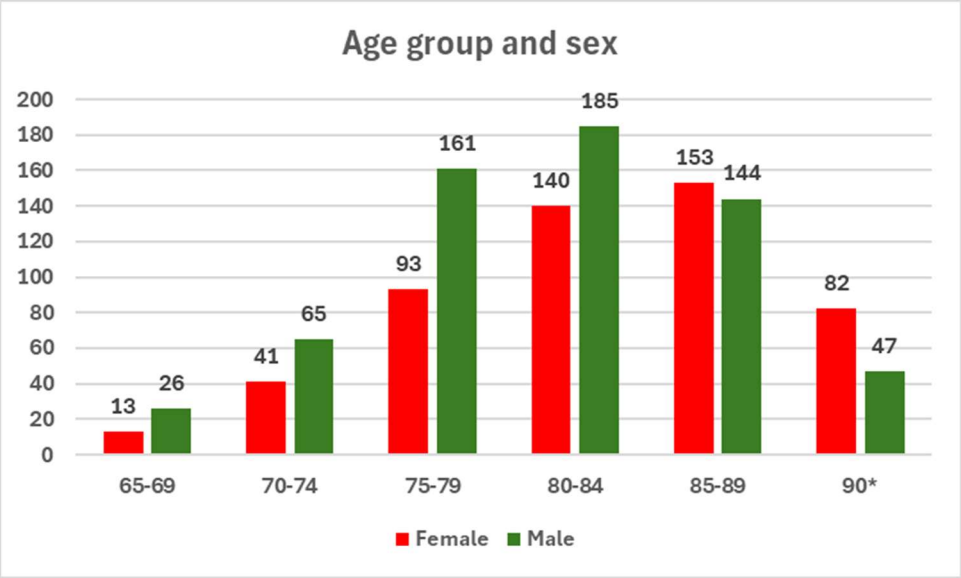

Figure 4: Age group and sex (numbers) of the 1150 people identified as intermediate risk by eFalls.

Ethnic groups

[2] The datasets available via the Secure Data Environment are consistently fluid, i.e. they are updated daily, and those updates can affect historic data. For example, people who may have been alive on the original February 2025 snapshot date, as the data indicated at the time, may in fact have already died by the time the same cut was ascertained a year later. The same applies to their relevance to GM. As at the original snapshot date, someone may have been indicated as being registered at a GM practice but, as the data matured, it turns out they had moved to another practice outside of GM but due to lag in patient contacting practices, practices updated clinical systems, GM receiving those changes, etc, it actually turns out they were not in scope a year later; Primary care records N=1128; Secondary care records N=1150

The cohort of 1150 people identified as at intermediate risk by eFalls was predominantly 'White/White British' (94.9%) with small proportions of 'Other ethnic groups', 'Black/Black British', 'Any other mixed background' and 'Asian/Asian British'.

Living status

Household living status was recorded for 656 of 1150 people identified. Of those with a recorded status, 73.7% were 'House owned/mortgaged/rented/unknown'; 14.5% were living in 'Supported accommodation'; 11.6% in a 'Care/nursing home'.

Frailty

In terms of categorisation by frailty (as recorded via the Electronic Frailty Index (eFI) in the Primary care record, [N=1128]), at the date of the snapshot, the eFalls intermediate risk group were classified as follows:

Robust 10%

Mild frailty 32%

Moderate frailty 30%

Severe frailty 28%

Polypharmacy

The proportion of the eFalls intermediate risk group who have five or more medications is 95%. To note, this refers to the number of medications recorded in the 93 days up to the data snapshot and is recorded in the Primary care dataset (N=1128).

Comorbidities

Over three quarters of the eFalls intermediate risk group (77%) had one or more comorbidity recorded. Table 2 show number of comorbidities, percentage and cumulative percentage.

Table 2 number and proportion of recorded comorbidities for eFalls intermediate risk group

Number of comorbidities	Number	Percentage	Cumulative %
0	254	22.1%	22.1%
1	360	31.3%	53.4%
2	301	26.2%	79.6%
3	152	13.2%	92.8%
4	69	6.0%	98.8%
5	14	1.2%	100.0%

The number and proportion of comorbidities by type (for those with 1 or more recorded comorbidity) are provided in Table 3; the condition recorded most frequently was diabetes

(42%), followed by coronary heart disease (39%), atrial fibrillation (35%), asthma (28%), Chronic Obstructive Pulmonary Disease (COPD) (26%), heart failure (19%) and rheumatoid arthritis (3%)

Table 3 Comorbidities by condition, number and proportion in those with 1 or more recorded co-morbidity.

Condition	Number	Percentage of those with ≥1 comorbidity
Diabetes	376	42.0%
Coronary heart disease (CHD)	347	38.7%
Atrial fibrillation	315	35.2%
Asthma	250	27.9%
Chronic Obstructive Pulmonary Disease (COPD)	234	26.1%
Heart failure	168	18.8%
Rheumatoid arthritis (RA)	26	2.9%

Secondary care records show there were 56,923 'events' associated with the eFalls intermediate risk group for a 23-month period between 25-02-2024 (12 months prior to eFalls algorithm being run) to 09-01-2026 (data snapshot)[3].

These events are grouped by dataset type, so for example Inpatient data relating to emergency admissions (e.g., heart attacks) or elective admissions (e.g., routine gall bladder removal), non-elective admissions (e.g., not exactly planned for electively, but not an 'emergency' per se) in addition to day cases and regular day and regular night attendances (e.g., dialysis).

Outpatient attendances, for example, first consultant discussions, and minor procedures done as part of an outpatient appointment.

Waiting List Minimum Dataset, for example, GP referrals to hospital. There were 4890 referrals attributed to the eFalls intermediate risk group, Table 4 provides GP referral by type:

[3] N.B., events are recorded as one line per patient per referral. However, within that referral, there are X number of contacts and there are likely to be numerous contacts, for example, if someone is referred into community care, it would be expected that the period of care would be long term and involve numerous home visits or clinic visits by the patient. Each one of those individual visits counts as a 'Contact'.

Table 4 Number of GP referral by type of service.

Ophthalmology	673
Cardiology services	554
Gastroenterology	468
Urology	317
Colorectal surgery	296
Trauma and orthopaedic	283
Ear, nose & throat (ENT)	280
Dermatology	251
Respiratory medicine	237
Pain management	159
Plastic surgery	153
Vascular surgery	119
Elderly medicine	118
Rheumatology	117
General surgery	104
Oral surgery	103
Neurology services	90
Breast surgery	85
Oncology	68
Renal services	56
Gynaecology	53
Endocrinology	44
Haematology	38
Neurosurgical	35
Transient ischaemic attack services	35
General internal medicine	24
Anaesthetic services	14
Spinal surgery	13
Heptology	11
Too small to report specialty	*92*
TOTAL	**4890**

In relation to data regarding **falls and fall related injuries** in the eFalls intermediate risk group, the secondary care data provides the following information:

Table 5 Secondary care data relating to falls and fractures (N) over the 23-month period.

Falls/fracture data	**N**
Falls, as assessed by A&E	"0"
Falls, as assessed by Urgent Community Response teams	160
Falls, as assessed by Ambulance services*	217
Fractures, as assessed by A&E	59
Referrals to falls clinics**	118

*this could include more than one entry per patient over the 23-month period.

** Treatment Function - doesn't specify falls clinics but can be filtered to Elderly Medicine service and thus reflects elderly medicine reported in Table 4.

"0" – numbers too small to report as required by SDE contract.

In the Hospital Inpatient and Admission dataset, 826 of the intermediate eFalls risk group accounted for 2961 hospital admissions over the 23-month period; this resulted in a total length of stay (LOS) of 10491 days, (median LOS = 6 days, range = 1-139 days). Such data require fuller analysis in future to clarify the impact on the service with and without use of eFalls.

3.2.2 Pilot Cohort

The **54** participants enrolled in the pilot **community strength and balance** classes were:

54% female: 46% male.

30% were aged 85-89 yrs; 30% aged 75-79 yrs; 24% aged 80-84 yrs; 15% aged 70-74 yrs and 2% aged 65-69 yrs.

Upon referral to Be Well, participants undertook a number of assessments at baseline and at the end of the 12-week programme. Information relating to assessments and whether there was recorded improvement or not, is provided in Table 6.[4]

[4] Be Well usually take measurements at 12weeks and 6 months as there is no end date in their usual strength and balance offer; but this was altered for the shortened eFalls pilot.

Table 6 *Be Well* assessments by type and recorded improvement.

	Measurement		
	Timed Up and Go	**Functional Reach**	**180 Turn**
Improved	19	23	20
Worse	8	4	7
Total*	**27**	**27**	**27**
*27 participants not assessed			

Adherence: Number and proportion of participants by number of sessions completed is provided in Table 7. Adherence, in terms of attendance of classes offered, is often set as high if ≥75% of classes attended, and low adherence as <30% classes attended [15]. Thus, in this case we observe high attendance adherence in 37% of the sample and low adherence observed in 19% of the sample.

Table 7 Number and proportion of participants by completed sessions.

Number of sessions attended	Number of participants	%
1	1	1.9
2	2	3.7
3	7	13.0
4	4	7.4
5	5	9.3
6	4	7.4
7	3	5.6
8	8	14.8
9	4	7.4
10	4	7.4
11	6	11.1
12	6	11.1
Total	**54**	**100**

3.2.3 Concerns about Falling

Concerns about falling scores were collected using the Short FES-I (Short Falls Efficacy Scale-International) [16] instrument at two points; at referral and at the end of the 12-week strength and balance course.

The Short FES-I is a validated seven-item questionnaire used in research and clinical settings to assess fear of, or concerns about falling in older adults. It is a shortened version of the 16-item FES-I, offering high reliability for identifying fall-related concern.

Each of the seven items in the questionnaire are rated on a four-point Likert scale (1 = Not at all concerned to 4 = Very concerned) and an individual can be scored as follows:

Low concern = 7-8

Moderate concern = 9-13

High concern = 14-28

Although fifty-four participants were enrolled in the strength and balance classes, complete scores for the two time points are only available for forty-seven participants. Changes in scores between the two time points are provided in Table 8 below.

Table 8. Change in Short FES-I Scores Between Baseline and Follow-Up (n = 47)

Time Point	Mean	SD	Mean Difference	t (df)	95% CI for Difference	Effect Size (Cohen's d)
Baseline	12.62	4.84				
Follow-up	11.19	4.30	1.426	1.790 (46)	–0.178 to 3.029	0.261

What this means: Participants' concerns about falling showed a small improvement from baseline (M = 12.62, SD = 4.84) to follow-up (M = 11.19, SD = 4.30). Although the mean difference of 1.43 points was in the expected direction it did not reach statistical significance on a two-tailed paired t-test, t(46) = 1.79, p = .080. The 95% confidence interval crossed zero (–0.18 to 3.03), and the effect size was small-to-moderate (Cohen's d = 0.26). Nonetheless, whilst the study was neither designed nor powered to demonstrate change in scores on any variables, this finding suggests (in line with the literature) that a larger longer-term implementation would demonstrate significant changes.

3.3. Participant acceptability and experience of pilot intervention

3.3.1 Acceptability

Participants included in the pilot intervention were asked to complete a short questionnaire at the last session of the strength and balance classes. The questionnaire (Appendix 3) was informed by the 'Theoretical Framework of Acceptability' (TFA) [11] and comprised questions based around seven constructs of acceptability. The TFA was developed in response to recommendations that acceptability should be assessed in the design, evaluation and implementation phases of healthcare interventions. The TFA consists of seven component constructs - Affective Attitude, Burden, Ethicality, Intervention Coherence, Opportunity Costs, Perceived Effectiveness and Self-efficacy - that can help to identify characteristics of interventions that may be improved. Questionnaires can also include an overall question on general acceptability.

48/54 participant questionnaires were completed (52% male;48% female).

Mean construct scores are provided in Figure 5. Typically, when using a five-point scale in a questionnaire based on TFA, a mean score of 3.5 (70%) or higher is generally considered 'acceptable' [17]. Overall acceptability of the case finding pilot intervention was high (4.31), and each construct scored over 3.5. The construct with the highest score was 'Ethicality' (4.75), i.e. was it fair to offer falls prevention community classes to those at an intermediate risk of a fall, and the lowest scoring construct was 'Perceived Effectiveness' (3.67), this question asked whether the classes had reduced their risk of falling.

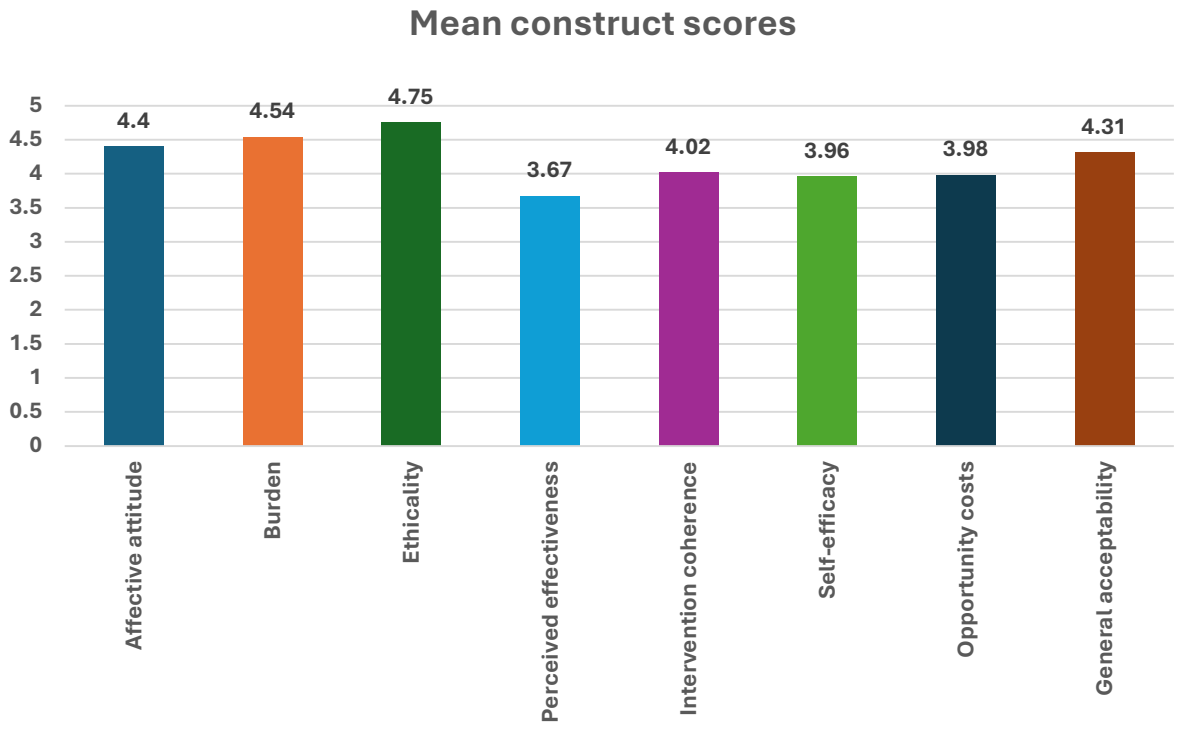

Figure 5. Mean construct scores for case finding acceptability questionnaire.

A Pearson correlation was computed to assess the relationship between constructs and identify which of the seven TFA constructs had the strongest influence on participants' overall judgment of general acceptability.

General acceptability of the intervention correlated positively with Ethicality (fairness of offering free classes ($r = .464$, $p < .001$)), Affective Attitude (liking the classes ($r = .452$, $p = .001$)), Perceived Effectiveness ($r = .402$, $p = .005$), and Intervention Coherence (clarity about how the classes reduce fall risk ($r = .342$, $p = .017$)). Acceptability was unrelated to Burden (booking effort ($r = .124$, $p = .401$)), Self-efficacy (confidence while participating ($r = .119$, $p = .421$)), and Opportunity Costs (interference with priorities ($r = .207$, $p = .158$)). The strongest association was between Affective Attitude and Perceived Effectiveness ($r = .709$, $p < .001$), with additional links between Intervention Coherence and Perceived Effectiveness ($r = .530$, $p < .001$) and between Intervention Coherence and Ethicality ($r = .461$, $p < .001$).

What this means: Overall, the correlation pattern shows a consistent and positive experience of the strength and balance classes. Participants who liked the classes were also more likely to view them as acceptable, believe they reduced their risk of falling and were clear about how the classes work to reduce fall risk. Confidence was also higher among those who understood the purpose of the classes. This might suggest that participants who found the classes enjoyable were more likely to believe the intervention was working.

Practical barriers appear largely irrelevant. Burden, (i.e. the amount of effort it took to book onto the strength and balance classes) was not significantly correlated with Affective Attitude or the General Acceptability of the classes, suggesting any administrative burden of enrolling and attending the 12-week course did not negatively impact the participant experience of the intervention itself.

3.3.2 Participant Experience

To understand older adults' experiences of being proactively identified for, offered, and participating in a community-based strength and balance intervention for falls prevention, we contacted a sample of those participants who had consented for further contact, to invite them to take part in a face-to-face interview.

Twenty-five participants accepted the invitation, and 20 interviews were completed (with 21 participants as one interview was conducted with a married couple); four participants did not attend on the day of the interview. Eleven male participants and 10 female participants took part in the interviews. Interviews took place at two locations in the SWAN PCN area: Chandler House GP practice and Ashton Bears Rugby Club. The interviews lasted on average 21mins (range 11-35mins). Interviews were audio recorded, fully transcribed and analysed thematically [11]. Via thematic analysis, four key themes and 15 sub-themes were

developed to understand the participants experience and views on the pilot intervention. Table 9 lists the key themes and sub-themes which will be discussed in detail below.

Theme 1 Case finding process
1.1 Timing of contact
1.2 Eligibility/understanding
1.3 Proactive GP contact
Theme 2 Motivation to accept offer
2.1 Health concerns
2.2 Looking ahead
2.3 Building confidence
Theme 3 Intervention factors
3.1 Supportive instructors
3.2 Social setting
3.3 Community location
3.4 Pitching of classes
3.5 Impact of health
Theme 4 Perceived benefits and longer-term impact
4.1 Physical
4.2 Psychological
4.3 Behavioural
4.4 Preventative mindset

Table 9 Key themes and sub-themes

Theme 1 Case finding process

Timing of contact

Participants frequently described the intervention offer as arriving at a timely or relevant moment, often following a (usually non-injurious) recent fall, decline in health or growing awareness of mobility changes and challenges. It is noteworthy that a number of participants mention previous falls given that the eFalls algorithm should be identifying persons without previous fall history. This possibly reflects lags in entering fall history into electronic health records, or that such falls are not recorded into the records, although this required clarification.

"It made me think about if I fall, what was going to happen, and having that slip, falling in the garden, frightened me a bit" (CF003, Female)

"I just thought because I was having trouble with the stairs, I thought a bit of...wouldn't do me any harm, you know, a bit of help" (CF007, Male)

"Thought it was brilliant, jumped at the chance. I'd only just stopped using the walking frame and I was walking with a stick. But I mean I did struggle a bit because my left side was a bit on the weak side, so I thought anything like fitness and everything else would have just...well, yeah, right up the street for me, so I just jumped at the chance" (CF009, Male).

"That's why I wanted to do the strength and balance. 'Cause I don't have an awful lot of strength, I use the walking stick, but I'm, like, I'm so nervous walking, and that's part of it…and I think the one main thing is, I'm absolutely terrified to fall" (CF021, Female).

I thought it was something I needed, because like I said, I've been doing quite a lot of walking, not so much just, but I still walk, but I thought if there are particularly exercises…I could have gone on the computer and find out what I need to do, but I thought, well, you know, never mind the iPad, I'll come and have a look what people are doing, and what the up-to-date thing is" (CF004, Male)

"Anyway, this year, I'd realised more how high the steps are, I used to think there was no problem, and I was taking my time. I thought, oh, I'll have to keep hold of the railings, which I didn't used to do" (CF011, Male)

"What I did get was a phone call, I can't remember what his name was but he didn't have to sell it to me, as soon as he said what he was ringing up about I was listening, took it all in and then I said, yeah, okay, I'd like to go along, and that was it. Next thing, I'm in there, don't think, boosh, straight in…" (CF012, Male [had recently had a fall])

Eligibility and understanding

Some of the participants we spoke to understood why they had been identified and offered the intervention, others assumed age was the determining factor, or could not recall how the strength and balance course was offered in the first place:

"Well, I mean, it made sense to me. As we get older, I'm probably more likely to fall, I feel even more so just now in the last couple of weeks…" (CF004, Male)

"Do you know, I can't remember them asking me… I think they just said would I like to go on one of these courses and I said yes" (CF014, Female)

"I think it's a good idea. But I don't think I was contacted by my GP, I think it was just I happened to visit on one occasion... I think so. As far as I can remember, it was just an appointment" (CF014, Female)

"I was surprised because I've never had a fall reported to the doctor. I've had falls, yes. But I've never actually been to the doctor because I've had a fall. So, I didn't know why I was picked" (CF008, Female).

"Because it's specifically pointed at people with bad balance perhaps, so if you haven't got bad balance or you don't think you've got bad balance, you might not see the point of it. Oh…if somebody said, well doctor said…we'll presume the doctor would look at his list and say, well she's got/he's got bad balance…" (CF002, Male)

"I think I did, in a way, I just thought it was...I couldn't understand how you got my name, basically, I just thought I'd been recommended by my GP, you know. So, I weren't too concerned, actually, about it, really. I just thought...I'm just glad you got me on it, you know" (CF006, Male).

"They said… it's random selection… I knew it wasn't…" (CF010, Female)

Proactive GP contact

Many participants described the invitation to the strength and balance classes as carrying weight because it was linked to their GP practice. Even those unsure why they had been selected felt they had to take the offer seriously.

"If it's from the GP, then you think, oh, it's official, you have to do it." (CF008, Female)

"Brilliant, brilliant. I can't praise them enough, I really can't, I mean, it's a thing that needed to be addressed and I think it should have been addressed way, way, way back. Not just now, and I don't even know how long this has been going on, but it's probably one of the best things that happened to me" (CF012, Male)

"I didn't really think about it, I just thought it was something the doctor was involved with and we were being asked if we wanted to take part" (CF003, Female)

"…I couldn't understand how you got my name, basically, I just thought I'd been recommended by my GP, you know. So, I weren't too concerned actually, about it, really. I just thought...I'm just glad you got me on it, you know" (CF006, Male).

In terms of the case finding process, participants describe how the timing of the contact and where the offer came from (i.e. their GP practice) was important. Even with gaps in recall or understanding of their eligibility, a large proportion of the participants at the face-to-face appointments accepted the strength and balance offer (78%), suggesting that a full understanding of their falls risk status may not be essential for uptake and that issues such as trust in the GP and perceived relevance of the offer may be sufficient.

Theme 2 Motivation to accept offer.

Health concerns

Health concerns and fear of deterioration were strong motivators for the participants. Many had already experienced falls/trips or lived with long-term conditions such as Parkinson's, leukaemia, arthritis, heart disease and pulmonary fibrosis. These experiences prompted a desire to avoid further decline as they aged.

"I had three bad falls… I knew I had to do something, otherwise I'm going to do myself serious damage." (CF012, Male)

"I've got Parkinson's and I'm having plenty of problems with it, so I seek help wherever I can. And this course came up with availability, and the doctor asked me and I said, yes, certainly, because that's what troubles me, my balance" (CF015, Male).

"I'm 85 so I'm wearing out. My knees are bad. Got neuropathy in my feet. General tightness and tension…So I'm not the best of health. Not the worst of health by a long shot. But why I like…I liked the thing was I'm walking badly, so I…because my knees are bad and my balance is bad. I've been to the docs about walking into walls when I've been turning left and I couldn't stop turning left and it…just walking through bloody walls, you know" (CF002, Male).

Looking ahead

Participants spoke about preserving their independence and mobility, and in doing so, often made comparisons with others who had experienced falls or had declining health.

"When I can see the way my sisters have gone, and perhaps, 'cause I always remember going…would take my sister to physio appointments and that, she's always had trouble with her shoulders, and she kept saying she can't move her shoulders. And he lifted them up and he said, look, he said, they do move, it's just you have to make them move. He wanted her to climb up the wall and make them rise, you know? But she didn't do it, and now she can't lift, she can't move her arms or anything. And every time I see her, I think, it's ages, it's more than months, and if she'd have been doing them every day, she probably would have been able to move them now, you know? And it makes such a difference. But, like I say, I have seen it first-hand so I know, but it is knowing you can do something about it, you know?" (CF008, Female).

"Cause, I mean, I'm all for anything that'll help me, you know, 'cause, I mean, obviously, I wouldn't like to fall. 'Cause I have a few friends, I mean, I've got a friend now…well, she's now gone in a home. And she's been having lots of falls and, you know, cuts her head open and fell down the stairs, was on the floor all night. And I'm thinking, oh, I do worry about that, but…" (CF021, Male)

"…my body's not young anymore but it's not...I don't feel like a 70-year-old, I don't feel like one. And I can remember my father, he lived until he was 82 and he looked old, I mean, old, he was fat, he never did any...he just drank, but he lived to 82. So that, my goal is to beat that, and if I keep doing this fitness stuff I will do that, I will beat him" (CF012, Male).

Building confidence

For some, loss of confidence was intertwined with life events such as serious illness or bereavement. Enrolling and attending the strength and balance course represented a safe, structured way to reconnect with others and rebuild confidence.

"Healthwise I'm not too bad. Unfortunately, at the moment I'm feeling very lonely because it's not long since I lost my husband.

I: I'm sorry to hear that.

R: And I've never been on my own before and I'm now on my own and having to face life on my own, which is pretty hard…So, I've enjoyed the course, mainly because it got me out in company because I enjoyed having the company" (CF014, Female).

"Oh yeah, oh God, yeah, yeah. I enjoyed it, as well, 'cause you meet people. Where I'm on my own all day. 'Cause all the family are out working, I've no one living at home, anyway. And it's just it gets you out and then you meet, sort of, people who are like yourselves, you know…" (CF021, Female)

"Yeah, it has made me think, that perhaps I can talk to people, it's just, I mean, I've been a housewife really, I have five children, and I've been at home with them. I mean, I worked when I was a teenager… but I've never really been out of it. I worked for about three months at somewhere, but I was awful there. And it's like, that's it, when you're shy already, or whatever I am, and you're not mixing with people, the older you get, and you just stop where you are don't you, you know what I mean?" (CF008, Female)

"…and I don't even know how long this has been going on [depression], but it's probably one of the best things that happened to me. I think I was just, you know, just lived and survived. But now I've got a meaning in life, a fitness in life, to want to do. So, if it weren't for that, yeah, no, it's a brilliant, best thing" (CF012, Male).

In terms of motivation to take up the offer of the strength and balance classes, it appears older adults engage most readily when the intervention speaks directly to three areas of need: health concerns, looking ahead to maintain independence and building confidence. These findings from the pilot implementation suggest that the 'offer' works best when it emphasises proactive prevention and participant autonomy, that is, participants are not taking up the offer just to exercise, they are responding to fears about their decline, hopes of staying independent and a desire to feel capable and confident again.

Theme 3 Intervention factors.

Participants' experiences of the programme were shaped by a number of interrelated factors concerning the quality of delivery, social environment, accessibility of venues, appropriateness of exercise level and the interaction between individual health status and attendance. These factors impacted both positively, and negatively, on engagement with the intervention for many participants.

Supportive instructors

Supportive instructors were discussed as a core feature of the intervention with participants repeatedly highlighting their friendliness, encouragement and attentiveness. Many participants valued that instructors noticed when they or others were struggling and offered modifications and reassurance.

"…I mean, the instructors, how they find topics to talk about, because it must be the hardest thing in the world to have a group of 12 or 14 people in front of you and to talk as well as, you know, demonstrate the things, I think it's brilliant, and how they do it I've got no idea.

No idea, no idea whatsoever, I mean, XXXXX (instructor name) …she's fantastic, absolutely brilliant, can't fault her at all, not at all. Fantastic" (CF012, Male).

"He was excellent at encouraging us and…no, and pointing out if you were doing something wrong and going to help you, and he had a chair in front of me, and if we turned round to do something at a different way, a, kind of, different way, he was quick to move the chair so that I always felt safe" (CF003, Female)

"...she learned us, you know, how, like, to do the exercises, and that. But in between, she'd speak and tell you stories as well, you know, how have you been, and, you know, all this. Which was nice, you know, I enjoyed that bit about it" (CF006, Male)

"They were good, they were patient and telling you how to do it so you don't fall, holding onto the chair if you're not sure, wanting to keep your legs back against the chair so you know it's there behind you, if you want to go down. Which, you don't think of when you're at home, or if you go out somewhere, you know" (CF011, Male)

"No, honestly, I can't say there was anything…and, maybe, I mean, we got nice instructors or trainers or whatever you call them. And there was only a young lad, well, young to me. And he was so good. 'Cause we were all elderly, yeah. And some of them didn't…I think I walked backwards; some of them were worse than me, but we all did it" (CF021, Female).

Social setting

There was a consensus from the older adults that the group setting of the classes was an important aspect of the pilot which provided camaraderie, reduced loneliness, normalised mobility difficulties and just generally made the sessions enjoyable. For some, the social value equalled or exceeded the physical benefits.

"And that class group's amazing, and all the people there were all laughing and joking as they were doing the exercises. The instructors were chatting all the time, it was a really good class" (CF016, Male)

"I'm interested in anything that brings me in contact with other people, I'll be quite honest, so as I'm not on my own, so I'm socialising" (CF014, Female).

"I'd be less likely to do it. They say, oh, you can do that at home. But I wouldn't. I might do it once or twice and then I'd forget about it. It slips your memory if you don't…to me, you've got out and do it. Stay at home and do it, I forget about it" (CF008, Female)

"…the same sort of age group…. not thinking, oh, she's a lot better than I am. You didn't take any notice of what people were doing because we were of the same age" (CF003, Female).

"If you...well, I don't know how you could put this. If you're in a rut, which you do get in, this is the thing for you. 'Cause it will help you to be in a group scenario, you'd be interacting with a teacher, like I said, it is going back to school, in a way, and it's nice. And you're in that secure setting where you feel safe, as well" (CF006, Male)

Community location

Participants were happy with the community setting of the classes and discussed how accessibility was often an important practical barrier for many older adults. The use of community spaces such as churches, rugby clubs, and local centres was viewed positively for being non-clinical, familiar and easy to navigate. Proximity to home, availability of parking and access via direct bus routes were all mentioned.

"There were no real barriers for me, if somebody wants to do it, well I don't know what might stop them. If they don't like the location, but that location, well, for me it was perfect. I mean, it couldn't be much nearer to be honest" (CF004, Male).

"Our setting was quite good, 'cause it was in a...I'm not religious, but it was in a church, and funnily enough, my brother-in-law got married there years ago. And I found it quite relaxing, you know, like, it was peaceful, it was nice, you know. I thought it was really nice that setting" (CF006, Female).

"Yeah, it is a good location. The only problem is there, is people with cars, it's parking. I never had any problem, 'cause in my job I was driving all the time, so I have no problem in getting in tight spaces and whatever, you know? But I could imagine, people if they drive, they'll look at it, and say, oh, I'm not bothering, and drive off" (CF011, Male)

"Oh, yeah, 'cause it's on a bus route. So, I mean, it's in between bus stops coming that way, but it's on a bus route, so it was handy. And I only live up the road, anyway" (CF017, Female).

Pitching of classes

Participants generally found the pace and progression of the strength and balance programme appropriate and manageable, appreciating how sessions built from gentle warm-ups to more challenging strength and balance activities. Some participants found elements repetitive or 'too easy' while others found certain balance tasks difficult but worthwhile.

"They were just right, I think. He told you to stop if you were over-stretching yourself and I think he watched everyone to make sure that they were not stressed or…but yeah, I think the exercises were just right" (CF003, Female)

"I mean, a lot of them were easy. They were all easy physically, I thought, but like, try to walk as if you're on a tightrope, I mean, for somebody with poor balance, that was difficult. But physically, none of them were tiring or over the top. They were quite easy in that respect. But if you suffer from poor balance, well, walking on a tightrope is not so easy" (CF004, Male)

"Oh, yeah, yeah, definitely, and it was right for my condition, actually, you know, everything...you don't realise you're using muscles but you're not, like, running a marathon. Do you understand, you're doing it sat or stood behind your chair. And I used to play rugby, and I used to think when I saw people like that, you know, the old people doing...sitting in a chair and doing that. I said why don't they just get up and do it. But I'm in that position now, and it makes sense, you know…" (CF006, Male)

"At first I wasn't so sure, I must admit, when I saw the first lot of exercises, I thought, obviously it's not much cop. And then as it went on, I thought, aye, yeah, 'cause you kept doing different things. I was thinking, oh, I can manage this. And then when he started to do the rubber bands, with more, he did more things then with the rubber bands, standing with them, and lifting it, as though you were lifting weights? Different things, put it over your…you know? I thought, yeah, I can stand this" (CF011, Male)

"No, I found them fine. I wouldn't say they were too hard. But it was just, like, you could always hold onto something, you know, things like that…I thought I did quite well on them, I don't know. But I felt, like, I did alright" (CF021, Female)

"I must admit there were a couple of times when I had to sit down and rest. But again I think a lot of that is because of my weight, and the fact that I can't bend as supple-y as some people can, you know. But basically, as I say, there were no problems at all with it" (CF007, Male).

"It was, yeah, the way they build up to the level that we got, at class 12 was, the level was brilliant, not overpowering, nothing really, it just, I just look forward to going every week, I really do, and I love it" (CF012, Male).

Impact of health

Understandably, given the population this intervention was targeting, health had an impact on the pilot. Illness, pain, hospital appointments and fluctuations with long-term conditions frequently disrupted attendance of strength and balance classes.

"Unfortunately…I was ill and I missed the other two weeks and I was so sorry, but it couldn't be helped" (CF003, Female)

"I missed one because I've not been so well for other reasons, nothing to do with my balance" (CF004, Male)

"…just had a really bad chest infection again, so missed a class… missed, I think, two in the course because of …health problems" (CF016, Male)

Overall, intervention factors such as supportive instructors, group setting, accessible venues and adaptable exercise content had an impact on participants' engagement with the pilot. This analysis highlights how the relational, social and environmental conditions in which the pilot was delivered are as important to the participants as the exercise content of the falls prevention programme.

Theme 4 Perceived benefits and longer-term impact.

Participants described a broad set of interlinked benefits arising from their involvement in the strength and balance pilot, these related to physical, psychological and behavioural gains.

Physical

Physically, many participants reported feeling stronger, steadier and more capable in everyday movements, with improvements noted in balance, posture and functional tasks such as standing from a chair or walking outdoors.

"well going back to standing up off the chair, actually that was a benefit. Real benefit, that. But as I was telling you, I'm…not that I'm getting old, I am old, but being old, I could still be fit, I could still be fitter than I am, that's for sure, you know. So, yeah" (CF002, Male)

"The strengthening the legs was good. You might think this is not relevant but I've just been on a cruise and we sailed through a gale. And when the ship was going up and down, I found I could stand, I had enough strength in my legs to counteract the ship going from side to side. And I thought that course has done me good" (CF008, Female)

"Well, benefit-wise I'm now not even walking with a stick. I try...I do do more walking, I'm feeling stronger and fitter because of it and I do get out on the Flashes more and do more walking round the Flashes" (CF009, Male)

"Mine is being able to stand straight and easy and getting up off the chair, for instance, the muscles have gotten stronger, definitely, because the tendency, instead of holding the handles to get up, is to stand up on your own accord" (CF019, Male)

"Well, I mean, after 11 or 12 weeks, I'm sure that I was beginning to strengthen some muscles that I don't use normally when I'm walking, when turning my head round, I was doing things like this, which I wouldn't normally do" (CF004, Male).

Psychological

These physical changes were closely tied to meaningful psychological shifts, most notably increases in confidence, reduced concerns about falling, improved mood and a renewed sense of capability.

"To be honest, towards the end of them I looked forward to going and enjoyed doing them. I also felt confident enough to drive the car again, so I was driving myself to the course again. So, it did improve my confidence" (CF009, Male)

"I couldn't go out on my own to take our other dog, Sidney. 'Cause I'd lost my confidence, you know, after the pneumonia. 'Cause what happens, you know, you'd be, like, I'm frightened of losing my breath. But going to that class has helped me to think positive" (CF006, Male)

"Yes, I think it is, it's certainly bolstered my, you know, my self-esteem a little bit so, you know" (CF007, Male)

I've enjoyed it both socially and physically… it gets you out, otherwise you sit down and do nothing" (CF014, Female)

"Well, I do think it builds your confidence more than anything, you know, and that's what you need when you're getting older" (CF021, Female)

"When I'm out walking, I stop worrying about falling down. And when we do walk round the Flashes with my wife I do know where the seats are to take a rest if I'm feeling tired or feel I've done enough or I've done it too quickly" (CF009, Male)

"I wouldn't say it's changed 'cause it's not a magic cure. But what it does do is it heightens your awareness of what you should do to prevent falls" (CF001, Male).

Behavioural

Behaviourally, participants described incorporating new routines into daily life, for example, using resistance bands, practising balance tasks, walking more regularly, or returning to gyms and community classes, indicating that the intervention could support ongoing habit formation and self-management.

"Oh yeah. I still do things at home...Not a great lot, but when I'm watching telly I'll do the foot exercises…Or I do the swings...and I've got my rubber band. I'm not saying I do it every day…" (CF015, Male)

"I went out and bought myself a rowing machine, so I've got a rowing machine indoors... Well it inspired me to go out and buy this rowing machine, so it's brought back what I used to be like, now" (CF012, Male)

"Well, at least if I'm going to fall, I know how to fall, as such. And I know which exercises to do and which not to do, and I found that I could use…I could stretch a little bit more, and I could do a little bit more" (CF017, Female).

"I'm still continuing with the courses…my wife and I are now going to them because she thought it was a good idea for her to go as well. And I still think I need to keep going for a while, because I still realise I am not…my balance is not as brilliant as it could be" (CF009, Male).

Preventative mindset

These short-term benefits often translated into potentially longer term behavioural and attitudinal shifts and had an impact on the participants' preventative mindset. Many participants spoke about a greater awareness of how to move safely, how to manage early signs of imbalance and how to get up after a fall.

"I am a bit better with the stretch because I noticed the other day, 'cause I was on…so what do you do when you want to stretch. What are you reaching for, you go to the supermarket, what do you do. Well, I ask for a tall person to come and get that from there. But I noticed the other day that when I went to get something right at the back of the cupboard, I actually managed to do it. So, obviously, something's working, isn't it?" (CF010, Female)

"It made me aware that I need to find out how to get up if I fall down, because I still don't know if I can manage to do it or if there's a different way for me to get up…" (CF003, Male)

"And up here (pointing to head) *it still sticks in, you know, every day you'll...oh, that's what we did at the course, you know" (CF006, Male)*

"…when I'm walking along or stepping over something, I've got him (instructor) *in my head, going lift your foot, step over, you know, and I think…and lift your feet up. So, his voice telling me as I'm walking along or doing things…" (CF010, Female)*

"It made me more aware of falling and things like that, and how easy it is if you're not looking, you know? Especially, like, what was it he was saying, you all walk on the ball of your foot, and if you misplace that, and I've thought about it when I've been coming down the stairs a couple of times, I've thought, woah, and that's it you think, put your foot down and walk, just take your time. I don't run up and downstairs like I used to do, but that's a thing you learn, 'cause they tell you that, and you think, it's at the back of your mind" (CF011, Male).

In terms of benefits and impact, it could be suggested that participation in the pilot programme supported not only immediate physical improvements for many participants, but also increasing confidence and ongoing engagement in falls prevention behaviours, generating a positive feedback loop.

In addition to these key themes, participants also discussed several factors that are useful to note in terms of improvements that could be made to the pilot intervention:

- **Clearer communication**: some participants felt the purpose of the individual exercises and their benefits could have been explained in more detail. For key techniques such as getting up from the floor after a fall, participants would have liked to have some take-home materials relating to this.
- **Structured progression**: some participants felt there were too many exercises per class and suggested there could be a focus on fewer exercises per session in order to build skills gradually.
- **Longer duration**: some participants felt that 12 weeks was too short; a longer program could reinforce good habits. We know that the recommended duration for strength and balance classes is at least 24 weeks, however, as this was a pilot implementation study, the duration was shortened for this purpose.
- **Follow-up support**: some participants felt there could be more encouragement of home practice and the provision of clear guidance for continuation including options to sign up to further (paid) sessions of strength and balance.

3.4 Summary:

Overall acceptability, as assessed by the questionnaire, of the pilot intervention was high. The questionnaire results show that participants generally had a positive experience of the strength and balance classes. Those who enjoyed the classes were also more likely to find them acceptable, believe they helped reduce their risk of falling, and understand how the

classes worked. People who were clearer about the purpose of the classes also tended to feel more confident. Practical barriers did not seem to matter to the participants.

In addition, the thematic analysis of the in-depth interviews showed that participating older adults viewed the proactive, GP linked offer of strength and balance classes as credible, timely and strongly aligned with their emerging health and independence needs. Participants were motivated to take part not only by concerns about declining mobility or previous falls, but also by a desire to maintain independence and rebuild confidence following illness, bereavement or social withdrawal.

The quality of the intervention itself, in particular, the supportive instructors, friendly group environment and accessible community venues, played a crucial role in enabling participants to feel capable and willing to engage. The participants felt the programme produced wide-ranging benefits: improved balance, strength and functional mobility; greater confidence and reduced concerns about falling; enhanced mood and social connection; and increased awareness of how to move safely and prevent falls. These immediate gains often translated into discussions about longer-term behaviour change, with many participants continuing exercises at home, joining follow-on classes or adopting more active routines, suggesting a shift toward a preventative mindset and reframing of falls prevention as an ongoing part of ageing well.

Participants also identified a number of useful suggestions to improve the experience of the pilot programme for future scale-up, including clearer communication, structured progression, longer duration of the classes and follow up support.

It should be noted that an aspect of the pilot work was to understand the practicality of administering the various instruments and collection of data from participants; data such as Short FES-I scores and adherence made available via the local strength and balance provider worked well, and the acceptability questionnaire was straightforward to administer to participants during their final exercise session.

4. Discussion and recommendations

The evaluation of the eFalls case finding pilot provides important learning regarding the implementation process, the mechanisms that shape engagement and the conditions necessary for future implementation in other PCNs across GM.

4.1 Integrating eFalls case finding into PCN workflows.

Overall, the pilot showed that ARRS roles (in SWAN PCN these were Care Co-ordinators and GP Assistants) can integrate case finding, patient contact and recruitment activities into their existing workload when supported by clear processes. Once participants attended a face-to-face clinic appointment, uptake of the strength and balance offer was high (78%). Once participants started classes adherence was reasonable, with 19% being identified as low adherers, 44% as medium and 37% as high adherers. This suggests the current model is workable once engagement is established, and that the proactive, personalised nature of GP linked contact is a powerful mechanism for acceptance.

However, the overall response rate (number initially attending classes out of total eligible) was low (5%), representing a key challenge for this work. While some exclusions were appropriate (e.g., housebound patients, those under existing falls services), substantial attrition occurred between algorithm identification, GP-level screening, initial telephone contact and face-to-face appointments. These early stages of the pathway currently limit the reach of the intervention. Strengthening administrative capacity, making sure ARRS staff adhere to SOPs and scripts when communicating with older adults about their falls risk, may help increase engagement and uptake. Future implementation may also need to ensure there are programme fidelity measures in place to ensure the implementation follows protocol.

The evaluation highlights some data management issues, including discrepancies in referral numbers between PCN and the community strength and balance provider, and difficulties accessing data in a timely manner via the SDE; both require resolution prior to roll-out in other PCNs. Given that the eFalls algorithm set at intermediate risk of future falls should be identifying persons without previous fall history, it is noteworthy that a number of participants mention previous falls and that there are numerous falls (and fractures) recorded in the secondary care database identified by Urgent Community Response teams, ambulance services and A&E, as well as referrals to falls clinics over the 23 month period (Table 5). This may reflect lags in entering fall history into electronic health records, or in the case of patient reported falls, that such falls are not recorded into the records- a point reflected by quotations indicating that some older people had falls but did not see a doctor about them. However, this requires clarification by future research, which will need to focus on data reliability and validity issues for eFalls implementation. This is especially important as participants appeared frailer (58% were moderately or severely frail p.21) than might

have been expected given their eFalls estimated fall risk. It should be noted that the pilot was the first of its kind in GM to trial access to the SDE for both research and health and care improvement, so identifying any access issues or discrepancies arising from this process forms key learning.

Primary Care Network Viewpoint:

The falls case finding pilot in SWAN PCN has been a strong example of how population health management principles can be operationalised at neighbourhood level in support of the NHS Long Term Plan prevention agenda. By using the embedded E-Falls toolkit within an integrated GP IT search framework, we were able to utilise rich primary care data already held within our systems, avoiding reliance on external datasets and creating a more sustainable, reproducible model for proactive identification.

General Practice continues to work in an environment of increasing demand, complexity and targets set locally and nationally. A key challenge was to prioritise the falls prevention agenda amidst the contractual obligations of practices. We found a PCN level delivery model enabled a unified approach across practices, reducing individual practice workload and variation, while maximising efficiency and consistency. The mobilisation of PCN workforce, including ARRS roles, allowed us to align personalised care and preventative interventions from the outset, rather than adding pressure to core practice teams.

Importantly, the pilot has helped us develop a clear operating model for proactive care, combining standardised searches, coordinated MDT delivery and defined referral pathways, which can now be adapted and scaled for other priority cohorts. This project demonstrated the value of a neighbourhood-based response to a national challenge. Leveraging local intelligence, established relationships and deep understanding of community need to design an approach that is both locally tailored and system aligned. The key learning for us as a PCN is the importance of building infrastructure and workforce models at PCN level that can be repeatedly deployed to support prevention at scale.

Dr Nikesh Vallabh, Clinical Director of SWAN PCN

4.2 Acceptability and participant experience

Acceptability of the pilot intervention was high, with all TFA constructs scoring above the 3.5 threshold typically considered acceptable and participants reporting a positive experience of the strength and balance classes. Those who enjoyed and understood the purpose of the classes were more confident and more likely to view them as effective, while practical barriers had little impact on acceptability.

The qualitative interviews add to this conclusion. Participants described the offer as timely and credible, in part because it came via their GP practice. Many were motivated by perceived decline, previous/recent falls or a desire to maintain independence. For some, the intervention also addressed loneliness and social withdrawal, illustrating that falls prevention intersects with broader wellbeing and healthy ageing priorities.

Participants consistently praised the supportive instructors, group setting and community locations, which collectively created an enjoyable and accessible environment. These features were important enablers of attendance and ongoing engagement and should be retained in any future expansion/roll out.

Collection of data via local strength and balance provider and questionnaire was acceptable.

4.3 Impact of the intervention

Participants described a range of physical, psychological and behavioural benefits to taking part in the 12-week strength and balance classes. These included feeling stronger and steadier, improved confidence, reduced concerns about falling, greater awareness of safe movement and adoption of new activity routines. Several participants described elements of behaviour change, such as continuing home exercises or joining follow-on classes.

Quantitative Short FES-I data, although limited to a small sample, indicated a trend towards reduced concerns about falling. While changes were not statistically significant, this reflects both sample size and the focus of this pilot on implementation rather than definitive outcomes. More importantly, the successful collection of Short FES-I data suggests such measurement is feasible at the face-to-face appointment or provider referral stage for routine monitoring in a scaled-up service.

Participants also made suggestions for improvement, including clearer explanations of the purpose of some of the exercises, fewer exercises per session and a longer programme duration. These preferences align with established evidence that strength and balance programmes require at least 24 weeks to deliver optimal benefit as outlined in the World Guidelines on Falls Prevention [6].

4.4 Mechanisms driving engagement.

Across the evaluation, three mechanisms consistently underpinned participant engagement:

1. **Perceived personal relevance** – many older adults saw the offer as timely and aligned with emerging mobility challenges or health conditions.

2. **Trust in their GP practice** – even with limited understanding of how they were identified, participants took the offer seriously because it came from a trusted source.
3. **Value of social connection** – group-based delivery and supportive instructors enhanced enjoyment, confidence and engagement.

These mechanisms suggest that early engagement may depend less on communication about their risk and more on ***how and from whom*** the offer is made.

4.5 Equity, access and population considerations

The cohort was predominantly White British (95%), which reflects the SWAN PCN population but does not reflect all GM localities. Transport accessibility and venue suitability were important facilitators, and these should be a core consideration in future service planning. Scale-up of the service will need to ensure engagement of populations beyond White British women (the traditional attenders at FaME classes) [18,19]. This will, for example, require inclusion of community leaders in promotion of the programme and recruitment as well as provision designed to address the linguistic and cultural needs of specific groups [20] including principles identified for promoting activity levels amongst disadvantaged and marginalised groups and differences between urban and rural areas [21,22].

4.6 System and workforce implications

The pilot demonstrates that PCN based case finding can provide an effective gateway into community level falls prevention, but only where sufficient workforce capacity and administrative support are in place. ARRS roles are well positioned to deliver this activity; however, they require clear processes and SOPs, protected time and improved tracking systems to work efficiently and consistently.

Pilot funding enabled the provision of a dedicated instructor to run class cohorts. When designing the pilot, conscious effort was made to build the model into existing capacity and structures to maximise sustainability. However, it also reinforced the need to secure additional resource for the community-based strength and balance offer to ensure the approach can be maintained and expanded going forward.

Running of the algorithm and the secure sharing of the case finding results worked well from SDE to PCN although the evaluation revealed some aspects of this process, in particular, data capture and monitoring and adhering to SOPs to ensure uptake, need strengthening. Addressing these system-level factors is crucial for moving from a successful pilot to a scalable model of proactive falls prevention across GM.

5. Recommendations

The evaluation of the eFalls case finding pilot pinpoints a number of recommendations, broadly related to PCN, system and programme delivery levels. Many of these issues are addressed by the revised FaME Toolkit [23] which is freely available online to help assist implementation of strength and balance provision.

Administrative processes:

1. Ensure administrative capacity within PCNs to reduce attrition between algorithm identification, GP level screening, initial contact and clinic attendance.

2. Ensure consistent use of standard operating procedures (SOPs), including scripts that clearly communicate why individuals have been contacted and the purpose of the intervention.

3. Provide targeted training for ARRS staff on communicating falls risk sensitively and effectively, emphasising reassurance, personal relevance and the preventative intent of the programme; this to be undertaken at appointment stage and not initial telephone contact.

Improving data management and data capture:

4. Address discrepancies in referral numbers between PCN records and the community provider through standardised referral and recording procedures.

5. Strengthen data capture processes to ensure consistent and complete documentation across all stages of the pathway (SDE → PCN → community provider).

6. Improve accessibility and usability of the Secure Data Environment, enabling timely evaluation as the programme expands.

Retaining key features of acceptability:

7. Delivery of evidence-based strength and balance programme by trained, supportive instructors, as they were central to participant confidence, engagement and perceived benefit.

8. Provision of group-based classes in accessible community venues, recognising the critical role of social connection and familiarity in supporting engagement.

9. Continue positioning the offer as GP linked, as trust in GP practices reportedly strongly influenced uptake.

Supporting workforce and system:

10. Ensure protected time for ARRS staff to deliver case finding and recruitment activities without compromising other PCN functions.

11. Sustain investment in the community leisure and Postural Stability Instructor workforce, recognising that high quality delivery depends on trained and stable instructor teams.

12. Embed routine feedback loops between PCNs, the community provider and commissioning teams to support continuous improvement and accountability.

13. Strengthen SOPs, workflows and monitoring tools to ensure fidelity of delivery.

Preparing for wider roll-out across Greater Manchester:

14. Develop a standardised, GM-wide model for exclusion criteria, referral processes, communication pathways and monitoring requirements, establishing this as 'business as usual' for proactive prevention within primary care and as part of a locality neighbourhood model.

15. Establish clear, integrated data flow processes to support real time tracking of engagement, uptake, attendance and outcomes across multiple PCNs.

16. Apply learning from the SWAN pilot to inform the phased expansion of proactive falls prevention pathways, ensuring future sites are operationally equipped before implementation.

5.1 Concluding remarks.

This pilot is directly aligned with the priorities of the NHS 10 Year Health Plan and provides system level evidence to support the shift towards preventative, neighbourhood-based models of care. It clearly demonstrates how proactive identification of people at risk can enable earlier, targeted intervention (**from sickness to prevention**), reduce reliance on reactive hospital-based services (**from hospital to community**), and make effective use of routine data and digital tools to support population health management (**from analogue to digital**). The findings highlight a scalable approach that supports improved outcomes for older adults, better use of primary care and community capacity, and the longer-term sustainability of the health and care system in line with national reform ambitions.

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7. Appendices

7.1 Appendix 1 – Interview topic guide

Topic	Questions/Prompts
Introduction	• Introduce yourself and thank them for agreeing to take part in the interview. • Brief explanation of study – you were identified by a computer programme as a patient over the age of 65 years who might be at an increased risk of a fall in the next 12 months. We know it makes sense to intervene earlier with people at risk of a fall, before they have a fall, and as a result you were offered and took part in a group strength and balance class for 12 weeks. As this is a pilot project, we want to find out from those who took part in the study what their views are on what was offered and their experience of the study. We are going to ask some questions about this, there are no right or wrong answers to any questions, and you do not have to answer any questions if you don't want to. It will take no longer than 30mins. • Do you have any questions before we begin? ***Start audio recording**
Background (ice breaker)	Can you start by telling me a little bit about yourself? How would you describe your overall health? (prompt for views on physical activity and keeping active as they age) Do you take part in any other activities in your community alongside physical activity or strength and balance?
Identification of risk / uptake	I'm going to ask you some questions about the strength and balance classes that you recently took part in. How did you feel when the GP practice first contacted you and explained you might be at an increased risk of a fall? Did you understand why you were being offered this opportunity? What do you think about GPs contacting older adults before they might have had a fall based on this risk score, do you think this is a good approach to take? What was it that made you want to take up what was being offered to you, i.e. the group-based exercise classes / already had a fall / declining mobility? How do you feel now after taking part in the course? (*prompt – has their view changed after taking part in the classes*)
Satisfaction with intervention	Was the phone call, followed by a face to face meeting the best approach for you? *(Prompt - could anything be done differently? If so, what?)* What did you like and/or dislike about the 12-week course? (*Prompt for level of exercises, too hard/easy? Location of classes offered / timing of classes / opinions on assessments at start and end / instructors.* Did you manage to attend all of the sessions? If not, was there any reason for missing some?

	What do you think are the benefits of taking part in this course of exercise? (*prompt for short term and longer-term benefits such as increased or maintaining independence, keeping well and out of hospital / relying on others / having carers to help / going into care etc)*
Barriers and facilitators	Do you feel there are any barriers to a study like this if we wanted to do this in other parts of Wigan/Greater Manchester? Was there anything that made it difficult for you to be a part of this study? (*prompt for timing / location / level of class etc*) Is there anything that you think would improve this for people like yourself?
Impact	Are you planning to carry on with future strength and balance classes or any other kind of exercise class? Has this course changed your opinion on physical activity and how it can help prevent falls and improve mobility? Also increased confidence around things like getting up after a fall etc? Would you recommend this to other adults? How would you describe it to others?
Closing Question	Finally, are there any other important issues or anything you would like to add that we haven't discussed?
Closing statement	Thank you - if there is nothing else, I will now stop the recording. **Stop recording.** **Give voucher.** Thank you so much for taking part in today's interview, your time is very much appreciated. Please get in touch if you have any questions about the study and what we have discussed today, my details are on the PIS.

7.2 Appendix 2 - Education pack for case finding pilot.

Checklist for...
preventing falls at home

Falls are often caused by hazards in the home that are easy to overlook, but simple to fix. This checklist will help you think about the safety of your own home. It covers each room, so take a moment to look around with a fresh pair of eyes and help prevent a fall at home.

At the front and back door

- ☐ Paths, steps and patios are even and well maintained
- ☐ Handrail is in place next to steps
- ☐ Walking route is clear, and kept free of pots and other objects
- ☐ Door mats are securely fixed and won't slip

On the stairs and landing

- ☐ Kept free of clutter such as papers, books or clothes
- ☐ Handrails are fitted securely on both sides of the stairs
- ☐ Bright lighting for the stairs and landing
- ☐ Carpet is in good condition and not heavily patterned

In the hallway and living room

- ☐ Rugs and carpets are in good condition
- ☐ Carpets are not heavily patterned
- ☐ Rugs are secured in place and won't slip
- ☐ Floor is free of clutter such as shoes, books and bags
- ☐ Cables and wires for lamps and chargers are kept to the edge of rooms
- ☐ Walking routes are clear, and kept free of furniture and other obstacles

In the bathroom

- ☐ Non-slip bath or shower mats are in place
- ☐ Grab rails are fitted by the bath, shower and toilet

In the kitchen

- ☐ Slip-resistant flooring – talk to a flooring supplier to find out more
- ☐ Everyday items are stored within easy reach
- ☐ A sturdy step stool with a handle is available for reaching higher items
- ☐ Wet patches are investigated to fix the cause of leaks

In the bedroom

- ☐ Floor is kept free of clutter, particularly around the bed
- ☐ Lamps are close to the bed and in easy reach
- ☐ Slippers are in good condition and fit well

Now you've made your home safer, check your health too:

Sit less, move more

Exercise is good for our all-round physical and mental health, and practising regular strength and balance exercises can reduce the risk of falls.

- ☐ **I am exercising on a daily basis**
- ☐ **I have found out about exercises that help to prevent falls**

Plan to get up!

Find out how to get up safely after a fall by watching the video at www.rospa.com/falls

- ☐ **I have watched the video and know how to get up safely**

Consider sight

Reduced vision can contribute to a greater likelihood of falls. You may be entitled to free eye tests.

- ☐ **I've had an eye test in the last year and updated my glasses if needed**

Think medicine

Taking four or more medicines increases the risk of falls, so have your medication reviewed regularly.

Never stop taking medication without first checking with your doctor.

Date of my last medication review

For more home safety tips, visit www.rospa.com/falls

ROSPA
accidents don't have to happen

RSA

Improve your **strength** and **balance**

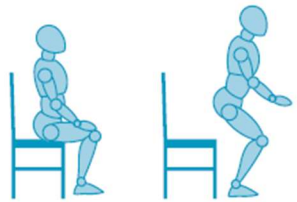
THE SUPER 6

6 simple exercises, 3 times a-week as well as a daily walk can help improve strength and balance.

Be Well

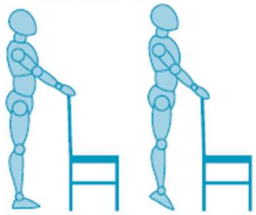
Wigan Council

Sit To Stand



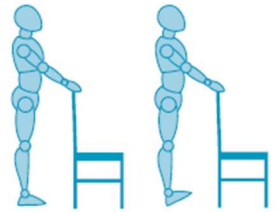
1. Sit up tall near the front of your chair
2. Place your feet slightly back and hip width apart
3. Lean forwards slightly and stand up slowly (use hands if needed)
4. Step back until your legs brush the chair
5. Slowly lower your bottom (use hands if needed)
6. Repeat up to 10 times

Heel Raises



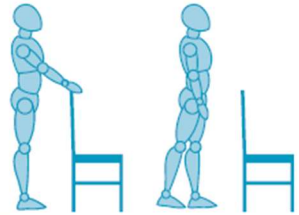
1. Stand tall with your feet hip width apart
2. Slowly lift your heels (light touch on support if needed)
3. Place your weight over your big toes
4. Try not to lock your knees
5. Aim to lift for a count of 3 and lower for a count of 5
6. Repeat up to 10 times

Toes Raises



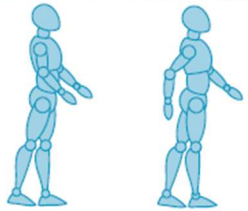
1. Stand tall with your feet hip width apart
2. Hold onto your support (if needed) and slowly lift the front of your foot
3. Keep your knees soft and try not to stick your bottom out
4. Lower your toes slowly
5. Aim to lift for a count of 3 and lower for a count of 5
6. Repeat up to 10 times

Heel Toe Stand



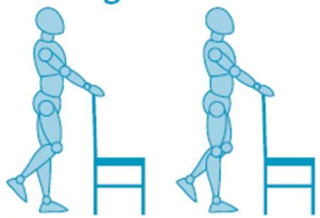
1. Stand tall side on to your support (light touch on your support if needed)
2. Place one foot in front of the other so your feet form a straight line
3. Look ahead and balance for 10 seconds
4. Take foot back to start position
5. Repeat with other foot forwards

Heel Toe Walking



1. Stand tall, side on to your support
2. Hold on to the support (if you need to) and look straight ahead
3. Place one foot directly in front of the other so that they form a straight line, bring the other foot in front and repeat for 10 steps (imagine you're walking along a line!)
4. Turn around and repeat the exercise until you're back to your start position

One Leg Stand

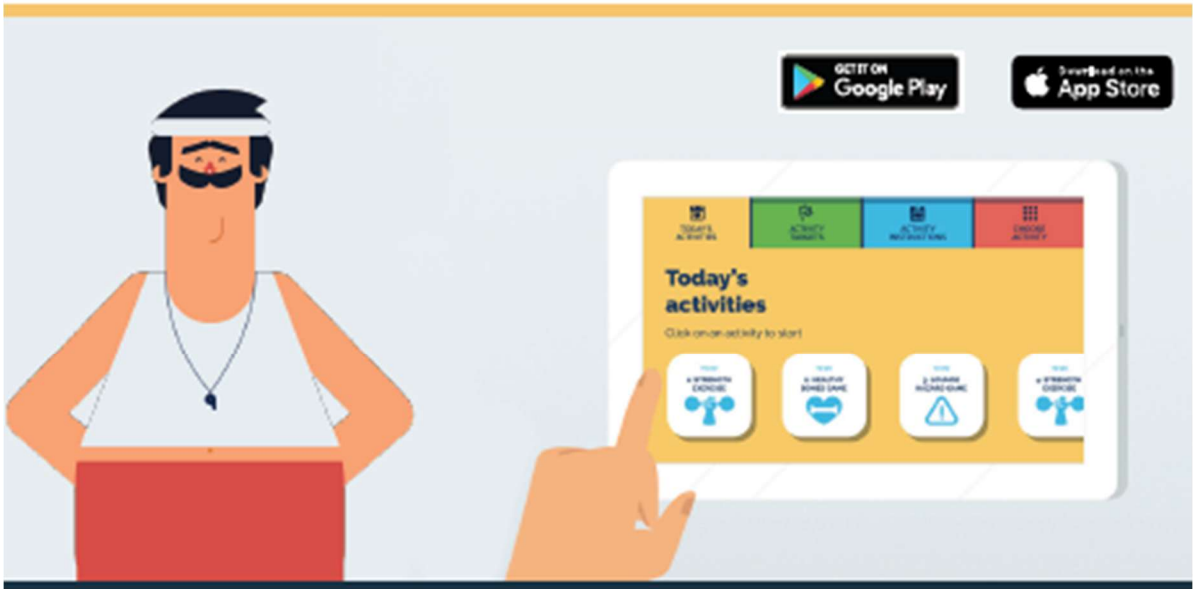


1. Stand close to your support and place hands on support (if you need to)
2. Balance on one leg, keeping your supporting leg straight but knee soft
3. Stand tall and hold for 10 seconds
4. Repeat on the other leg

KOKU

(Keep on Keep up) - Digital

KOKU



What is it?

KOKU is an award winning, NHS approved Digital programme. It enables older adults to access a tailored evidence-based strength and balance exercise programme to prevent functional decline and falls. It also provides health literacy games on how to maintain bone health, home safety and stay hydrated. For a brief introduction on KOKU see website https://kokuhealth.com/

KOKU is available to download on the Apple App Store for iPad users and Google Play Store for Android users (tablet-based only). Just click on the App/Google store search icon and type in, 'Koku Health' and you can access it. KOKU has been certified and approved by NHS Digital and is GDPR (data protection) and safety compliant.

Who is it for?

It is aimed at anyone aged 65 and over, but could also be used by younger age groups who are digitally literate or can be supported with the download and navigation of the app (i.e. by relatives, carers or care home staff).

Evidence

Incorporating over 20 years of research, KOKU is based on health behaviour change theory and the proven OTAGO/FAME falls prevention exercise intervention programmes. Trials in Greater Manchester, Nottingham and Texas have found that KOKU is viewed very positively by older adults and objectively found to have high usability with improved outcomes in balance, health status and confidence after 6 weeks independent use.

MANCHESTER 1824 The University of Manchester

KOKU

Health Innovation Manchester

MANCHESTER CITY COUNCIL

HEALTHY AGEING RESEARCH GROUP

Reason Digital

Tameside Metropolitan Borough

Innovation Fund Denmark

Activity

This is a focus on some of the Activities that Be Well has to offer in your area. If you would like to find out more or speak to a member of our team to discuss any of our sessions, please go to https://www.wigan.gov.uk/BeWell/ or call 01942 488491.

Strength and Balance

These evidence-based sessions are designed to help you improve your mobility, balance, strength, coordination and confidence to get out and about. There are four sessions for people exclusively in this study and all the options available will be discussed with you during your appointment.

Specialised Health Condition Sessions

The following activities are closed groups, and you will need to contact our office to arrange a conversation with one of our Specialist Wellness Coaches prior to taking part.

Robin Park Leisure Centre

Pulmonary Rehab	Monday	14:00 - 15:00
Escape Pain	Monday	13.00 - 14:00
Cardiac Phase 4	Tuesday	10.00 - 11.00
Pulmonary Rehab	Tuesday	10:45 - 12.15
Stroke and Neuro	Wednesday	11.00 - 12.00
Active with & beyond Cancer	Wednesday	12.00 - 12:45
Cardiac Phase 4	Thursday	11.00 - 12.00
Escape Pain	Thursday	13.00 - 14:00
Pulmonary Rehab	Friday	10.00 - 11:00

Activity

Ashton Leisure Centre

Back Rehabilitation	Tuesday	11:00 - 12:00
Beginner Pilates	Wednesday	09:45 - 10:30
Pain Management	Thursday	11:15 - 12:15
Aqua Mobility	Thursday	14:30 - 15:15
Targeted Swim	Thursday	14:30 - 15:30

Wigan Life Centre

Aqua Mobility	Wednesday	11.15 - 12.00
Back Rehab	Wednesday	12.30 - 13.30

Be Well Outdoors

Whether it's our free walking and cycling activities, group runs, golf courses, with Be Well there are plenty of ways to get active outdoors.

Be Well Sport

We offer a variety of racket sports, walking sports, and ball sports, all suitable for beginners or people returning to activity.

Be Well Group Activity

Be Well delivers a variety of activities at Ashton Leisure Centre, Robin Park Leisure Centre and Wigan Life Centre including Tai Chi, Pilates, Yoga, Low Aerobics, Low Circuits, and Aerobics.

Be Well Healthy Eating and Nutrition

Whether you're wanting to achieve a healthier weight or simply looking to take better care of what you eat and drink, there are a variety of ways we can support you.

N.B. Sessions are subject to change. Please check they are still going ahead before attending.

7.3 Appendix 3 – Acceptability questionnaire

Acceptability questionnaire for Case Finding pilot (N=all participating older adults):

1.Did you like the strength and balance classes?

Strongly dislike ☐ *Dislike* ☐ *No opinion* ☐ *Like* ☐ *Strongly like* ☐

2.How much effort did it take to book a place on the strength and balance classes?

No effort at all ☐ *A little effort* ☐ *No opinion* ☐ *A lot of effort* ☐ *Huge effort* ☐

3.How fair is it to offer free strength and balance classes to people over 65 years at risk of fall?

Very unfair ☐ *Unfair* ☐ *No opinion* ☐ *Fair* ☐ *Very fair* ☐

4.The strength and balance classes have reduced my risk of falling and improved my mobility?

Strongly disagree ☐ *Disagree* ☐ *No opinion* ☐ *Agree* ☐ *Strongly agree* ☐

5.It is clear to me how the strength and balance classes will help reduce my risk of falling?

Strongly disagree ☐ *Disagree* ☐ *No opinion* ☐ *Agree* ☐ *Strongly agree* ☐

6.How confident did you feel about taking part in strength and balance classes?

Very unconfident ☐ *Unconfident* ☐ *No opinion* ☐ *Confident* ☐ *Very confident* ☐

7.Participating in strength and balance classes interfered with my other priorities?

Strongly disagree ☐ *Disagree* ☐ *No opinion* ☐ *Agree* ☐ *Strongly agree* ☐

8.How acceptable were the strength and balance classes to you?

Completely unacceptable ☐ *Unacceptable* ☐ *No opinion* ☐ *Acceptable* ☐ *Completely acceptable* ☐

If you have any other comments on the strength and balance classes that you wish to share with the research team, please write them below:

_____
_____
_____
_____
_____
_____
_____
_____
_____

Acknowledgements

We sincerely thank all participants, and patient and public involvement and engagement members for their valuable time and effort. We also thank all the NHS, health and care, and exercise professionals who participated by identifying and recruiting participants and delivering the services which made this pilot possible.

For more information, please contact [Bethany Badrock] [Bethany.Badrock@greatermanchester-ca.gov.uk]

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The information in this report is correct at the time of printing.