

BARNSELY METROPOLITAN BOROUGH COUNCIL

**South Area Council Meeting:
Date: 17/01/2020**

Report of Alec Tinker, Senior Public Health Officer

South Area Council – Title: Older people physical activity to strength and balance.

1. Purpose of Report

- 1.1 Following a request at a South Area Council workshop on the 21st November 19 this report provides further information on the current falls prevention offer in Barnsley, outlines possible approaches for the development of an older people's physical activity programme for Barnsley South Area that improves strength and balance. The approaches detailed in this report include costings, benefits and challenges of implementation.
- 1.2 To outline what is considered current best practice regarding preventative work and possible delivery mechanisms to increase older people's physical activity, improve strength and balance, reduce the risk of falls and ultimately reduce excessive winter deaths for Barnsley South Area Council.

2. Recommendations

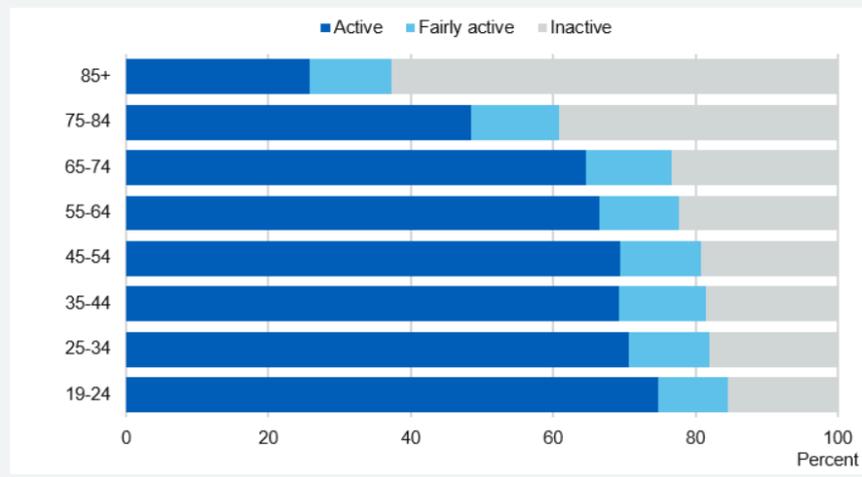
- 2.1 **That Members note the information in this report**
- 2.2 **That if Members recommend progressing prevention work that Members approve a way forward based on the two options outlined at section 6.1.**
- 2.3 **That if supported Members agree a £20,000 budget for a period of 1 year to deliver prevention work and agree the preferred option for a way forward approving either one of the two options presented 1) procure a service provider to deliver interventions agreed through a service specification or 2) deliver a grants programme encouraging a range of community based organisations to support delivery.**
- 2.4 **That Members delegate responsibility for the delivery of a prevention service/s, as outlined in the options, to the Executive Director, Communities in liaison with the South Area Council Manager and South Area Council Chair.**

3. Background

- 3.1 Presentation by public health at Members Briefing on tackling Excessive Winter Deaths, identified a key action to explore future physical activity for older people, including strength and balance training.
- 3.2 As people get older, they are far more likely to become inactive: nationally 42% of people aged 55 and over are inactive compared to 29% of the adult population.

Adult physical activity by age group

Activity levels generally fall with age, but the sharpest decline comes at ages 75-84 (48% active) and age 85+ (26% active).



Statistics on Obesity, Physical Activity and Diet, England, 2019
Publication date: 8 May 2019

National Guidelines state that adults aged 65 and over should:

- aim to be physically active every day. Any activity is better than none. The more the better, even if it's just light activity
- do activities that improve strength, balance and flexibility at least 2 days a week
- do at least 150 minutes of moderate intensity activity a week or 75 minutes of vigorous intensity activity if you are already active, or a combination of both
- reduce time spent sitting or lying down and break up long periods of not moving with some activity

3.3 In 2017/18 Barnsley emergency hospital admissions due to falls by people aged 65 and over were 2,922 per 100,000, this equates to 1,302 people over the age of 65 falling and admitted during the period 2017/18. This is an increase from 2,815 per 100,000 which equates to 1,232 people for 2016/17 (Public Health Outcomes Framework). If the trend in Barnsley continues it is set to rise for the year 2018/19, while other areas across the country have maintained a relatively consistent number of emergency admissions over the last few years.

Injuries from falls can lead to a loss of confidence, fear of future falls, loss of mobility, independence and mortality. Falls can occur for a number of reasons and some falls can be prevented by focusing on; improving strength and balance, maintaining muscle mass and bone density, removing trips and hazards at home, keeping hydrated, reviewing medication, reducing alcohol intake and having regular eyes checks.

3.4 This paper outlines a number of approaches that will achieve the following outcomes:

- Increase older people's physical activity levels
- Improve strength and balance
- Reduce risks of falls
- Increase social interaction
- Improve health and wellbeing

4. Barnsley Context

- 4.1 Barnsley excess winter deaths (single year, all ages) has increased to 39.7% for the period 2016-2017. This is significantly above the Yorkshire & Humber and England rates of 24.9% and 21.6% respectively (Public Health Outcomes Framework).

Barnsley rates for hip fractures in people aged 65 and over are significantly worse than the England average and second worst in Yorkshire & Humber. A month after suffering a hip fracture 1 in 12 people will have died and only half will have returned home.

Older people reporting a fall or considered at risk of falling should be observed for balance and gait deficits and considered for their ability to benefit from interventions to improve strength and balance.

During the winter months the likelihood of falls increases due to adverse weather conditions, leaves on the floor, and older people being less active which increases mobility issues.

- 4.2 Barnsley does not currently have a commissioned primary falls prevention exercise programme. Any primary falls prevention work that is taking place in Barnsley is fragmented and sparse. In the South Barnsley Area a business called Healthy Bones provide private strength and balance classes held at Birdwell Methodist Church and Saville Court Centre, one class per week. At a cost of £5 per class. These classes are evidence based falls prevention exercise classes for over 50's. Other forms of physical activity that may help to improve and maintain strength and balance include: tai chi, ping, walking groups, racket sports, walking football, pilates etc...

What	When	Where
Gentle Exercise for over 50s	Mondays, 10am to 11am	St Michael's & All Angels Church Hall, Park Street
Mild Salsa for the over 50s	Mondays, 1pm to 2pm	St Mary's Church, Church Street, Wombwell
Sequence Dance Club	Mondays and Saturdays, 7pm to 9.30pm	St Mary's Church, Church Street, Wombwell
Tai Chi	Tuesdays, 12pm to 1pm	Wombwell Library, Station Road
Jump Bowling Club	Monday evenings. Contact for more information	Bowling Green, Jump Park, Roebuck Hill, Jump
Yoga Class—For all abilities. Just call in!	Mondays, 7.30pm to 8.30pm	Birdwell Methodist Church, Sheffield Road, Birdwell

Darfield Bowls Club	Wednesday Afternoons	Church Street, Darfield
Modern Sequence Dancing	Tuesdays, 7.30pm to 10pm and Fridays 1pm to 3pm	Darfield Community Centre, Illsley Road

Barnsley Love Later Life Service Booklet, Age UK Barnsley 2019

- 4.3 South Area Council has 9,100 over 65s in residence, and has 7 Residential Care Homes and 3 Learning Disability Residential Care Homes within its boundaries.

The mortality rate from causes considered preventable in the South area is higher than those of Barnsley and England at 220.8 per 100,000. The South Area's Excess Winter Deaths rate is higher than those of Barnsley and England at 31.2% (based on ONS source data, 2016).

5. Best Practice

Below are examples of interventions that specifically aim to improve strength and balance, which may reduce the risk of falls and help to achieve the ultimate aim of reducing excess winter deaths.

- 5.1 **Move it or Lose it** is a limited company that has developed an exercise programme in partnership with the Centre for Healthy Ageing Research at the University of Birmingham. The exercise programme improves participants' flexibility, aerobic capacity, balance and strength (FABS).
- 5.1.2 Training: The course involves online video tutorial and a two day practical training with informal and formal assessing throughout the days. The online videos give course participants the time to practice each of the exercises in preparation for the practical assessment. This equates to 32 hours of guided learning. Participants can also download the complete theory and practical training manuals for future reference.

Participants can learn and practice in the convenience of their own home so when they attend the two day practical training they will be fully prepared. At the practical training they will learn how to link the exercises and put them to music to create fun-filled routines. They will be continually assessed informally and formally to show competence in safe and accurate delivery, observation and adaptation, goal setting and motivational techniques.

On completion of the course participants will:

- Understand of the major changes associated with ageing and inactivity.
- Understand how to support and motivate the older adult to adhere to physical activity
- Understand guidelines and training principles in relation to the older adult
- Be able to plan, deliver and evaluate exercise sessions for older adults including progressive training

- 5.1.3 Financial commitment for training an individual:

Cost of course training per instructor: £495 (incl VAT)

5.1.4 Advantages:

- Evidence based classes that increase physical activity
- Improve strength and balance.
- Encourage social interaction, reducing loneliness and social isolation.
- Create a greater sense of community.
- Improves health and wellbeing of older people.

5.1.5 Disadvantages:

- It is not specifically mentioned in the NICE guidelines for falls prevention.

5.2.1 Tai Chi combines deep breathing and relaxation with flowing movements. Originally developed as a martial art in 13th-century China, Tai Chi is now practised around the world as a health-promoting exercise. Some research suggests Tai Chi can reduce the risk of falls among older adults who are at increased risk. However, more research is needed.

5.2.2 Training:

Tai Chi Foundation Level of Instructor certificate with Qigong. Potential instructors should be able to demonstrate at the end of the course:

- A good degree with competence of demonstrating Silk Reeling Energy, Warm Up exercises and Qigong Foundation exercises.
- A good degree with competence of demonstrating the Tai Chi 8 short forms.
- An understanding of basic Tai Chi principles and philosophy.

No previous experience is required for the Foundation Level Instructor with Qigong. This Training Course provides instructional online based videos to practice either at home. Any relevant experience and skills in other martial arts, Physiotherapy or having been an instructor in other exercises such as Qigong, Yoga, Laugar, Shaolin Kung Fu, Football coaching, Dancing...etc will be taken into account for the consideration of acceptance on the course.

Any students who can't pass the assessment successfully during the course are welcome to join the re-assessment in three month time or take part in the next instructor course at free of charge.

5.2.3 Financial commitment for training an individual:

The current fee for a foundation course is £435.00

5.2.3 Advantages:

- Increases physical activity
- May improve mental health
- May improve respiratory health

5.2.3 Disadvantages:

- More evidence is needed to claim that Tai Chi reduces falls.

5.3. Chair based aerobic/exercise classes for people who have difficulty standing or walking.

There are a variety of different training courses that offer differing levels of expertise. For example Later Life Training provide a course called Sit Tall, Stand Strong which is a chair based exercise programme that progresses individuals to standing work where able. The evidence based exercises of this programme allow for progression to standing work whilst still providing a programme to maintain movement and strength for those requiring to remain seated. However, many other training providers deliver courses that do not offer individuals training in how to progress clients from sitting exercises to standing. Below are two example training courses.

5.3.2 Later Life Training course:

This training is suitable for; people working in care settings, health professionals, volunteers and exercise professionals (further pre-requisites may exist). It is also appropriate for qualified exercise teachers and those holding an NVQ in Exercise and Fitness or equivalent qualification. The course can also be accessed by candidates who have no formal qualifications but have considerable experience working with older people such as care workers or physiotherapy assistants. There are no academic requirements but the candidates should have experience of working with older people.

All learners will gain skills to lead this pre-set programme of 22 chair based exercises, including sit to stand exercises. Particular emphasis is placed on exercise technique, safety and purpose, essential for supporting motivation, individual difference and longer term engagement in the programme. Learners will have supervised opportunities to develop and practice necessary leadership skills, group management and motivation.

Course duration is 4 days unless participants are exercise and sports scientists, physiotherapists or occupational therapists then they may undertake a 2 full days course instead.

5.3.3 Financial commitment for training an individual:

The full 4 day course costs £410 + VAT and includes all manuals, assessments and certification. = £492

The 2 day intensive course, for Physiotherapists and Qualified Exercise Instructors, costs £310 + VAT and includes all manuals, assessments and certification

5.3.4 AMAC training course:

This training is suitable for fitness instructors looking to adapt exercises to help older clients and people who do not have any existing fitness qualifications but already work with older or frailer individuals. There are no formal prerequisites for this course but you do need to be over 16.

The course can be completed online or face to face.

Course Content:

- Introduction to the values and principles of adult social care
- Understand the value of chair-based exercise with frailer, older adults
- Plan and deliver chair-based exercise for frailer older adults

5.3.5 Financial commitment for training an individual:

The online course costs £228.00

Hard-copy manual to accompany the online course £25.00

Face to face course costs £264.00

5.3.6 Advantages:

- Increases physical activity for people who have difficulty standing and walking
- If the instructor is trained to deliver progression exercises classes from sitting to standing then this could drastically improve individual older people's mobility and independence

5.3.7 Disadvantages:

- Alone it does not improve strength and balance or reduce falls
- Only suitable for adults who have limited mobility
- No training courses currently scheduled

5.4. **Functional Fitness MOT (FFMOT)** is a person centred tool that uses a number of different physical function assessments to give older people an idea of how their physical function compares to that of their peers. It provides an opportunity for early identification of those at risk of falling and to effectively signpost them into appropriate interventions to reduce their risk.

5.4.2 Service model:

Activity Instructors that work with people older than 50 and those that provide classes such as Tai Chi, Pilates, Yoga who have undertaken the Functional Fitness MOT (FFMOT) will deliver FFMOT to their clients. The FFMOT can be delivered in a variety of settings including leisure centres, shopping precincts, community centres as well as residential settings. It includes activities such as chair sit and reach, 30 second chair stand and handgrip strength.

5.4.3 Option Training:

The FFMOT training run by Later Life Training can be used as an educational tool in a

The purpose of the FFMOT training is to:

- Highlight the new Physical Activity Guidelines with older people
- Highlight the importance of the components of fitness, particularly strength and balance
- Use as a motivational tool to engage older people in programmes and activities

The training is a one-day practical seminar that raises awareness of the importance of physical activity and physical function for older people and demonstrates how the FFMOT can help professionals frame their discussion. Following the workshop a network of physical activity instructors with an interest in preventing falls could be formed. This would provide attendees with a community of supportive instructors and a place to share best practice. (Leeds have established a similar model with good results)

5.4.4 Financial commitment:

The cost to host a course for up to 24 candidates is £1,200 + VAT. It can be run for a maximum of 24 participants but will require at least 12.

5.4.5 Advantages:

- Current workforce is up skilled. Physical activity volunteers and professionals will be able to deliver FFMOT.
- Providing the training workshop would create a knowledgeable workforce which is able to work with adults to prevent falls. It would form a universal primary prevention offer across the South Area Council.

5.4.6 Disadvantages:

- As a standalone intervention it does not increase the physical activity offer in the South Area. We do not currently have a commissioned service for people at risk of falls to be referred to.
- It is not specifically mentioned in the NICE guidelines for falls prevention.

Measuring success:

Evaluation of all exercise class examples can be designed into the service offer. Tests learnt during the FFMOT training and tests such as the TUG Timed up and Go test and CONFbal test will help to inform council members of the success of the programme and inform individuals of their own progress.

Community exercise classes have more than just physical benefits. They are social events and can help reduce social isolation. In order to capture this added benefit Quality of Life questionnaires may be given to participants. Utilising the social aspect of the classes it may be possible for participants to receive printed information on a range of agreed topics including healthy nutrition, winter warmth and regular exercise alongside specific falls prevention material.

Informal focus groups could create some qualitative data that could help council members gain insight into the success of the programme and could be used by the instructors to give them ideas for how they might improve the classes for the participants.

6. Options to progress this proposal:

6.1 If the South Area Council agree to support work to improve strength and balance, reduce the risk of falls and ultimately reduce excessive winter deaths for South Area Council, the following are options for discussions and further consideration to progress this work.

- Commission a service provider to deliver interventions that meets a set of agreed outcomes (outcomes discussed in section 3.3). A specification would be developed and agreed by the South Area Council which would include some of the best practice as suggestions in the report. This would be promoted on YORtender. Costings up to £20K, potential to increase or decrease funding depending on what is required. A YORtender approach would look for one provider to be responsible for the co-ordination of a programme of activity to meet the outcomes and management and training up of people to deliver this work.

- Grant programme. A grants programme would enable a mix of approaches and encourage community based organisations to get involved. Suggested amounts for discussion would be a total grant pot of £20K with individual grants of up to £5K.

Both approaches could incorporate some core principles of building in wider health and wellbeing including developing social connections and relationships, tackling social isolation and better access to information support and advice.

6.2 Recommended option for the greatest impact using best practice examples:

Combination offer of Move It or Lose It and FFMOT

Through the commissioning of a service provider to deliver the intervention or by using grants, the recommended option would be to have one or more fitness instructors/volunteers trained to deliver Move It or Lose It classes in the community. Level 2 fitness instructors or volunteers with an interest in working with older people would attend the Move It or Lose it course and then deliver physical activity classes that improve strength and balance across the Barnsley South Area in community and care home settings.

Having a combined offer of Move It or Lose It and the Functional Fitness MOT workshop provides Barnsley South Area with greater capacity to deliver physical activity for older people in the South Area. It up skills the current workforce, improves the health and wellbeing of participants and reduces social isolation.

Individuals who are trained to deliver the FFMOT could signpost older people to Move It or Lose It classes.

If possible holding some classes in care homes and inviting older people from the community in will help care home residents and staff feel part of their local community and will strengthen relationships.

6.3 Financial commitment:

Costings depending on which approach is taken.

6.4 In order to progress this work it is recommended that a small working group, including South Area Council Members, is formed to look at developing the approach recommended.

Officer Contact:

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