Let’s Get Moving
Guide to those delivering exercises
to frail older people
Foreword

This booklet is designed to provide information and advice to those who wish to provide exercises for frail older people. Exercise can be beneficial for almost everyone. Even frail elderly individuals with stable medical conditions can benefit physically and mentally from exercise if it is done appropriately with a “common sense approach”.

Physical inactivity is a major problem for society and is responsible for one in six deaths in the UK (Public Health England 2014). Many older people do not meet the recommended guidelines for physical activity which were published by the Chief Medical Officer in 2011, with many older people spending much of their time sedentary. This can have a major impact on health, wellbeing and quality of life. Sedentary behaviour is related to falls, diabetes, cancer, cardiovascular disease and to increased mortality from all causes. Physical inactivity is the fourth leading cause of death worldwide, killing 5.3 million worldwide each year (The Lancet 2012). On the other hand, regular exercise can prevent chronic disease, with physical, psychological and psychosocial benefits (Chief Medical Officers 2011).

Falls are a major problem for an ageing population with 1:3 people of 65 and over, falling every year and 1:2 over 80 falling every year (Cochrane 2012). Falls account for the largest single presentation to the Scottish Ambulance Service (over 35,000 attendances), are responsible for over 390,000 emergency bed days and are implicated in up to 40% care home admissions (Scottish Government 2012). They cost health and social care around £471m rising to £666m by 2020 (Craig 2012). Falls are not an inevitable part of ageing. Physical activity and exercise are crucial in the prevention and management of falls.

Everyone who supports older people can help promote physical activity. Exercises such as those described in this booklet can help promote physical activity in frailer older adults. More information on physical activity and how to promote it in frail older adults can be found in the Care About Physical Activity Resource, which can be found on the Care Inspectorate website www.careinspectorate.com

The information in this booklet is not exhaustive but serves as a general guide. There may be training available locally to expand the information in this guide and support its practical application. Please also refer to the DVD Let’s get Moving which is aligned to this booklet. The DVD provides some practical examples of how exercise can be incorporated into an individual’s daily routine.

If in doubt regarding an individual’s health or ability to participate in exercise please seek advice from their GP, physiotherapist or other health, social, leisure care professional.
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Introduction

A lack of physical activity and exercise can pose many health risks including:

- Deep vein thrombosis
- Gravitational oedema
- Contractures
- Pressure sores
- Constipation
- Muscle wasting

There are many reported benefits of exercise and activity. Just some of these benefits are listed below:

**Physical**

- Increased/maintained range of movement
- Increased/maintained strength of muscle
- Increased/maintained circulation
- Improved sleep pattern
- Increased energy levels and vitality
- Improved/maintained balance
- Promotes bone health
- Improved appetite
- Improved/maintained mobility
- Improved/maintained ability with activities of daily living
- Reduced risk infections
- Reduced risk falls
- Improved/maintained co-ordination
- Reduction in all cause mortality

**Psychological**

- Improved self-esteem
- Reduced anxiety
- Reduced depression
- Reduced stress and distress
- Reduced boredom
- Reduced irritability
- Socialisation
- Reduced loneliness
- Positive peer pressure
- Improved alertness/concentration/cognition
- Reduced mortality rates
- Improved staff morale
- Improved relative satisfaction
- Increased opportunities for learning and new experiences
- And can be **fun**!
Getting started

Before commencing any exercises there are certain things to consider. It is essential that you know your participants well from the following points of view: medical conditions (both long-standing and new), exercise tolerance and personality. Some people can be concerned when promoting exercise in frail older people, however, with a common sense approach the benefits far out way the risks.

Medical conditions

As previously mentioned a “common sense” approach is required. People who may not be appropriate to take part include:

- Unstable medical conditions e.g. heart, chest, unstable diabetes, unstable angina, acute infections, acute joint/muscle problems, recent fracture and anyone feeling unwell
- Advice should be obtained from a relevant practitioner before exercising anyone with the above conditions/symptoms

Other medical conditions which may require the exercises to be modified include the following:

Dizziness

Dizziness is a common symptom, especially in older people, that is not usually a sign of anything serious. Common causes of dizziness include; medication side effect, ear conditions, high or low blood pressure, low blood sugar, vertebrobasilar insufficiency and heart problems. Most people who experience dizziness are able to exercise safely, however, dizziness should always be investigated to establish the cause and any management programme. People who experience dizziness should seek advice before exercising to ensure the exercise they are participating in will not exacerbate their symptoms or make them unduly unsteady. The word dizzy is commonly used and can describe various feelings, namely unsteadiness, lightheadedness, vertigo. It is good to ascertain their true meaning of dizziness.

Stroke

The effects of a stroke may result in difficulty moving some parts of the body. In most cases encouraging movement of the affected side is a positive thing, even if the participant requires to assist their affected side with their non-affected side. Jerky movements should be avoided and caution should be taken with shoulder movements. Movements which involve taking arms above the head are best avoided unless advised by a physiotherapist. A stroke can also affect the person’s vision therefore think about the best place to position yourself so that the person can follow what you are doing. Stroke can also affect a person’s ability to follow commands so please take this into consideration.

Stroke affects everyone differently therefore if in doubt seek advice from a physiotherapist.
Arthritis
This is a very common condition in older people. There are different types of arthritis. In general, exercise is something that should be encouraged to keep the joints mobile and the muscle supporting the joints strong. However, if someone is experiencing a flare up of their arthritis in that the joint/joints are hot/painful/inflamed advice should be obtained before encouraging participation. People who do take part should be advised they should not feel any unusual pain either during the exercises or afterwards. Unusual pains should be reported to you.

Parkinson’s Disease
Physical activity can be very beneficial for people with Parkinson’s Disease. Physical symptoms include stiffness, tremor, slowness of movement and stooped posture. People with Parkinson’s Disease may have difficulty lifting their arms above their head if their posture is stooped and may have difficulty with jerky, fast movements. There may also be difficulty initiating movement with an exercise. Give them time and sometimes counting them in can help.

Hip and joint replacement
People who have had a hip replacement or a hemiarthroplasty as a result of a hip fracture should avoid bending their hip more than 90 degrees (past the right angle) for at least 12 weeks. Crossing the legs should also be avoided for at least 12 weeks. This is to avoid the risk of hip dislocation.

Hearing and sight problems
Check participants are wearing any aids such as glasses and hearing aids and that they are in good working order. Staff and any helpers should position themselves in positions that allow any participants to be able to see and hear them to provide any physical support/prompting. Use visual cues, demonstrating what you want the participant to do. Minimise noise and disruptions and ensure good lighting.

Osteoporosis
This condition causes the bones to be more porous and as a result more at risk of fracture. People with osteoporosis often have a stooped/curved spine which may result in them having difficulty with exercises which involve lifting the arms above the head. Care should be taken with movements involving twisting the spine and bending forward from the waist which could result in spinal fracture especially if done in an uncontrolled or jerky fashion.

Angina
Angina is a heart condition and typical symptoms include discomfort in the middle of the chest which may spread to the throat, neck, jaw or arm. It can also cause breathlessness. If a participant has a history of angina it is important to ascertain if it is stable and what sorts of activities bring it on. Many people with angina exercise, however if any doubt about the stability of their angina, advice should be sought from the GP. If the person is able to take part you should ensure any GTN spray is accessible when exercising.
Lung conditions
Conditions such as bronchitis, emphysema and asthma can lead to shortness of breath at rest or on exertion. When people exercise they may breathe harder and faster – this is quite normal, however, ensure participants are not so short of breath they cannot hold a conversation. Keep any inhalers close at hand. If in doubt seek advice from the GP regarding the person’s suitability to take part in exercises.

Dementia
People with dementia may have difficulty following complex instructions, so instructions should be kept simple, perhaps supplemented with visual cues such as gestures. Supporting staff should position themselves so that the person with dementia can easily see them or be physically prompted with exercises as required. It is important that activities should be failure free so complicated games requiring high levels of cognitive ability should be avoided. Consider the design of the environment in terms of colours, patterns, textures, doorways, noise and distractions. A noisy atmosphere can increase stress and distress in some individuals. Be aware of your own body language – smiling is good! Remember that some people with dementia have a short attention span. Get to know what individuals can cope with and plan the activity within that time frame.

Exercise tolerance
For anyone who has not exercised regularly they need to build up their tolerance gradually. Remember to build up the intensity and duration of the exercises gradually. It is normal to feel a bit of muscle soreness for a day or two after exercising, especially if the exercise is unaccustomed. If they felt any more than this then they have done too much. You may have to reduce the intensity or duration the next time. You don’t want to put them off! If soreness lingers on seek advice.

Personality
Everyone is different in terms of likes and dislikes so it is important to know your participants and to know what type of activities they may enjoy. Some people enjoy exercising in a group setting, others do not. Some people enjoy competitive games, others do not. Some individuals may enjoy a cognitive component to the exercise such as a word game, others may not. Some people may enjoy singing and dancing, others may not. What some people may find fun (e.g. dressing up, games etc) other people may find undignified. Think about factors such as preferences in music and be conscious of people’s histories and backgrounds. Try not to make assumptions about what they will like. Not all older people enjoy music from the war period. For example it may bring back bad memories. Always ask what people like - you may be surprised!
The exercises

Choices
The exercises must be tailored to each individual’s ability and preference. Some people will enjoy participating in a small exercise class or using an exercise DVD for example “Stay Active, Stay Steady”, produced by the NHS. For others fitting a few simple exercises into their daily activities will be a more suitable approach.

Fab five exercises
To help break sedentary behaviour and get older people moving more, here are five simple exercises to choose from to fit into their day. Aim to do these most days of the week. These can be done one at a time during different aspects of their day e.g. when dressing, when waiting on lunch. It is everyone’s/all care staff’s business to encourage physical activity and exercise to older people and convey a positive attitude towards the benefits of exercise.

Ankle loosener
- Sit forward in a chair or the side of your bed with your feet flat on the floor
- Dig your heel onto a spot just in front of you on the floor
- Then lift your leg up and point your toes downwards as far as you comfortably can on the same spot on the floor
- Repeat up to 10 times on each leg
- You may wish to begin with five repetitions and increase gradually
Shoulder circles
• Sitting forward in a chair or the side of your bed with your feet flat on the floor
• Shrug your shoulders up towards your ears, draw them backwards and then down and relax
• Repeat up to 10 times
• You may wish to begin with five repetitions and increase gradually
**Sit to stand**

- Shuffle your bottom forward to the front third of your chair
- Place your feet slightly back so that your knees are over your toes
- Place your hands on the chair arms (using your hands to push up if needed)
- Lean forwards and then stand up
- Hold onto your frame in front if required for balance and safety
- Step back to make sure you feel the chair behind your legs
- Reach your hands for the chair arms (if required)
- Slowly sit down, controlling the movement gently into the chair. Try to avoid bumping down onto your chair
- Repeat up to 10 times
- You may wish to begin with five repetitions and increase gradually
Alternative to sit to stand – knee extensions
If sit to stand is too difficult this exercise is an easier alternative
- Sit back in your chair with your back supported
- Straighten your leg as much as you can, keeping your foot off the floor
- Hold for five seconds and then lower slowly to the floor
- Repeat up to 10 times on both legs
- You may wish to begin with five repetitions and increase gradually
**Heel raises**

Stand tall with your feet hip width apart, holding a support

- Slowly lift your heels upwards
- Try to keep your weight over your big toe and second toe side of your foot
- Keep knees soft
- Hold for five seconds, gently lower your heels back down
- Try to raise your heels as high as you comfortably can
- Repeat up to 10 times
- You may wish to begin with five repetitions and increase gradually
- Gradually reduce your hands support to challenge your balance safely e.g. both hands, one hand, finger tips and then hands hovering above the support
Side step
- Stand tall holding onto support (if needed)
- Step your right foot out to the side, take your weight through that leg
- Bring your foot back to centre, keeping a small space between your feet
- Do the same to the other side
- Repeat up to five times each side
- You may wish to begin with fewer repetitions and increase gradually

Finally...

The purpose of this booklet was to provide some guidance when providing exercises for older people. Safety is obviously the first priority, however, with a common sense approach the benefits far outweigh the risks. Remember to make it enjoyable and fun! The benefits of exercise can be made well into your nineties and beyond. A few minutes of your time, support and encouragement with exercise throughout their day can go a long way and make a real difference to peoples lives. As the DVD shows, these simple exercises can be easily and quickly incorporated into an individual’s daily routine.

So, let’s get moving!
Appendix

A guide for chair based group exercise sessions
This appendix will focus on what exercises you may wish to include in a
group exercise session which is aligned to Lanarkshire’s Movers and Shakers
Chair Based Exercise Training (available from Lanarkshire Care Home Liaison
Service).

Remember that this is a guide for what exercises would be included in a
comprehensive exercise class. When working with an individual a personalised
approach is best.

When dealing with very frail individuals with poor exercise tolerance it is
essential to start with low intensity and duration. You may well have to modify
what you do with more emphasis on general recreation and wellness in the
first instance with a gentle warm up and cool down. Depending on how your
participants progress other components can be added over time.

The environment
Before you get started think about the environment you are using in terms of:

Seating
Ensure chairs are stable and supportive but do not restrict the participants
movement. Ensure participants can put their feet on the floor. Ensure all the
participants can see you. You may wish to be either across from someone who
requires more support or by their side, depending on their needs.

Lighting
Ensure the area is well lit so the participants can see what you are doing.

Temperature
Ensure the environment is not too hot or too cold.

Noise/distractions
Ensure these are kept to a minimum, especially if your participants have any
sensory problems or cognitive impairment. Tell the rest of the staff what you
are doing so not to disturb. You may even want to put a sign up.
Equipment/music
Ensure everything you require is close at hand. You will lose momentum if you stop to go and get something.

Think about the music you will use (if any). It needs to be suitable to achieve the desired outcome (e.g. reminiscence, relaxation, stimulation).

Refreshments
Many people do not drink as much fluids as they should. This is an ideal opportunity to encourage your participants to drink more. After the exercises is a good opportunity to have refreshments and give/take feedback about the activity. This approach will also encourage people to view the activity as social.

Clothing/footwear
Check that everyone is wearing loose comfortable clothing and well-fitting footwear to maintain their freedom of movement, comfort and dignity.

Healthcare needs
Make sure people’s health and personal care needs such as going to the toilet, medication, nutrition and hydration have been met before starting the activity. This preparation will mean it is more likely that people will have a positive experience and you will be less likely to be interrupted.

Consent
Ensure everyone who is there wants to be there.

Explanation
Always start with an explanation of what is about to take place. Always reassure the participants that everyone is different and that they should only do what they can. Advise them they should feel no pain or discomfort and if they do they should let you know.

Getting assistance
You should discuss with your colleagues in advance the procedure if you require assistance during the activity. One of your participants may wish to leave or may wish to visit the bathroom. You do not want to lose the momentum of what you are doing so would want another member of staff to assist the participant if required. You would also wish to discuss what the protocol would be if a participant became unwell.
Exercise class plan

- **Warm up** – posture in chair
- **Lower limb** – ankle loosener, knee extensions, marching on spot (caution if recent hip replacement), hip in and out
- **Upper limb** – finger flexion/extension, wrist circles, arms swings, shoulder circles
- **Trunk** – thoracic twist/non jerky, side bends *must be done carefully*
- **Stretches** – chest stretch, back of thigh, calf
- **Aerobic** – activities such as marching, small leg kicks, clapping, swimming actions. Start small with small movements and just either legs or arms on their own. Exercise can be progressed by making bigger movements and moving arms and legs together
- **Strength, balance and endurance** – finger/hands lifts, hip wiggles – back and forth in chair, chair push-ups, knee extensions, sit to stand practice if able (ensure safety with walking aid or supervision as required), reaching exercises in standing if able, knee bends, heel raises
- **Cool down** – as for warm up

Suggestions for props and games
The use of props and games are not essential to facilitate exercise in older adults, however, they can be useful to make exercise more fun. They can also be useful if participants have difficulty following the instructions of exercises as the movements can be encouraged whilst performing more automatic movements such as throwing and catching.

- Use of balloons, soft handballs, beach balls, bean-bags, gym/pilates balls
- Parachute
- Target games
- Skittles and carpet bowls
- Use of props e.g. hats, scarves, flags
- Musical instruments
- Word and number games e.g. alphabet games
- Sing-a-long
- Use of themes can be a good way of making exercise more fun e.g.
  - **The decades** – 20’s, 30’s
  - **Music genres** – jazz, country, romantic
  - **Countries** – Scottish, Irish
  - **High days and holidays** – beach theme, Easter, Burn’s night, Christmas
Important things to remember

• Watch for participants holding their breath. Apply the talk test – make sure individuals can hold a conversation
• Movement should be smooth and rhythmical, never jerky
• Keep arm movements low at first to prevent shoulder strain
• Never hold one position for more than five or six seconds
• Muscles may feel comfortably tired/stretched but never painful
• Always build up any exercise regime gradually, especially when dealing with frail older participants
• Always observe for signs of distress/discomfort e.g. pain, extreme pallor, extreme sweating, extreme or unfamiliar shortness of breath, dizziness, nausea, chest pain
• Discourage moves such as head circles and neck extension movements
• If in doubt seek advice

And afterwards…
As mentioned earlier this is an ideal opportunity to provide refreshments. This also provides you with an opportunity to ask the participants how they found the session. You can also give reassurance that it is okay to feel a little post exercise ache in their muscles if they are unaccustomed to exercise but that they should not feel pain.

Documentation
If you work in a care setting, ensure appropriate documentation is completed detailing; what you did, why you did it, what the outcome was (i.e. how they managed and if they enjoyed it okay) and your intentions for the future (if you will do it again, not do it again or make some changes).