

Healthy Ageing Research Group, University of Manchester – Written evidence (NPS0064)

The following evidence summary responds to the overarching context of the inquiry whilst also specifically addressing questions related to increasing participation of older people.

Executive Summary

- There is robust evidence that healthy lifestyle behaviours such as regular physical activity mitigates many long term conditions (diabetes, heart disease, respiratory disease), even when positive changes are adopted in mid and/or later life. For activity some is good, more is better (see [UK CMOs' Guidelines 2019](#)).
- Physical activity has been shown to increase wellbeing and can help older adults to maintain social connectivity and avoid loneliness. Evidence suggests using a holistic approach of combining methods to increase physical activity through education and using health behaviour change theory.
- There are a number of factors that influence an older person's participation in community based exercise classes that are important to consider when setting up and establishing new programmes (See [Hawley-Hague et al, 2013](#))
- Messages should be "gain framed", that is they should emphasise the positive effects of being more active (e.g. feeling and looking better, maintaining independence) (see [Yardley et al 2006](#))
- Involving older adults and those who care for them, at every stage of programme and session development will ensure a better understanding of motivations and barriers to physical activity – co-creation and co-production are key to engagement; older people as assets (see [Greater Manchester Active Ageing Report, 2019](#))
- When promoting community exercise programmes, it is important to think about how they will be perceived by older people, using attractive and informative promotional materials that show local programmes are: easily accessible in terms of transport and connections; affordable; welcoming; sociable; and that information about the class is provided before first time attendance (see [Boulton et al, 2018](#))
- Linking social activities to the classes can provide a strong motivation for people to attend, as can linking other activities, such as visiting speakers, trips and refreshments before or after the session. When classes are provided as a follow-on from rehabilitation, it is useful if the same venue is used to allow groups to stay together. This is particularly helpful if classes are delivered to participants in local areas so that access is easier and venue familiarity is established (see [Hawley-Hague et al 2017](#)).
- Interventions delivered digitally (mHealth or eHealth) may be effective in increasing physical activity in older adults in the short term. However components of successful interventions include self-monitoring, incorporation of theory and behaviour change techniques, and professional support (see [McGarrigle et al. 2020](#)).

- We highlight three technological innovations to promote healthy ageing, a Smartphone *app* for activity promotion, exergaming for fall prevention, and a tablet based *app* for strength and balance training.
- Healthier older people will continue to be engaged fully in society. Successful ageing could be a major benefit for the UK, not the negativity framed burden ageing is all too often portrayed to be.
- Ageism in sport needs also be included in the list (question 6), not least as one of the protected characteristics, but to also highlight the importance of inclusive representation in all our sports, leisure and recreational facilities – opportunities for apprenticeships for older adults and re-training/entering sport and recreation employment opportunities can only benefit the sector.

Encouraging active lifestyles with older people:

- There is robust evidence that healthy lifestyle behaviours such as regular physical activity mitigates many long term conditions (diabetes, heart disease, respiratory disease), even when positive changes are adopted in mid and/or later life. For activity some is good, more is better (see [UK CMOs' Guidelines 2019](#)).
- Engaging in physical activity, to include muscle strengthening, bone health and balance activities at least twice per week from mid-life can reduce falls risk and improve health outcomes. Whilst the evidence is strong for strength and balance interventions, there is a lack of acknowledgement of its critical importance in mid-later life (see [UK CMOs' Guidelines 2019](#)).
- The challenge lies in finding innovative, engaging ways to assist the increasingly large population of older adults to stay active, healthy, happy and independent.
- Physical activity has been shown to increase wellbeing and can help older adults to maintain social connectivity and avoid loneliness. Evidence suggests using a holistic approach of combining methods to increase physical activity through education and using health behaviour change theory.
- Messages should be "gain framed", that is they should emphasise the positive effects of being more active (e.g. feeling and looking better, maintaining independence) rather than focusing on risk to be avoided (e.g. falls or injuries) (see e.g. [Yardley et al 2006](#))
- Older people's participation in community based exercise classes is influenced by a number of factors which are important to consider when setting up and establishing new programmes: housing, education, mental wellbeing, group cohesion, attitudes and instructor personality are all important predictors of participation (See [Hawley-Hague et al, 2013](#))
- When promoting community exercise programmes, it is important to consider messaging - using attractive and informative promotional materials that show local programmes are: easily accessible in terms of transport and connections; affordable; welcoming; sociable; and that information about the class is provided before first time attendance (see [Boulton et al, 2018](#))
- Linking social activities to the classes can provide a strong motivation for people to attend, as can linking other activities, such as visiting speakers, trips and refreshments before or after the session. When classes are provided as a follow-on from rehabilitation, it is useful if the same venue

is used to allow groups to stay together. This is particularly helpful if classes are delivered to participants in local areas so that access is easier and venue familiarity is established (see [Hawley-Hague et al 2017](#)).

- Evidence based strength and balance programmes, delivered in community settings are an effective way to engage older people in activity, improving quality of life, but there remains to be an implementation gap across England (see; [Raising the bar on strength and balance, 2019](#))

Innovative methods to engage older people in evidence based physical activity – examples of our work:

Use of technology and gamification:

- Major gains are to be found in ensuring the evidence that already exists on the benefits of specific exercises, activity promotion and avoidance of being sedentary are implemented. There is emerging evidence that technologies can be used to assist implementation and promote healthy active lifestyles.
- Interventions delivered via mHealth or eHealth may be effective in increasing physical activity in older adults in the short term. However components of successful interventions include self-monitoring, incorporation of theory and behaviour change techniques and professional support (see [McGarrigle et al. 2020](#)).
- We have successfully demonstrated the use of interactive eHealth/mHealth *applications* underpinned by behaviour change theory and providing evidence based interventions. ([Boulton et al 2019](#)). Such evidence based apps could provide opportunity for scaling up of population health interventions promoting healthy ageing, but need to be appropriate for the population being targeted.
- In a randomised controlled trial we have demonstrated the benefits of exergaming for older people ([Stanmore et al 2019](#)). This exergame is a tele-rehabilitation system that has gamified evidence based physiotherapy exercises such as FaME ([Skelton et al 2005](#)). Exergaming significantly reduced falls and improved balance, pain and fear of falling. In addition older people enjoyed participating in the exercise sessions and showed higher than expected adherence to the programme. This technology is now in use in rehabilitation wards and community rehabilitation teams in Greater Manchester, and used by NHS England as part of the NHS at 70 campaign (see [here](#)).
- We have also developed smartphone and tablet-based technologies for older adults to assist them with maintaining optimum levels of exercise, nutrition, hydration and bone health for example *Keep on Keep up* (see [here](#) and for the [app see here](#)), motivational apps (see [here](#)) and rehabilitation exercise teleconferencing (see [here](#)).
- There is a risk that technologies can exacerbate the health inequalities of ageing unless this issue is carefully taken into consideration in their design and roll out (See [OPFPRU website – Digital Inequalities](#)). Specifically, poorer and more deprived older people are less likely to have access to expensive technologies, including Smartphones and tablets, which may be required to access services, or to promote health. Materials may need translating to other languages for those who English is a second

language, and accessible formats, including easy read need to be considered.

- Older adults want to remain independent in their communities and remain as active as possible they age. Interventions and technologies that support these objectives from smart homes, through smart watches and *apps* on hand held devices, to assistive robotics, are important and have potential market among older adults.

Addressing ageism and economic advantages of inclusivity:

- Ageism in sport needs also be included in the list provided at question 6, not least as one of the protected characteristics but to also highlight the importance of inclusive representation in all our sports, leisure and recreational facilities.
- Policies should ensure that social and health inequalities are not exacerbated by ageing, nor by the technological innovations related to ageing. All too often ageing is portrayed in terms of burden on society rather than recognising the benefits that may be accrued from successful ageing. Whilst recognising that the ageing of our population provides challenges for UK, such negative stereotyping should be combatted, and the opportunities of fulfilling, longer, healthy lives embraced.
- From an economic as well as a quality-of-life perspective, supporting older adults to remain at home and to age "in place" can provide numerous advantages.
- Compression of ill health implies that older people could play fully contributory and fulfilling roles in society for longer, ensuring expertise gained over many years of experience is not lost.
- Large numbers of older people provide unpaid caregiving for their loved ones and friends, older people play an important role in many voluntary and charitable services. Supporting older carers and enabling access to opportunities to remain active should be an important policy priority.

The Authors

Healthy Ageing Research Group

The [Healthy Ageing Research Group](#) ([HARG](#)) at the University of Manchester is a multi-disciplinary group conducting research aimed at promoting healthy and active ageing. Our work covers the range of ages considered for mid-life (40-60) and older people (including younger older people e.g. 55+/retirement age, and the oldest old).

HARG's high quality population health research adopts a participatory mixed methods approaches and uses quantitative, qualitative and evidence synthesis review techniques and has an emphasis on healthy and active ageing so to promote active participation in society¹. We develop research capacity in the topic, ensure our work has direct relevance to policy and practice at a local, national and international level. We engage with and involve the public, patients and stakeholders in our research activities, amplifying voices through [consultation, co-creation](#) and implementation of all our work.

¹ Methodologies include randomised controlled trials, cluster randomised controlled trials, quasi-experimental qualitative, quantitative and evidence synthesis.

Areas of expertise include: falls and falls prevention, activity and exercise promotion (strength and balance), nutrition and diet, development and evaluation of novel mHealth and eHealth technologies, clinical decision making support tools, health behaviour change and health literacy, musculoskeletal conditions, mixed-methods research methodology, critical appraisal and evidence synthesis, and user-involvement in design of technologies to support healthy ageing.

Healthy Ageing Research Group Affiliations:

Colleagues within the HARG work within the NIHR [Policy Research Unit for Older People and Frailty](#), as well as theme leads for Healthy Ageing work programme within the [Greater Manchester Applied Research Collaboration](#). We are also closely linked to the [Manchester Institute for Collaborative Research on Ageing](#), based at the University of Manchester. For more information on specific covid-19 related outputs see individual website and webpages, or get in touch and we are happy to signpost you.

*Professor Chris Todd & Jane McDermott on behalf of:
Healthy Ageing Research Group
School of Health Sciences
University of Manchester*

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