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Protecting and improving the nation's health

NFPCG Webinar on Overcoming deconditioning and falls prevention during the COVID-19 pandemic

23rd October 2020, 11.00-12.30

The National Falls Prevention Coordination Group (NFPCG),
is hosted by Public Health England

Housekeeping

- Please **stay muted and turn your cameras off** during this webinar.
- Please **use the chat function to ask questions** for the Q&A (**we will not be using the ‘hands up’ feature or ‘unmute’**)
- If you have a question for one of our speakers, please **clarify** that when writing your questions in the chat box
- To make this webinar available to those that are unable to join us, **today’s webinar will be recorded**. The recording, with both audio and visual will be shared next week.
- We would really appreciate your feedback on this webinar. **Please provide any brief comments in the Chatbox** (eg. WWW, what could we improve?)

Agenda

11:00 – 11:10	Welcome, introductions, housekeeping, introduction to the NFPCG– (10 mins) <ul style="list-style-type: none">• Sue Dewhirst (Chair) – Chair of NFPCG, Population Health services Manager, Healthcare Public Health, Public Health England
11:10 – 11.55	Presenters – (10 mins each) <ul style="list-style-type: none">• Daniel MacIntyre-Public Health Consultant, West Sussex County Council• Dawn Skelton, Professor of Ageing and Health, Glasgow Caledonian University• Chris Todd, Professor of Primary Care & Community Health, University of Manchester• Cathryn James, Association of Ambulance Chief Executives (AACE)
11.55-12.00	Followed by 5 minutes quick comfort break / stretch
12.00 – 12.25	<ul style="list-style-type: none">• Panel discussion, led by Dr Dawne Garrett, and Q&A – (25 mins)
12.25-12.30	<ul style="list-style-type: none">• Closing remarks. Close by latest 12.30.

Chair - Sue Dewhirst



Sue is the Chair of the National Falls Prevention Coordination Group (NFPCG), Population Health Services Manager, Healthcare Public Health (HCPH), Public Health England

Sue joined the NFPCG in April 2019. She coordinates the group, facilitates task and finish groups, and leads and supports the development of resources, briefings and publications. Sue worked previously as Programme Manager in PHE's national Older Adults team and in Health Improvement in PHE South East regional office, working on Healthy ageing, Dementia and CVD prevention.

Before joining PHE Sue was a research fellow in the Academic Unit of Primary Care and Population Sciences at University of Southampton and became a Public Health Practitioner, registered with UKPHR.

The speakers:(1) Daniel MacIntyre



Daniel MacIntyre, Consultant in Public Health West Sussex County Council

Daniel has worked at West Sussex County Council as a Consultant in Public Health since 2018. He leads on older people and mental health and is currently joint Consultant lead for the West Sussex COVID-19 response.

Between 2014 and 2018 Daniel worked in the Healthcare Public Health Team at Public Health England where he was the organisation's policy / technical lead for falls and fracture prevention.

At PHE Daniel was involved in setting up the National Falls Prevention Coordination Group and Chaired the group from 2016 to 2020. During this time he worked with group members on drafting the 'Falls and fracture consensus statement'.

The speakers:(2) Dawn Skelton



Professor Dawn Skelton, Glasgow Caledonian University

Professor Dawn Skelton, an exercise physiologist, is Professor in Ageing and Health at Glasgow Caledonian University and a member of the National Falls Prevention Coordination Group (NFPCG).

Dawn chaired the Royal Osteoporosis Society's Statement on Exercise and Osteoporosis (2018) and the Older People panel for the UK's update of the Physical Activity for Health Guidelines (2019). She is currently Chair of the British Geriatrics Society Rehabilitation Group. Her research focuses on implementation of falls prevention exercise, reduction of sedentary behaviour in older adults and she is a renowned speaker on these topics.

The speakers:(3) Chris Todd



Professor Chris Todd, Professor of Primary Care and Community Health, University of Manchester

Chris leads the Healthy Ageing Research Group at the University of Manchester, a research group comprising some 38 staff and postgraduates. He is Director of the National Institute for Health Research (NIHR) Policy Research Unit Older People and Frailty, and Lead for Healthy Ageing, NIHR Applied Research Collaboration-Greater Manchester and NIHR Senior Investigator and Fellow of the Royal College of Physicians of Edinburgh. Chris's work is broadly Health Services Research related to fall prevention, frailty and activity promotion amongst older people, including the use of technologies. Chris led the EC funded projects: ProFaNE Prevention of Falls Network Europe; and ProFouND Prevention of Falls Network for Dissemination.

Citation and publication lists: [publons](#) | [Google Scholar](#) | [Orcid](#) | [Scopus](#)
<https://www.research.manchester.ac.uk/portal/chris.todd.html>
<http://www.opfpru.nihr.ac.uk>

The speakers:(4) Cathryn James



Cathryn James, Clinical Support to the Association of Ambulance Chief Executives (AACE) and Clinical Pathways Manager, Yorkshire Ambulance Service (YAS)

Cathryn started working for Yorkshire Ambulance Service (YAS) in 1981, originally as an ambulance cadet and becoming a qualified Paramedic in 1987. She is seconded from YAS to AACE four days per week, clinically supporting the work of AACE, the National Ambulance Medical Directors Group (NASMeD) and the ongoing development of the UK Ambulance Services Clinical Practice Guidelines (JRCALC).

Panel Member: Dawne Garrett



Dr Dawne Garrett, Professional Lead - Older people and dementia care- Royal College of Nursing (RCN)

Dawne has committed her nursing career to working with older people through a variety of clinical, academic and entrepreneurial roles. Her experience has spanned acute hospital care, community nursing, integrated services and academic roles. Dawne also undertook a variety of early advanced practice and lecturer practitioner posts working with academic institutions including the University of Hull and Bournemouth University developing clinical practice, lecturing students and undertaking research. Dawne completed a PhD as a Florence Nightingale Scholar, researching older people's experiences of sexual intimacy. She has been the United Kingdom professional lead older people and dementia care for the Royal College of Nursing for the last three years and maintains a clinical role and publishes widely.

Panel Member: Julie Windsor



Julie Windsor, NHS England & Improvement National Patient Safety Team.

Job title: Patient Safety Clinical Lead – Medical Specialties/Older People

Roles & responsibilities: Provide specialist clinical advice and safety insight. National (& international) policy/ clinical interventions & guidance. Identify, engage stakeholders and develop national safety alerts/ responses. National audits. Publications. Briefings. Speaking engagements.

Skills: Registered General Nurse. MSc Gerontological Practice.

Co-designer of FallSafe and CareFall projects, member of the NICE 161 (Falls) Clinical Guideline Development Group. Member of the National Falls and Fracture Audit Programme (Inpatient Falls) and National Falls Prevention Coordination Group. Clinical advisor to several falls studies and a clinical reviewer for the National Institute for Health Research. My particular research interest is the built environment and patient safety technologies.

About me: I live on the south coast, drive a rusty camper van and the besotted owner of a Cockerpoo called Betty.

Panel Member: Julie Whitney



Julie Whitney, Consultant Practitioner in Gerontology & Gerontology RDU Lead, NIHR CRN Ageing Lead (South London), Kings College Hospital

Julie is a lecturer in the Academic Department of Physiotherapy at King's College London and a consultant practitioner at King's College Hospital. Clinically, she is involved in assessment of older people presenting to the emergency department as part of the "frailty pathway". Her research interests include fall risk assessment, the effects of ageing and associated conditions on mobility as well as evaluating physical activity and exercise interventions. She teaches on the BSc and MSc physiotherapy courses at King's College London. She is also the clinical lead for the National Audit of Inpatient Falls and the South London CRN lead for Ageing.



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Sue Dewhirst

Population Health Services Manager,
Healthcare Public Health, Public Health England

NFPCG

National Falls Prevention Coordination Group (NFPCG)

- Set up in 2016
- Over 35 member organisations
- Brings together representatives from national organisations, NHSE/ I, academia, 3rd sector
- Hosted by Public Health England
- Main group meets 3 times a year, 'task and finish' groups focus on specific topics
- Provides leadership, enables dissemination of good practice, supports data collection, informs skills development, influences policy, facilitates task and finish groups

Taking action....

The National Falls Prevention Coordination Group published the **Falls and fracture consensus statement and resource pack (2017)**

This advocates a whole system approach to falls and fractures prevention:

Link

<https://www.gov.uk/government/publications/falls-and-fractures-consensus-statement>

More recently:

The NFPCG launched a survey to evaluate the effect of the COVID-19 pandemic on local falls services (launched 29th September 2020)

[Link to NFPCG survey](#)

COVID-19 new resources

- 1) **Blog**: Are you ready for the Autumn and Winter? Key questions for people providing and planning local falls prevention services during the time of COVID-19.
- 2) **Later Life training**-Promoting physical activity amongst older people: 10-minute online movement classes, three times a day. Also available as [videos](#))
- 3) **Supporting safer home environments**: A Home Hazards checklist, available via the [British Geriatrics Society website COVID-19 resources page](#). and at: <https://www.westsussex.gov.uk/media/14191/home-environment-checklist-public.pdf>
- 4) **Falls FAQ poster** and NHS ambulance trusts **Falls Response Governance Framework**
- 5) **All Our Health (AOH)- Falls and Fractures e-learning**, March 2020, on the e-Learning for Health Hub



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Daniel MacIntyre

Consultant in Public Health
West Sussex County Council

COVID-19 and falls – context and impact

- Impact on services
- Impact on older people
- Challenges and opportunities

More info here: <https://www.bgs.org.uk/blog/are-you-ready-for-the-autumn-and-winter>

COVID-19 – impact on services

- NHS focus on building COVID-19 response capacity
- NHS Community Trusts – provide falls care for high risk patients only
- Group exercise no longer possible
- Some remote support provided
- Services slowly start to resume June
- Indoor sports resume end July, but older people still shielding /social distancing
- Need for increased infection prevention and control measures

Impact on older people

- Service provision ceased for older people under care of falls prevention services
- Services unavailable for older people newly needing services
- No leisure service / group exercise provision for older people
- Deconditioning highly likely for particular cohorts e.g. those shielding

Falls emergency admissions

Table 1: Number of emergency hospital admissions for falls among persons aged 65+ in West Sussex by month of admission date (2015 to 2019)

	2015	2016	2017	2018	2019	2020
Jan	365	425	375	405	370	455
Feb	330	350	320	370	400	460
Mar	330	350	355	390	430	360
Apr	360	380	385	400	460	350
May	355	370	410	445	445	430
Jun	325	345	390	455	435	400
Jul	365	395	415	435	430	400
Aug	365	415	405	460	480	-
Sep	365	370	385	430	430	-
Oct	365	390	400	400	495	-
Nov	360	380	410	410	480	-
Dec	430	395	435	465	470	-
	4,315	4,560	4,680	5,065	5,325	-

Accessing services

Healthwatch in Sussex and Sussex NHS Commissioners. 'Accessing health and care services – findings during the Coronavirus pandemic'.

37.4% [806] chose not to make an appointment during the pandemic despite having a need to access health, social or emotional care. From all those that delayed their appointment, the top three reasons were:

- 'Felt that my condition wasn't serious enough' – 41.5% [396]
- 'Didn't want to burden the NHS' – 37.7% [360]
- 'Thought I'd wait until the pandemic was over' – 26.7% [255].

Challenges and opportunities

Challenges

- Meeting increased demand
- Reduced service capacity due to infection prevention and control / social distancing requirements
- Increasing population level physical activity
- Remote therapy provision and physical activity promotion

Opportunity

- Remote therapy provision and physical activity promotion – scale and pace



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Dawn Skelton



Professor Dawn Skelton
Professor of Ageing & Health
Glasgow Caledonian University
@GCUResearch

Declaration of Interest: Director of Later Life Training,
not for profit training organisation @LaterLifeTrain

Strength and balance for falls prevention (primary and secondary)



	All fallers (Odds Ratio)	Recurrent Fallers (Odds Ratio)
History of Falls	2.8	3.5
Gait Problems	2.1	2.2
Walking Aids Use	2.2	3.1
Vertigo	1.8	2.3
Parkinson's Disease	2.7	2.8
Antiepileptic Drug Use	1.9	2.7
Physical Disability	1.6	2.4
Disability in Instrumental Activities in Daily Life	1.5	2.0
Fear of Falling	1.6	2.5

Deandrea 2010

Supporting Active Ageing



Risk of falls and recurrent falls **35-40% lower** in those reporting **30+ minutes** of moderate intensity physical activity **per day** compared to those doing less

Focus on balance and strength

Focus on reducing sedentary behaviour and interrupting long periods of sitting

UK Chief Medical Officers' Physical Activity Guidelines 2019

Physical activity for adults and older adults

Benefits health	Reduces your chance of	Type II Diabetes	-40%
Improves sleep		Cardiovascular disease	-35%
Maintains healthy weight		Falls, depression etc.	-30%
Manages stress		Joint and back pain	-25%
Improves quality of life		Cancers (colon and breast)	-20%

Some is good, more is better Make a start today: it's never too late Every minute counts

Be active

at least **150** minutes moderate intensity per week
Increased breathing able to talk

OR

at least **75** minutes vigorous intensity per week
breathing fast difficulty talking

Build strength
to keep muscles, bones and joints strong
on at least **2** days a week

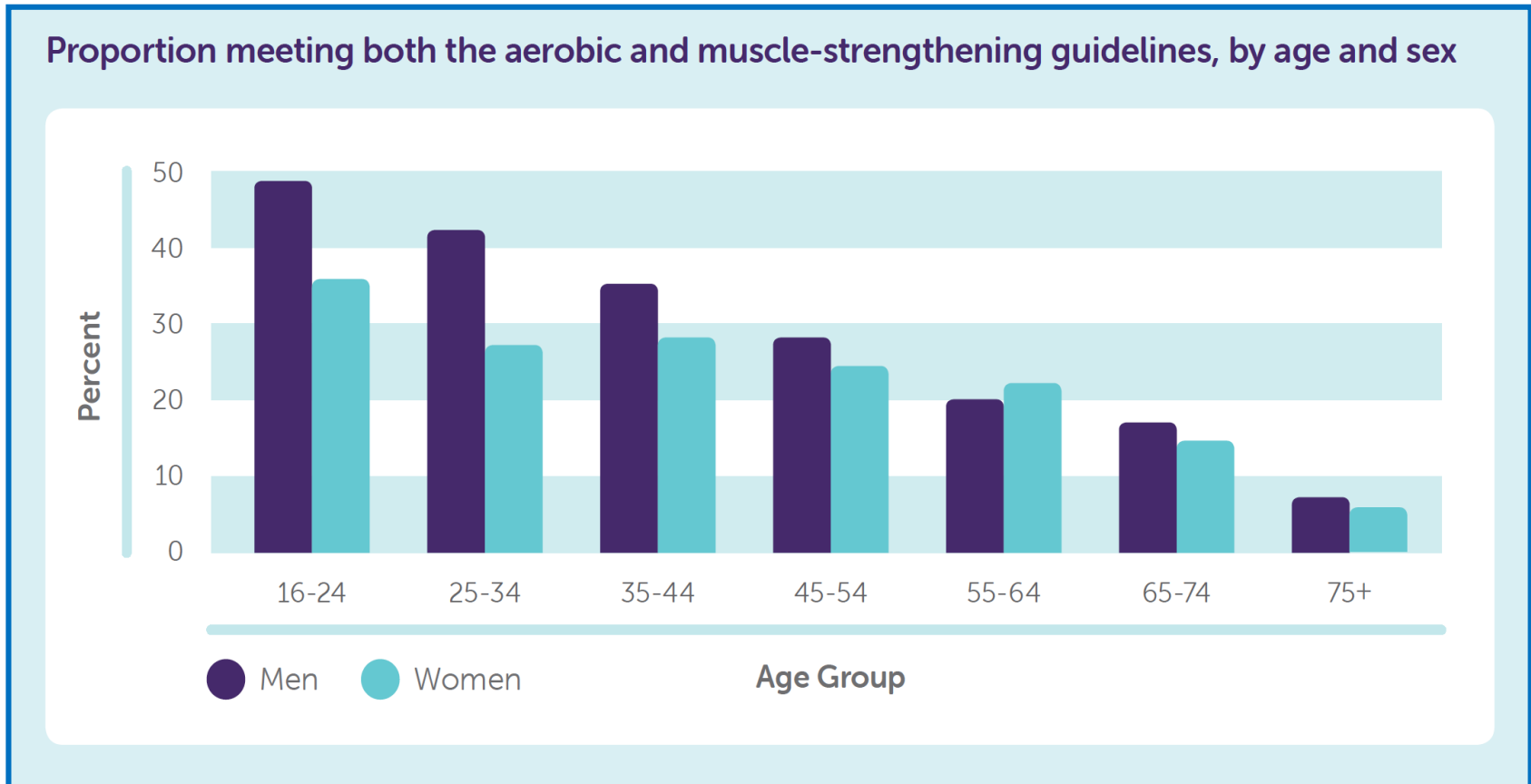
Minimise sedentary time
Break up periods of inactivity

Improve balance
For older adults, to reduce the chance of frailty and falls
2 days a week

Participation remains low



Centre for Ageing Better (2019); Strain 2017



Sport England – Older people, people with LTCs, those on low income and those shielding reported less activity than prior to Covid-19. At Wk 5 only 19% of all adults had performed any strengthening activities.

Sport England- <https://indd.adobe.com/view/793b48d5-bbcd-4de3-a50f-11d241a506b3>

Covid-19 pandemic & inactivity



On March 23rd the UK Government issued a 'Stay at home order' to everyone. Older people shielded and even as some restrictions have been lifted, few activity opportunities available

Activity restriction results in increased fall risk by contributing to deconditioning and functional loss (revolving door!)

We now face a rehabilitation pandemic

Rehabilitation will be needed for those who contracted Covid-19, those who have become deconditioned as a result of movement restrictions, social isolation and inability to access healthcare for pre-existing or new non-Covid-19 illnesses

Most falls services still not up and running with an increasing waiting list

*<https://www.gov.scot/publications/covid-shielding/>
De Biase, Cook, Skelton, Witham, Ten Hove. Age Ageing 2020*

What's been happening to their (our!) bodies?

- Reduced range of motion and stiffness
- Synovial atrophy
- Fibrofatty connective tissue infiltration
- More symptoms from arthritis
- Bone loss / muscle loss
- Poor venous return
- Increased postural hypotension
- Reduced kinesthetic awareness
- Depression
- Loss of control
- Loss of motivation
- Feeling of helplessness
- Fear of falling



30 weeks of reduced physical and social activity!
Falls programmes halted/altered dramatically
Many new 'fallers' ahead

Secondary prevention – evidence base



Multifactorial assessment with multidisciplinary intervention:

23% reduction in rate at which people fall

No difference in the number of people who fall, hospital admissions or medical attention

Possible reduction in fall related fractures

Most evidence for home hazard assessment and behavioural interventions, medication review and action, **group and home-based strength and balance exercise**

Exercise interventions alone were as effective as multifactorial interventions

Hopewell. Cochrane Library 2018; Gillespie. Cochrane Library 2012

Exercise Interventions for reducing falls



Exercise

Reduces rate of falls by 23%

Reduces the number of people who fall by 15%

Reduces fall related fractures by 27% *

Reduces falls requiring medical attention by 39% *

But not all exercise is the same!

* Evidence not as robust

Key elements of effective exercise:

- Challenging balance
- Progressive strength training
- Functional movements
- Dose of 50+ hours
- 3 x per week

Sherrington. Cochrane Library 2019; Sherrington BJSM 2017

Exercise Interventions for reducing falls



Types of exercise

Balance & Functional Exercises

- reduces rate of falls by 24%
- number of people who fall by 13%

Multiple types of exercise (Balance, Functional & resistance exercise)

- reduces rate of falls by 35%
- number of people who fall by 22%

Tai Chi *

- may reduce rate of falls by 19%
- and number of people experiencing falls by 20%

Programmes that are primarily based on resistance exercise, dance or walking have uncertain effects

* Evidence not as robust

Sherrington. Cochrane Library 2019

Cost effective interventions in the UK



Return on Investment

Exercise programmes (50 hrs+ > 6 mths, 3 x p/w)

- Falls Management Exercise (FaME/Postural Stability Instructor Led)
- Otago Exercise Programme (OEP) (*Stage 4 of Up & About Pathway*)
- Tai Chi
- Fidelity to original effective components (dose, frequency, intensity, challenge, resistance, right population)

Quality Markers

- Details of 7 quality markers for strength and balance exercise, suitable for use by local areas as criteria to help them carry out self-audits

Public Health England 2017, 2018, 2019



[Falls and fracture consensus statement: supporting commissioning for prevention](#)

Ref: PHE publications gateway number: 2016588
PDF, 890KB, 22 pages

This file may not be suitable for users of assistive technology. [Request an accessible format.](#)



[Falls and fracture consensus statement: resource pack](#)

Ref: PHE publications gateway number 2017193
PDF, 417KB, 34 pages

This file may not be suitable for users of assistive technology. [Request an accessible format.](#)



[Strength and balance quality markers: supporting improvement through audit](#)

Ref: PHE publications gateway number: GW-531
PDF, 620KB, 19 pages

This file may not be suitable for users of assistive technology.

► [Request an accessible format.](#)

Otago

Home based programme with support visits and calls over 1 year¹

RCTs in > 65s living at home, receiving home care and recently discharged from hospital ¹⁻⁵

Most effective in over 80s and frailer ¹⁻⁵

Group based improves balance and strength faster than home-based ⁶

Reduces falls rate and falls risk (home, > 6 months)

Improves physical function and confidence

Reduces fear of falling ⁶

Improves cognitive function ⁷

No effect on habitual physical activity, potential decrease ⁸⁻¹⁰

Cost effective if delivered with fidelity ¹¹

Lack of effectiveness if poor adherence/no ankle weights or balance progression ⁸



¹Campbell 1997,

²Robertson 2001;

³Campbell 2005;

⁴Sherrington 2019,

⁵Bjerk Age Ageing

2019, ⁶Kyrdalen

2013, ⁷Liu Ambrose

2008, ⁸Illiffe. HTA

2014; ⁹Adams. BMC

Geriat 2019;

¹⁰Waterman Trials

2016; ¹¹Public Health

England 2017/8;

FaME

RCTs in frequent falling women >60/65yrs^{1,2,3}

RCT in sedentary >65s from GP practices⁴

Feasibility in visual impairment⁵

Evaluations in practice⁶ and Implementation Study >65s self/GP referral⁷

Reduces falls rate and falls risk (group + home, > 6 months)

Increases habitual physical activity (105-170 mins/wk)

Improves physical function and confidence

Reduces fear of falling³

Regains the skill to get up from the floor

Cost effective if delivered with fidelity^{8,9}



<http://arc-em.nihr.ac.uk/clahr-store/falls-management-exercise-fame-implementation-toolkit>

¹ Skelton. *Age Ageing* 2005;

² Skelton. *JFSF* 2019; ³ Yeung.

PHCR&D 2015; ⁴ Iliffe. *HTA*

2014; ⁵ Adams. *BMC Geriat*

2019; ⁶ Hedley. *PTP* 2010;

⁷ Carpenter. *Inj Prev* 2018;

⁸ Public Health England

2017/8; ⁹ Gateshead OP

Assembly 2017

Primary prevention – improving strength and balance



Not all types of physical activity impact on strength and balance (walking and cycling are not the best activities!)

The ‘actives’ can take part in activities that will help strength and balance

In those not achieving physical activity guidelines and at high risk of a fall (those ‘in transition’ or ‘frailer’) these activities are not achievable and will not reduce future falls risk. A different approach is needed

Type of sport, physical activity or exercise	Improvement in muscle function	Improvement in bone health	Improvement in balance
Running	★	★★	★
Resistance Training	★★★	★★★	★★
Aerobics, circuit training	★★★	★★★	★★
Ball Games	★★	★★★	★★★
Racquet Sports	★★	★★★	★★★
Yoga, Tai Chi	★	★	★
Dance	★	★★	★
Walking	★	★	☆
Nordic Walking	★★	①	★★
Cycling	★	★	★

★★★ Strong effect ★★ Medium effect ★ Low effect ☆ No effect ① Not known

Table 2: Types of activities that can help maintain or improve aerobic capacity, strength, balance and bone health and contribute to meeting the physical activity guidelines (8)

UK Chief Medical Officers' Physical Activity Guidelines 2019; Skelton & Mavroei, JFSF 2019

Encouraging physical literacy and falls self efficacy



Introduction to Falls >

Falls Assessment >

Exercise Centre >

Advice and
Information >



My Action
Plan



Sedentary behaviour associated with reduced muscle strength, reduced bone density and increased falls and frailty.

Breaking long periods of sitting maintains/improves physical function.

Copeland 2017; Harvey 2019; Chastin 2014; Harvey 2018

Why does sit less/move more help?



Those who break up their sitting time more (even if sit for similar total time) have:

- Better physical function (they do more sit to stands in a day!)¹
- Lower frailty levels (independent of MVPA and total sedentary time)²

Increased light physical activity (LIPA) is associated with:

- lower risk of obesity, CVD, cancer and all-cause mortality³
- better lipid and glucose metabolism⁴
- reduction in unplanned hospital admissions and future prescriptions for health conditions⁵ and improved bone health⁶

¹Harvey et al. *JFSF* 2018; ²Kehler. *Ex Gerontol.* 2018; ³La Monte *JAGS* 2018; ⁴Füzéki. *Sports Med* 2017; ⁵Simmonds. *Plos ONE* 2014; ⁶Onambele-Pearson. *Front. Physiol* 2019

Make Movement your Mission

- 23rd March – with 1000+ members (now 3000+), 3 x daily LIVE movement snacks
- Each day at 8am, 12 noon and 4pm - 10-15 minutes
 - 8am – circulation boosts & mobilisers
 - Noon – warm up, functional strength and balance
 - 4pm – warm up, sway/coordination and stretches
- 23rd September – MMYM reaches 6 month anniversary
- 01st October – celebration event for International Day of the Older Person; hourly movement snacks from 8am-4pm

Make Movement Your Mission Facebook link -

<https://www.facebook.com/groups/MakeMovementYourMission/>

Make Movement your Mission YouTube Clips-

<https://www.youtube.com/playlist?list=PLeePVUq4FvWu9uSwUK8YMwZIVjx1CKp8q>

I can now get in and out of a chair without using my arms

Found I could raise and lower ankle single legged - really feel stronger

I have to hold on to my walking frame but I am doing the standing one today

Final Thoughts



Consistent messages to ALL older people – sit less, move more
Community exercise should have a focus on strength and balance
Home based exercise/activity needs supporting online (videos) or by phone/paper

Falls Services - Help patients reach effective dose of highly challenging strength and balance exercise to reduce frailty and falls

- Ensure transition on and continued exercise beyond your ‘service’
- Support patients to transition on to self directed exercise
- Support patients who are online to exercise online
- Maintain fidelity (type, intensity, frequency, duration)
- Adherence is key – support needed!

We know what works, just need to implement it!

Different programmes for primary and secondary prevention



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Chris Todd

Professor of Primary Care & Community Health
The University of Manchester

MANCHESTER
1824

The University of Manchester

Falls prevention amongst older people using digital technologies during COVID-19 home isolation and physical distancing

Chris Todd

Professor of Primary Care & Community Health

NIHR Senior Investigator

Health Ageing Research Group

School of Health Sciences

With thanks to Dr Lisa McGarrigle and Dr Lis Boulton

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No conflicts of interest

Research Funders



Australian Government
National Health and Medical Research Council

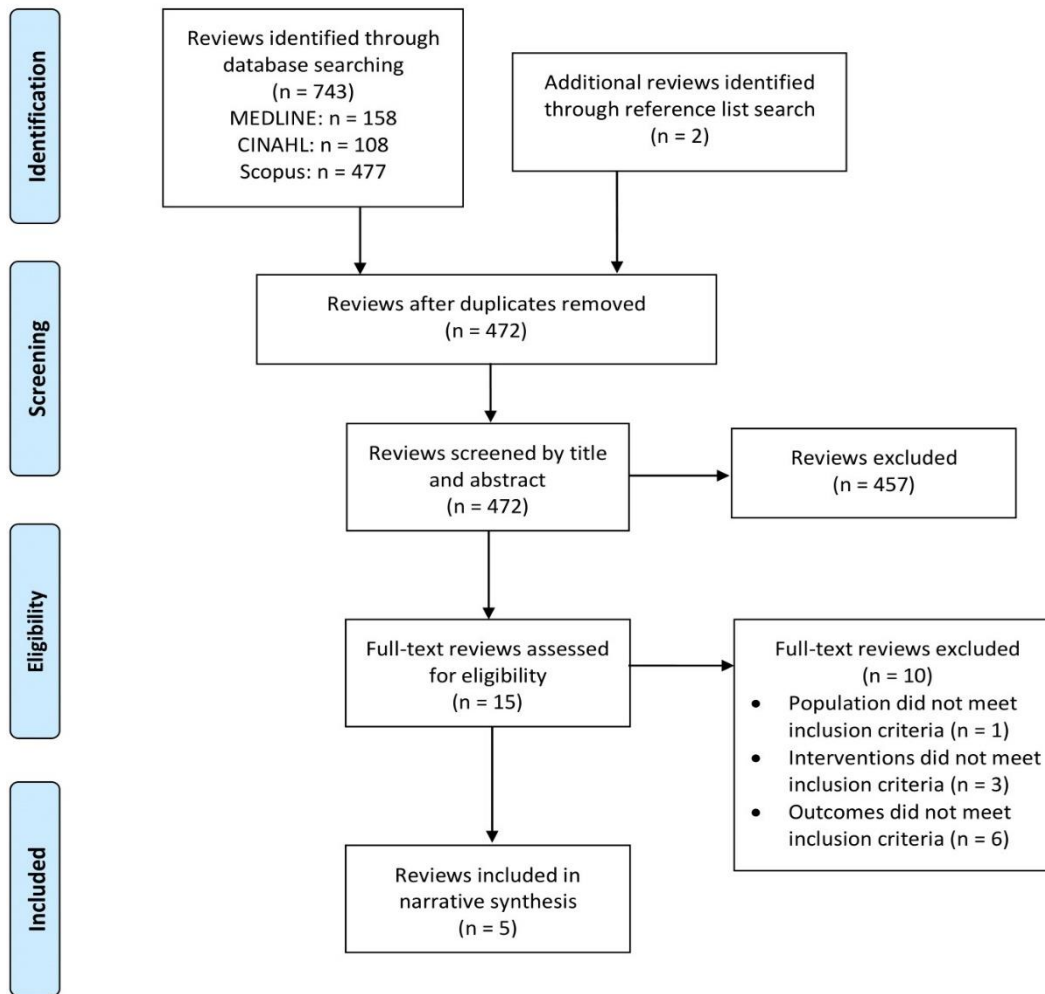


PreventIT

PRU Briefing for DHSC

- **Delivery of strength and balance exercises for falls prevention amongst older people using digital technologies to replace face-to-face contact during COVID-19 home isolation and physical distancing.**
- <https://www.opfpru.nihr.ac.uk/covid-19-research/rr7-covid-19-technology-for-strength-and-balance/>
- McGarrigle L, Todd C (2020) Promotion of physical activity in older people using mHealth and eHealth technologies: Review of reviews *Journal of Medical Internet Research*
- McGarrigle L, Boulton E, Todd C (2020) Map the Apps: a rapid review of digital approaches to support the engagement of older adults in strength and balance exercises *BMC Geriatrics*

eHealth mHealth: Review of reviews



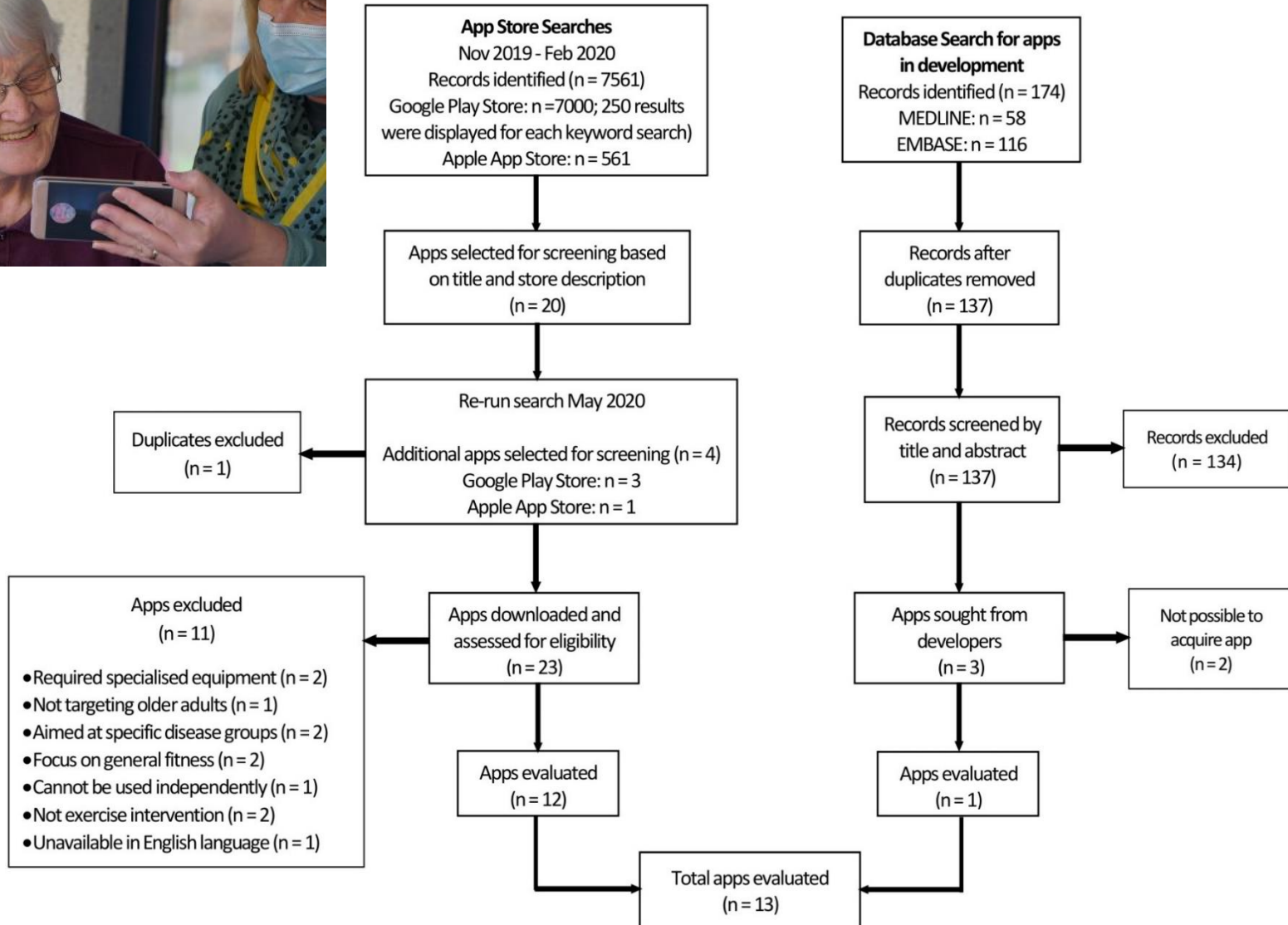
From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit www.prisma-statement.org.

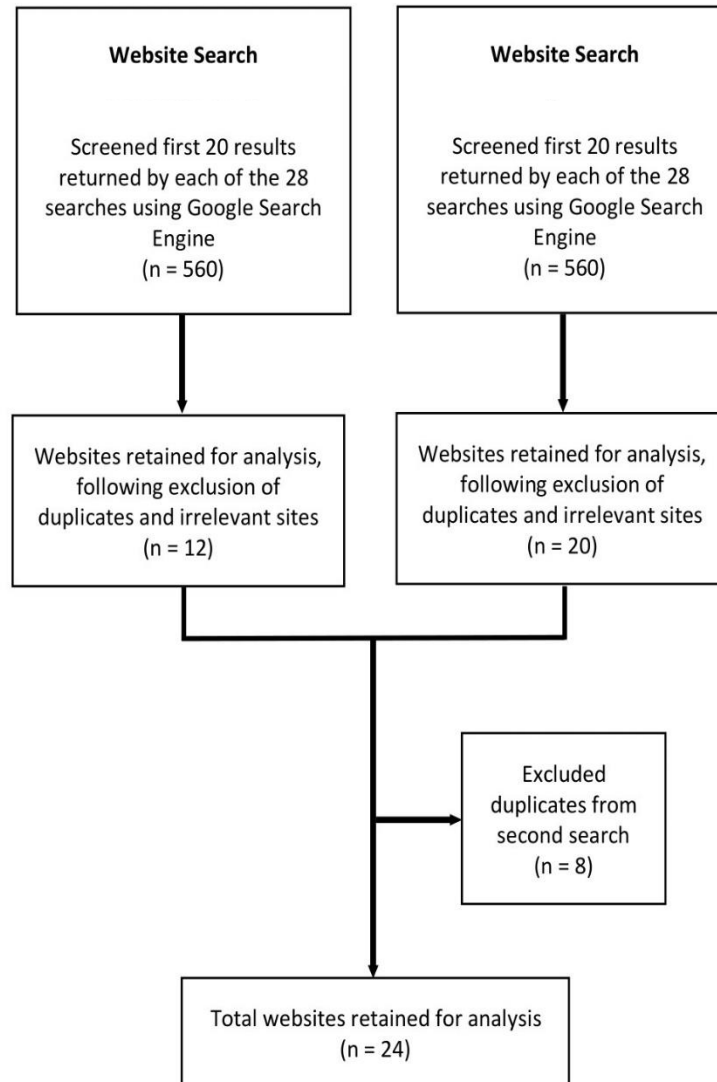
General evidence for digital exercise promotion to older people

- Mobile/smartphone apps appears to be **acceptable** to older people.
- Older people appear to **adhere** to apps (at least in the short term).
- Apps may be **effective** in decreasing sedentary time, increasing physical activity and physical fitness (over 3 or so months).
- Apps that are **theory-based**, include behaviour change techniques, clear instructions, social and professional support may be more effective
- Apps should provide exercise/activity interventions that fit in with older people's **lifestyles** and **expectations** and offer **tailored** interventions taking account of individual preferences and capabilities.
- **Positive messages** are crucial.
- Older people need to understand and **appreciate the benefits** they will gain and benefits need to be in accord with older people's own lifestyle and aspirations.
- Emphasising **staying independent**- important to many older people.
- When introducing apps to older people the **steep learning curve** must be recognised and support supplied to help them.

App searches



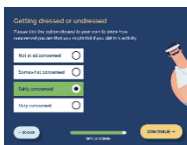
Website searches



Apps

- Currently available*

- Otago Exercise Programme
- Nymbal Balance¹
- Keep On Keep Up



- Under development

- Standing Tall



* Assessed using underlying evidence base, MARS & use of BCTs. **No** RCTs or evidence of effectiveness

¹ USA only

Websites

- Currently available**

- csp.org.uk
- fallsassistant.org.uk
- go4life.nia.nih.gov
- nhs.uk/live-well
- profound.eu.com
- betterhealthwhileaging.net
- caringseniorservice.com

- For resources see also

- laterlifetraining.co.uk

** Assessed using underlying evidence base, HoNCode & use of BCTs. **No** RCTs or evidence of effectiveness

Otago



Keep on
Keep Up

Getting dressed or undressed

Please tick the option closest to your own to show how concerned you are that you might fall if you did this activity.

Not at all concerned	<input type="radio"/>
Somewhat concerned	<input type="radio"/>
Fairly concerned	<input checked="" type="radio"/>
Very concerned	<input type="radio"/>

← GO BACK



95% complete

CONTINUE →



Standing Taller

The home screen of the 'Standing Tall' app features the 'Standing Tall' and 'NeuRA' logos at the top. A central illustration of a woman is shown. On the left, a 'Menu' sidebar includes buttons for 'Exercises', 'Progress', 'Goals & Journal', 'Calendar', and 'Help'. Below the menu, a progress indicator shows '0%' and '1 hour of exercises left this week'. The 'Exercises' section is titled 'Let's do this.' and includes a motivational message: 'How long would you like to exercise for?' with a '0%' progress indicator and a note: 'Note that you still need to do 1 hour this week.' At the bottom, a 'Choose your exercise duration' section offers five options: 10, 15, 20, 25, and 30 minutes.

A circular flow of five exercise screens is shown, connected by orange arrows. Each screen includes a title, set/duration information, a progress indicator, and a visual guide for the exercise:

- Stepping in the Grid - Mixed**: Set: 1/3, Duration: 21 seconds. Visual: A 4x4 grid with a person icon stepping on a square.
- Standing with Eyes Closed - Near Tandem**: Set: 2/3, Duration: 30 seconds. Visual: A person standing on a circular mat with one foot in front of the other.
- Lean Side-to-Side on Foam**: Set: 1/3, Duration: 38 seconds. Visual: A person leaning side-to-side on a mat.
- Step and Bend - Mixed**: Set: 1/3, Duration: 38 seconds. Visual: A circular mat with a person icon stepping and bending.
- Step Up Sideways - High Knees**: Set: 2/3, Duration: 31 seconds. Visual: A person stepping up and down on a mat.

The 'Exercise Complete' screen displays a progress indicator at 100%. It includes a feedback prompt: 'Please rate how you went. You found this exercise' followed by a row of five smiley face icons. Below this is a 5-point rating scale with buttons labeled 1 (Unstable), 2 (Somewhat Stable), 3 (Mostly Stable), 4 (Stable), and 5 (Very Stable). A message states: 'Selecting 4 suggests you "felt stable" and the exercise was fairly easy to complete without holding on for support.' A question asks: 'Did you need to use a chair to complete the exercise?' with 'Yes' and 'No' buttons. At the bottom, a 'Complete exercise' button is checked.

Cluster RCT of Exergame in 18 sheltered housing facilities



Stammers et al. BMC Medicine (2019) 17:49
<https://doi.org/10.1186/s12916-019-1278-4>

BMC Medicine

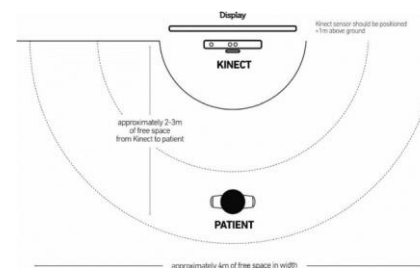
RESEARCH ARTICLE

Open Access

The effectiveness and cost-effectiveness of strength and balance Exergames to reduce falls risk for people aged 55 years and older in UK assisted living facilities: a multi-centre, cluster randomised controlled trial



Emma K. Stanmore^{1,2,3*}, Alexandra Mavroedi¹⁰, Lex D. de Jong¹⁰, Dawn A. Sletton¹⁰, Chris J. Sutton¹⁰, Valelio Benedetto⁷, Luke A. Munford⁴, Wynole Meeles⁵, Vicky Bell¹ and Chris Todd^{1,2,3}



Improvement in Exergame group
Falls incident rate ratio **0.31 (95% CI 0.16 to 0.62)**

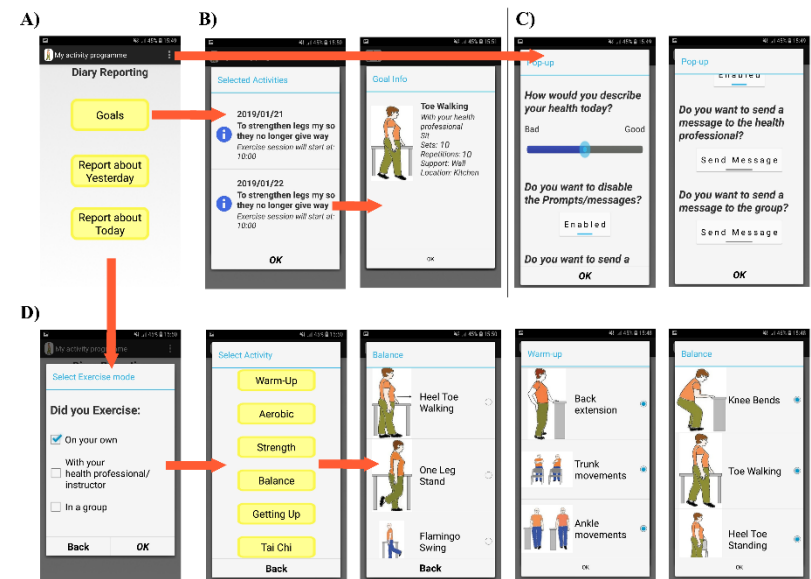
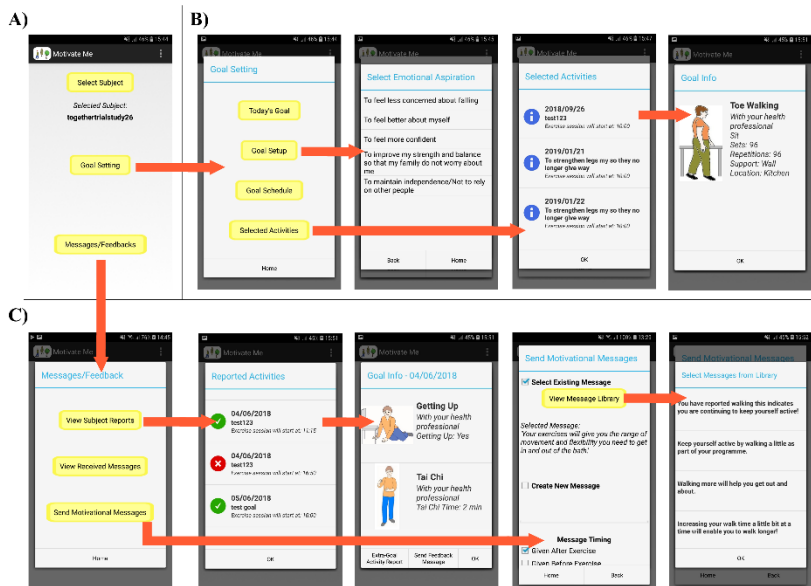
Balance 6.2 (95% CI 2.4 to 10.0)

Short FES-I -2.7 (95% CI -4.5 to -0.8)

VAS pain scale -12.1 (95% CI -22.3 to -1.8)

Adherence at 12 weeks 87%

Motivate Me and My Activity apps

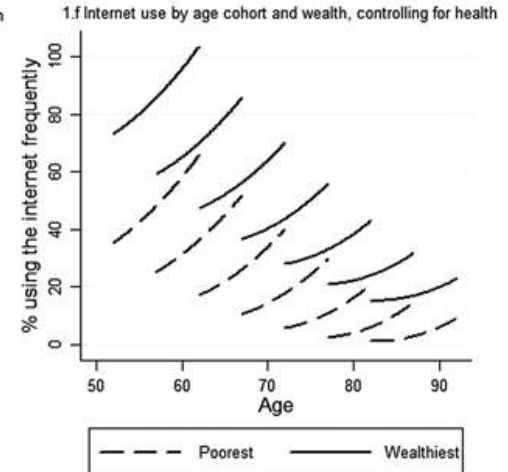
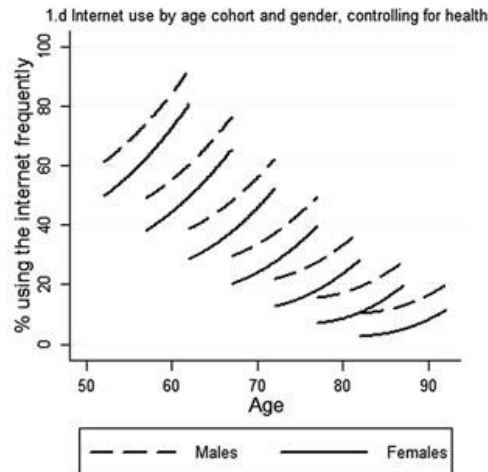
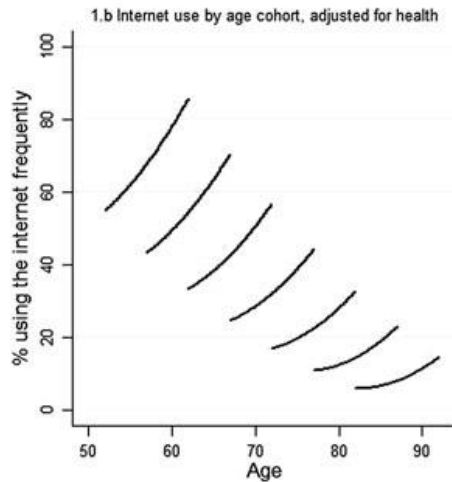
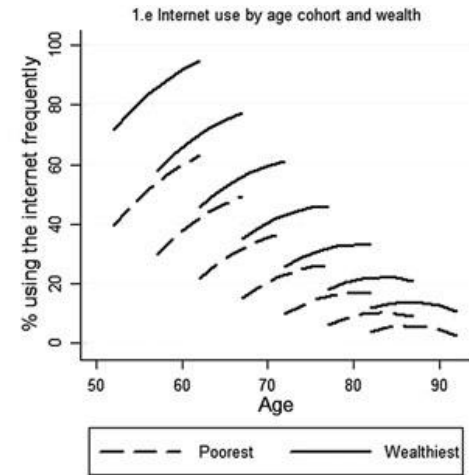
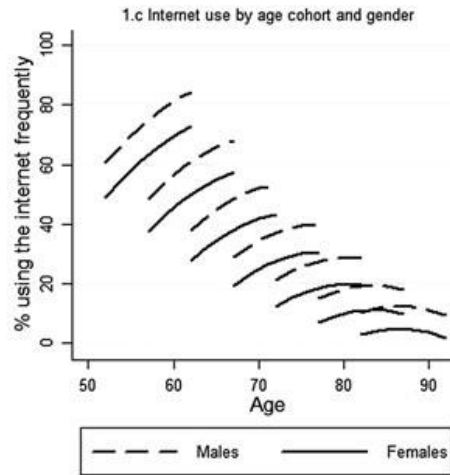
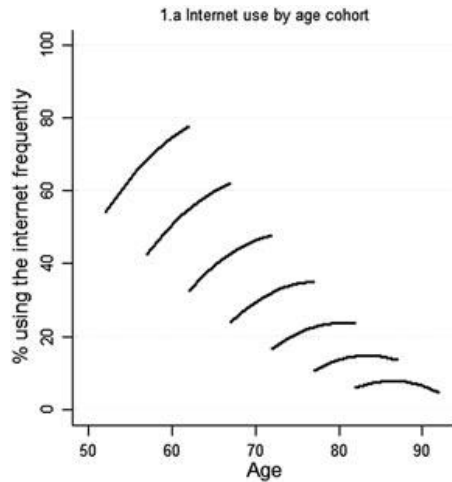


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Conclusions

- Digital delivery better than no delivery
- Rapidly changing area
- In longer term digital could (will) become common, but needs carefully phased roll out
- Ensure co-development work with older people
- For the immediate future focus on
 1. Those already familiar with S&B, assessed and previously receiving face-to-face delivery, and stable health
 2. Relatively healthy and digitally literate capable of remote set-up
 3. Rehabilitation following hospital discharge with set-up done face-to-face in hospital
- **NB Digital exclusion and exacerbation of health inequalities**
older, female, deprived, BaME, marginalised

Growth curve models of frequent internet use by age cohort, gender and wealth



Internet use in UK 2017

- 7.8 million people (15%) do not use internet
- 7.4 million people (14%) 'limited users'
- Non- users
 - 64% aged >65
 - 48% have a disability or long standing health issue.
 - 49% in DE social class.
 - 44.5% annual household income <£11,500.
 - 78% left education at 16 or younger

Thank you

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Bringing together skills,
expertise and shared knowledge
in UK ambulance services

NHS Ambulance Services response to Falls

October 2020

Cathryn James





Falls response governance framework for NHS Ambulance Services

The document has been developed with input from NHS ambulance trusts and members of the National Falls Prevention Coordination Group (NFPCG), which is chaired by Public Health England (PHE).

It has been produced as a key output from the NHS England and NHS Improvement Safely Reducing Avoidable Conveyance programme as an initial step in supporting access to appropriate care for people who have fallen.

Bringing together skills, expertise and shared knowledge in UK ambulance services



ASSOCIATION OF
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The purpose of the document is to outline a national ambulance service approach in response to people who have fallen to ensure that they receive appropriate care, treatment and access to falls prevention services, and when safe to do so, avoid conveyance to hospital emergency departments (EDs).

FRAMEWORK

1

Articulate how ambulance trusts and partners in the health, social care and the voluntary sector respond to people who have fallen

2

Provide clarity on roles and responsibilities of ambulance trusts in relation to falls and falls prevention

3

Describe how ambulance trusts can have the greatest impact on falls and fractures

4

Support collaboration and interoperability between health systems

5

Meet the needs of people who have fallen using a system wide approach to falls and falls prevention

6

Recognise that a system-wide approach to falls is needed

Bringing together skills, expertise and shared knowledge in UK ambulance services



Principles in safe management of falls

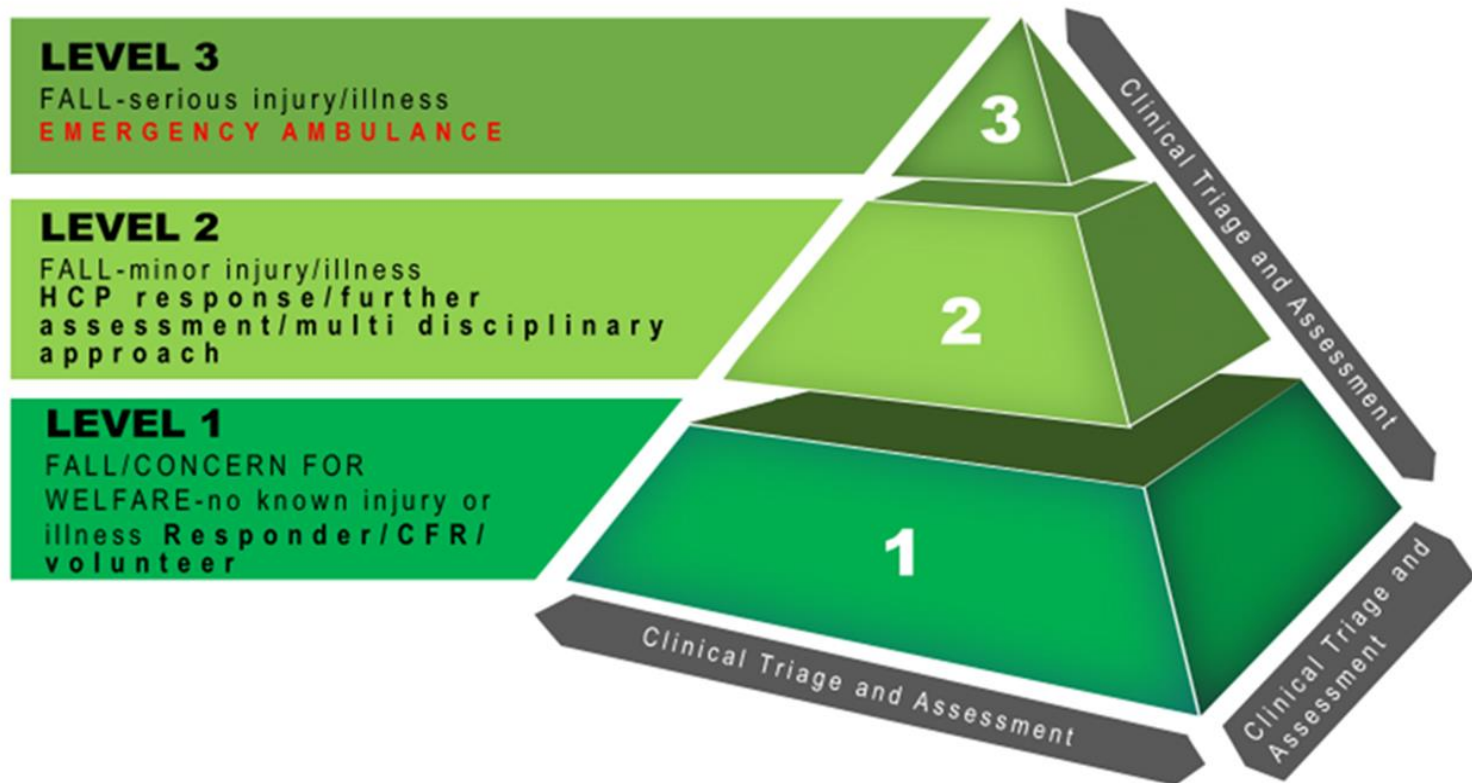
The principles on which the document are based cover five domains

FRAMEWORK



Bringing together skills, expertise and shared knowledge in UK ambulance services

Falls response



Managing a fall that may require an ambulance during the COVID-19 pandemic-Falls in care and residential homes poster



British Geriatrics Society
Improving healthcare
for older people



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National Audit of
Inpatient Falls (NAIF)

Falls in care and residential homes

- Should we always call 999 first for a resident found on the floor?
- Do residents always need to go to hospital for a check-up after a fall?
- Are we allowed to move a resident before they've been seen by ambulance staff?
- Can we give our resident anything to drink or any painkillers before the ambulance arrives?

What to do if you fall-advice

- Creating a falls plan
- Getting up from a fall
- How to get up from the floor
- What to do if you can't get up
- What to do if someone else falls

<https://www.nhsinform.scot/healthy-living/preventing-falls/dealing-with-a-fall/creating-a-falls-plan>



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Bringing together skills,
expertise and shared knowledge
in UK ambulance services

 **Cathryn James**

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Thank You



Public Health
England

Protecting and improving the nation's health

Dawne Garrett

Professional Lead - Older people and dementia
care- Royal College of Nursing (RCN)

Discussion on a national rehabilitation strategy in response to deconditioning.

We recognise there will many implications for citizens post pandemic, for those who experienced a loss of strength and function because they,

- Have survived Covid-19
- Have 'long Covid'
- Have long term conditions or frailty and could not access exercise
- Did not / could not access timely interventions and now have residual problems, stroke, cardiac issues etc
- Those who are shielding
- Those who could not access there usual exercise

Should we have a national rehabilitation strategy?

What would this look like?



Public Health
England

Protecting and improving the nation's health

Q&A Session

National Falls Prevention Coordination Group

Further resources

All Our Health (AOH)-Falls and fractures and AOH e-learning for health module

Are you ready for the Autumn and Winter? Key questions for people providing and planning local falls prevention services during the time of COVID-19. Link is here

Strength and Balance Quality Markers paper (July 2019)

Raising the bar on Strength and Balance. Link is here

Later Life Training, 'Making Movement Your Mission'

Falls FAQs poster and NHS Ambulance Trusts Falls response governance framework

Home hazards checklist

Link to NFPCG survey

Keeping well at home booklet and PHE Exposure blog and Active at home booklet

Further resources

Accessing health and care services – findings during the Coronavirus pandemic:
Executive summary and full report

Falls, NHS inform

What to do if you fall, find out what to do if you fall and can or can't get up

LLT Guidance in response to COVID-19 FaME & OEP Delivered as Virtual
Exercise Programmes & Home Alone Guidance

React to falls

Further resources

COVID-19 rehabilitation and recovery

Otago Exercise Programme to prevent falls in older adults. A home-based, individually tailored strength and balance retraining programme

Promoting exercise as part of a physiotherapy-led falls pathway service for adults with intellectual disabilities: a service evaluation

The National Falls Prevention Coordination Group: Survey to evaluate the effect of the COVID-19 pandemic on local falls services

Keeping well at home guide, the University of Manchester

Thank you

If you have any questions for the NFPCG
please contact us at
healthcarepublichealth@phe.gov.uk