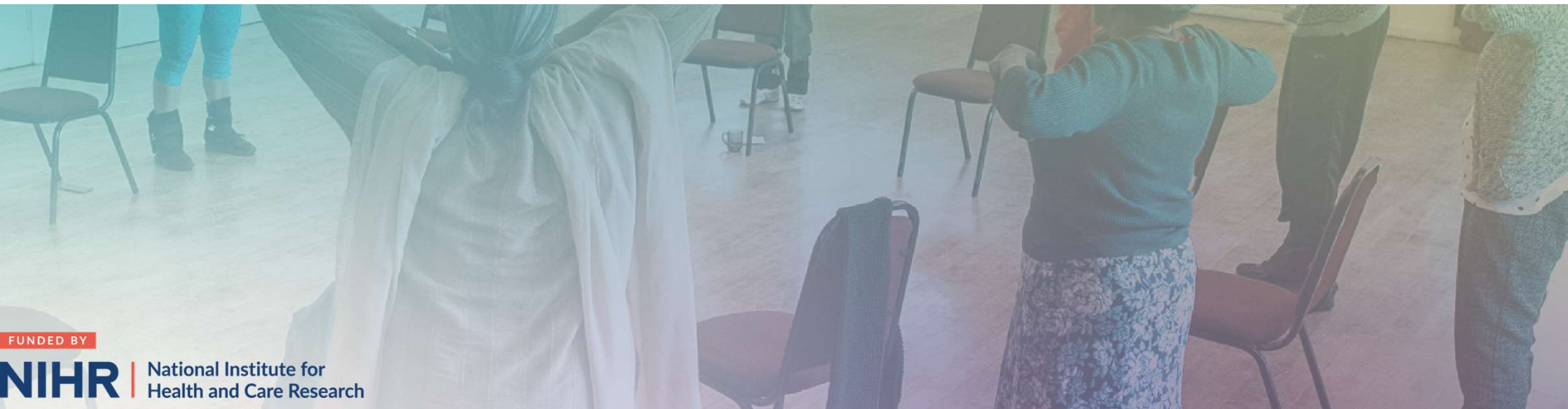




# From a successful RCT to community implementation: The RETirement in ACTION group-based intervention targeting older adults with mobility limitations

**Professor Afroditi Stathi**  
**University of Birmingham**

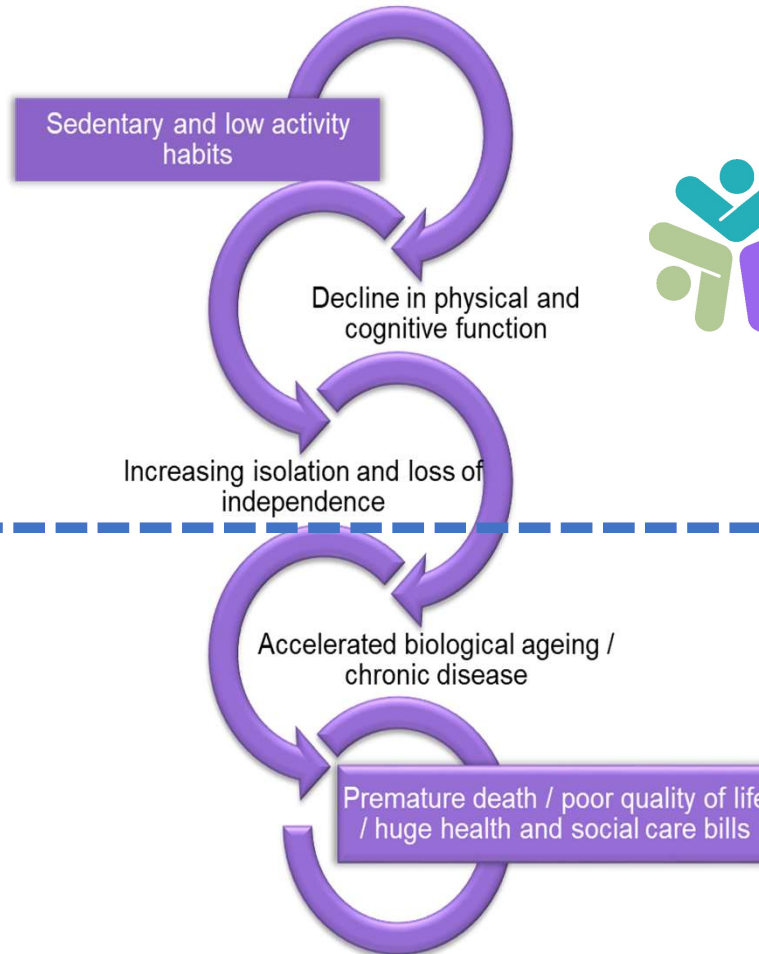


# Mobility and independence

## Knowledge gaps

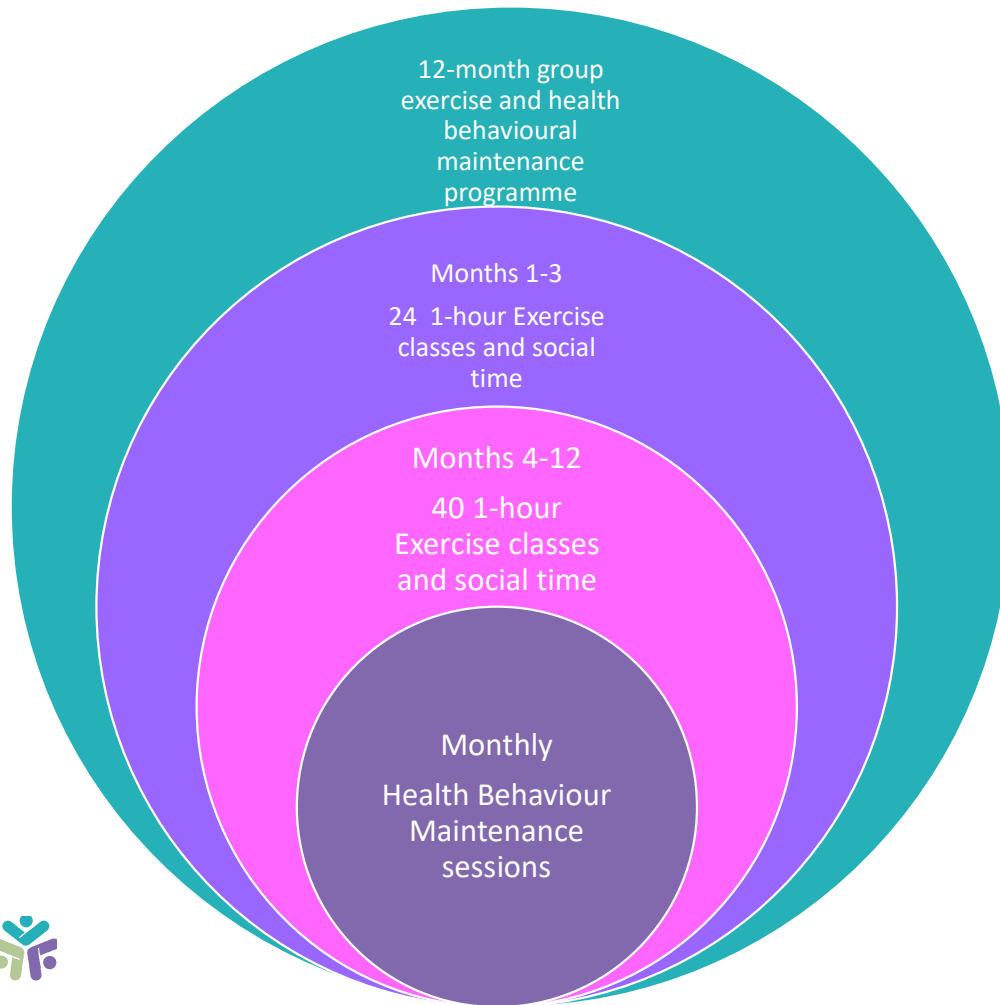
1. Long-term ( $\geq 1$  year) community-based mobility programmes : Effectiveness? Value for money?

2. Sustainability of effects 6+ months post-intervention?



Downward spiral: From independence to dependence and frailty

 **REACT** The Intervention



**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

or a combination of both

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

Swim  
Brisk walk  
Cycle  
Gym  
Yoga  
Carry heavy bags  
Run  
Stairs  
Sport

**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

Bows  
Tai Chi  
Dance



# Primary outcome

Changes in lower limb physical function at 24 months:

1. sit-to-stand task

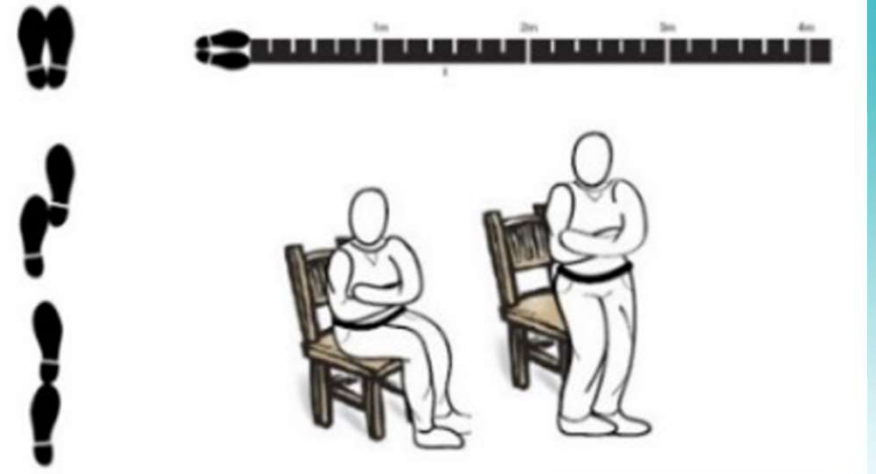
2. standing balance test

3. gait speed test

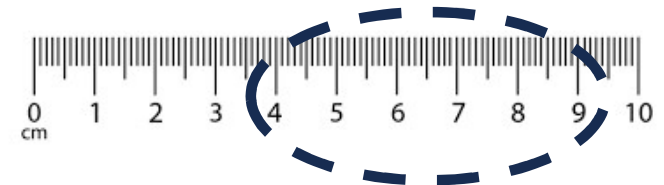
**Pre-frail & frail adults 65+**



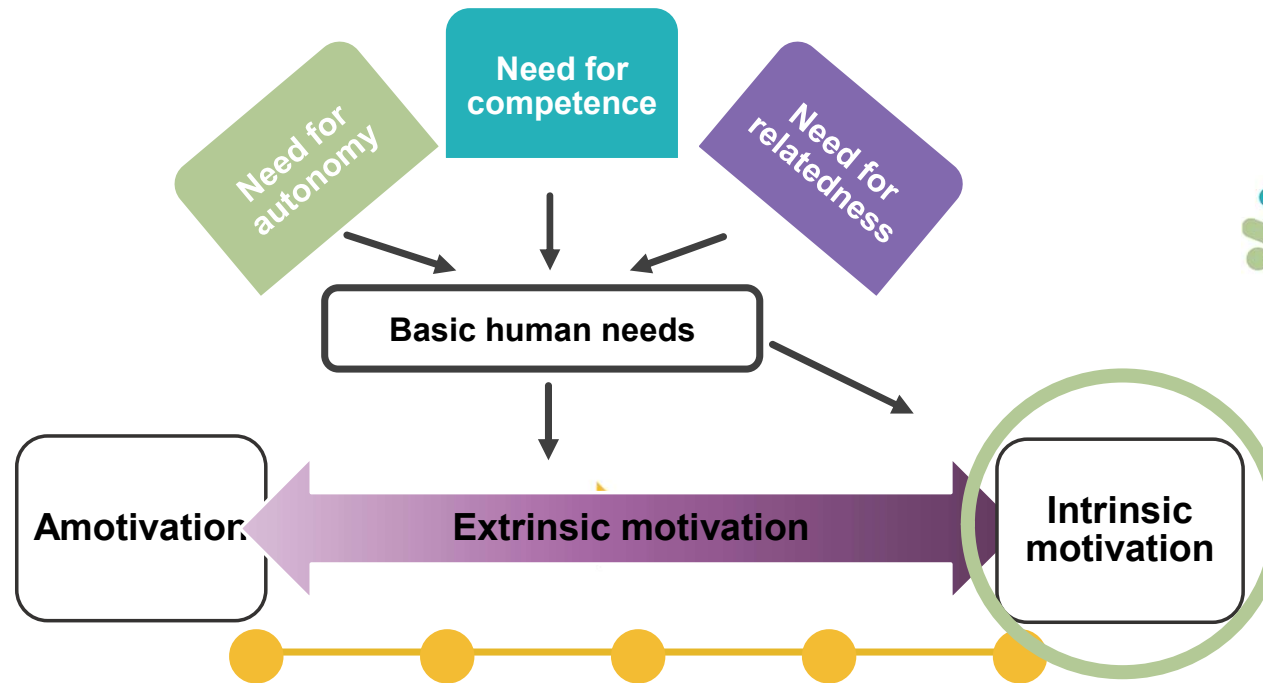
## Short Physical Performance Battery (SPPB)



Eligibility: Scores 4-9



# Behaviour change and maintenance



Ryan, R. M., & Deci, E. L. (2017). Self-Determination Theory: Basic Psychological Needs in Motivation, Development and Wellness. New York: Guilford Press.

# Recruitment: Representative REACT participants vs UK 65+ population

	REACT (n=777)	UK 65+ (n=9,223,073)
<b>Age (years), n (%)</b>		
65 to 69	95 (12.2)	2,674,161 (29.0)
70 to 74	191 (24.6)	2,178,672 (23.6)
75 to 79	190 (24.5)	1,777,547 (19.3)
80 to 84	160 (20.6)	1,338,005 (14.5)
85 and over	141 (18.1)	1,254,688 (13.6)
<b>Gender, n (%)</b>		
Female	514 (66.2)	6,617,318 (54.4)
Male	263 (33.9)	5,548,239 (45.6)
<b>Race/ethnicity, n (%)</b>		
Caucasian/white	739 (95.1)	8,806,190 (95.5)
African/Caribbean	23 (3.0)	115,288 (1.3)
Asian	9 (1.2)	238,878 (2.6)
Other/mixed	6 (0.8)	60,872 (0.7)
<b>IMD, n (%)</b>		
Quintile 1	86 (11.1)	1,321,666 (14.3)
Quintile 2	157 (20.2)	1,618,649 (17.6)
Quintile 3	159 (20.5)	1,975,582 (21.4)
Quintile 4	156 (20.1)	2,127,763 (23.7)
Quintile 5	219 (28.2)	2,180,334 (23.6)



# Effectiveness: Increased and sustained mobility at 6, 12, 24 months



<sup>1</sup>Stathi et al., 2022. The Lancet Public Health

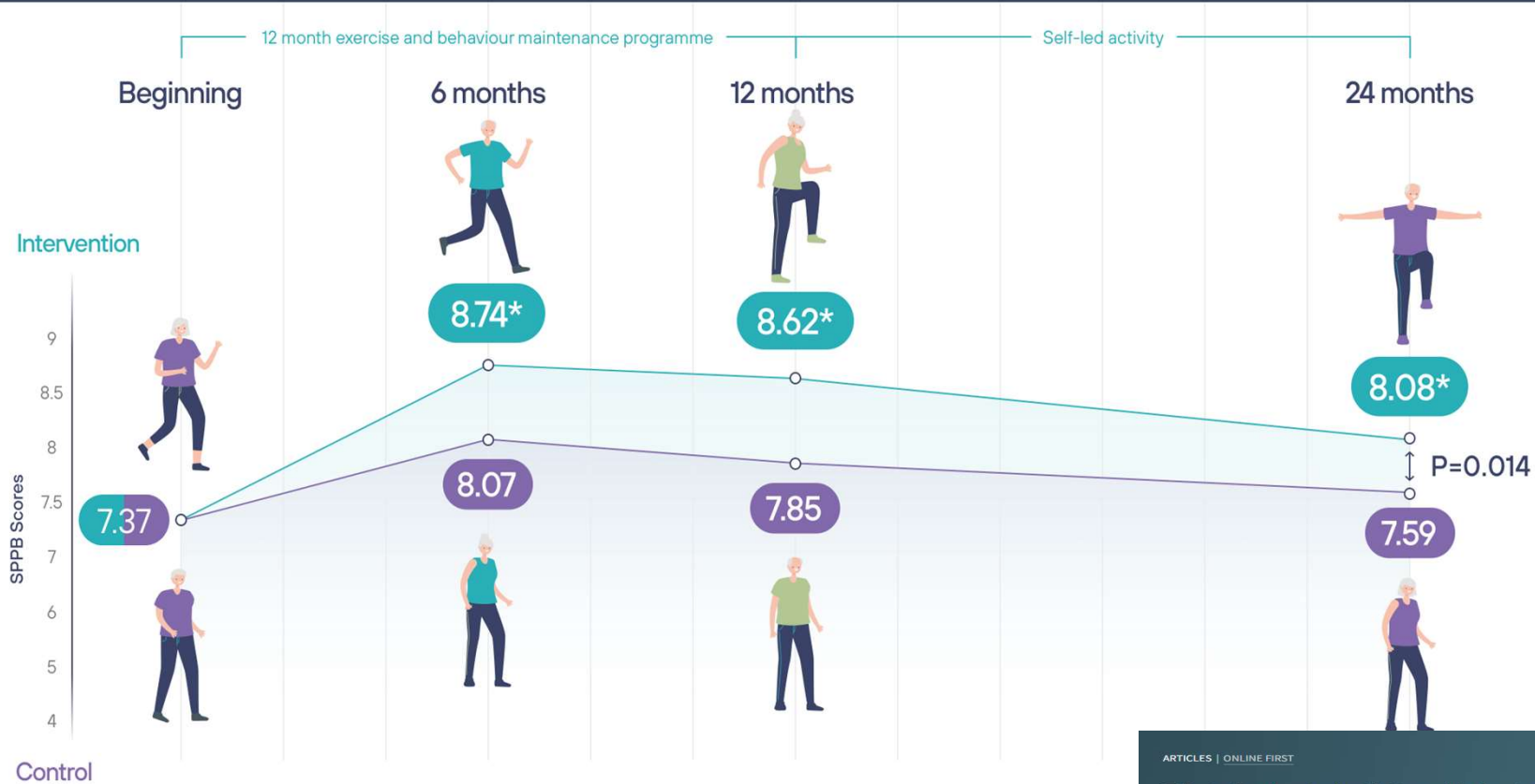
# Effectiveness: Increased and sustained mobility at 6, 12, 24 months



<sup>1</sup>Stathi et al., 2022. The Lancet Public Health

# Effectiveness: Increased and sustained mobility at 6, 12, 24 months

## REACT The impact on physical function



ARTICLES | ONLINE FIRST

Effect of a physical activity and behaviour maintenance programme on functional mobility decline in older adults: the REACT (Retirement in Action) randomised controlled trial

Prof Afroditi Stathi, PhD - Prof Colin J Greaves, PhD - Prof Janice L Thompson, PhD - Janet Withall, PhD - Peter Ladlow, PhD - Prof Gordon Taylor, PhD - et al. [Show all authors](#)

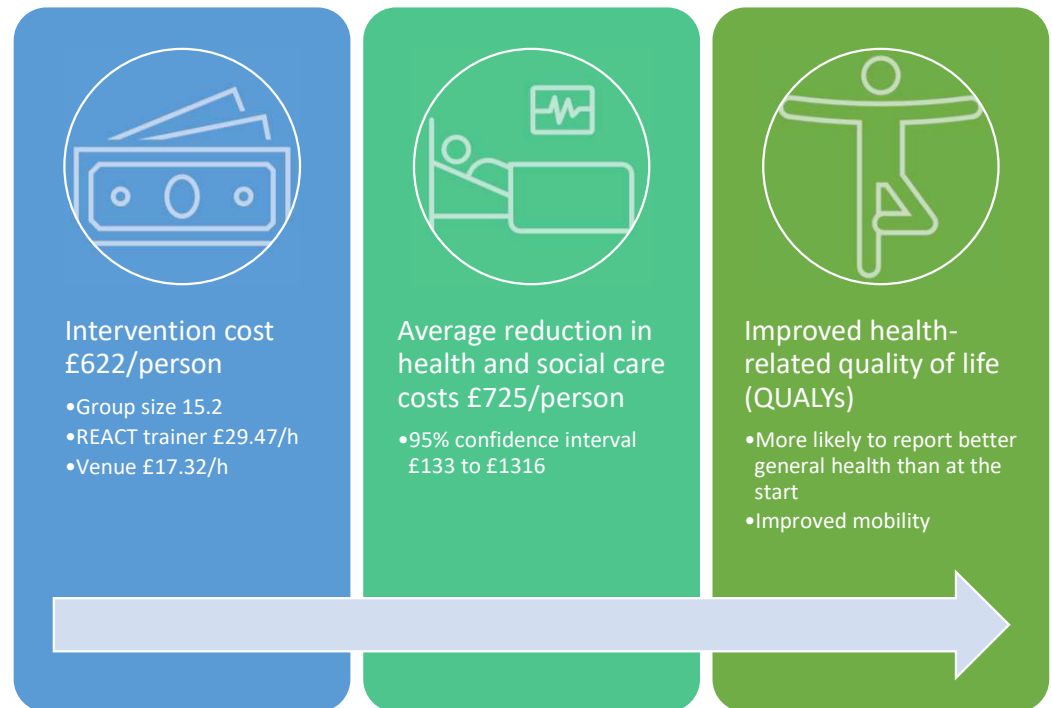
Open Access - Published: March 21, 2022 - DOI: [https://doi.org/10.1016/S2468-2667\(22\)00004-4](https://doi.org/10.1016/S2468-2667(22)00004-4)

[Check for updates](#)

<sup>1</sup>Stathi et al., 2022. The Lancet Public Health

# Cost-effectiveness: Savings offset costs

- ✓ Reduced unplanned hospitalisations
- ✓ Reduced prescriptions



ARTICLES | ONLINE FIRST

Cost-effectiveness of a physical activity and behaviour maintenance programme on functional mobility decline in older adults: an economic evaluation of the REACT (Retirement in Action) trial

Tristan M Snowsill, PhD Prof Afroditi Stathi, PhD · Prof Colin Green, PhD · Janet Withall, PhD · Prof Colin J Greaves, PhD · Prof Janice L Thompson, PhD · et al. [Show all authors](#)

Open Access · Published: March 21, 2022 · DOI: [https://doi.org/10.1016/S2468-2667\(22\)00030-5](https://doi.org/10.1016/S2468-2667(22)00030-5)

Check for updates

(Snowsill, Stathi et al., 2022. The Lancet Public Health)



**THE REACT TRIAL (2015-2021):**  
Established that a 12-month community-based, group exercise and health behavioural maintenance intervention **prevents decline in physical functioning** in older adults already at increased risk of mobility limitations



# REACT: Strong community partnerships



All REACT photography courtesy of Alex Rotas <http://alexrotasphotography.co.uk/>



## ARE YOU STARTING TO HAVE DIFFICULTY DOING DAILY ACTIVITIES

such as walking, getting up from chairs and climbing stairs? If so REACT could help you maintain your independence.

REACT is a weekly group physical activity class – followed by a cup of tea and a chat.  
**COST** £3.50 per class. First week FREE.

### VENUE

Easton Leisure Centre

### ADDRESS

Thrissell St, Easton, Bristol BS5 0SW

### TIME

Tuesdays and Fridays 10am – 11.30am  
Wednesdays 2pm – 3.30pm

You can either self-refer or speak to your GP today.

### TO FIND OUT MORE

**EMAIL** [bristolcommunityoutreach@everyoneactive.com](mailto:bristolcommunityoutreach@everyoneactive.com)

**CALL** Alistair on 07825 033 741



Photo credit: Chloe Edwards



## Bristol: The first city-wide partnership to roll out REACT

- ✓ BNNSG Integrated Care System
- ✓ Bristol Health Partners
- ✓ Age UK Bristol
- ✓ Everyone Active



## Key achievements so far

1. **90% membership from underrepresented populations** including South Asian, Caribbean, Jamaican, West Indian
2. **An ethnically diverse team of REACT co-ordinators/instructors**



# Next steps

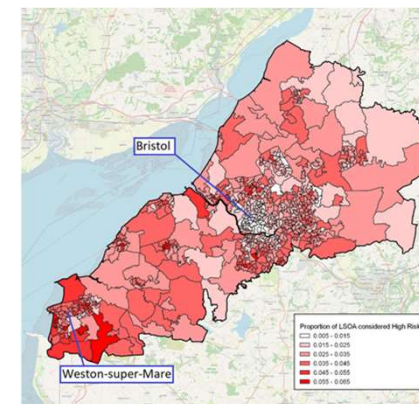
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- **Roll out:**

1. Bristol, North Somerset, South Gloucestershire
2. North Central London

- **Partner with** a national training provider to deliver the REACT training at scale

- **Roll out nationally**





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<https://www.attainnetwork.org.uk/>

<https://www.activeageingresearch.org/>

@ActiveAgeingRes

@AfroditiStathi

@JanetWithall



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