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Welcome

to the University of
Nottingham

Professor Elizabeth Orton





About me

- Co-lead injury epidemiology and prevention group
 - Injury across the lifecourse
 - Database studies (epidemiology)
 - Systematic reviews (e.g. Cochrane)
 - Observational studies
 - Trials
 - Implementation research
- ARC theme lead – Building Resilience in Later Life
- Consultant in Public Health in Leicestershire
 - Integration team – falls prevention
 - Health Determinants Research Collaboration
 - Health improvement



Falls prevention research

- Preventing falls in the community
 - Falls Management Exercise Programme (FaME)
 - OTAGO exercise programme
- Preventing falls in Care Homes
 - Action Falls



Falls in older adults (community)

- 30-40% community dwelling >65 yrs fall each year
 - 30-50% minor injury
 - 5-6% major injury (excluding fracture)
 - 5% fractures; 1% hip fractures
- 50% hospital admissions for injury due to fall
- History of falls a major predictor future fall
- >10% ambulance call outs due to falls (up to 40% not taken into hospital)
- Declining activity, increasing frailty, receipt of care
- Concern about falling – reduced physical activity – increase risk



GUIDELINE

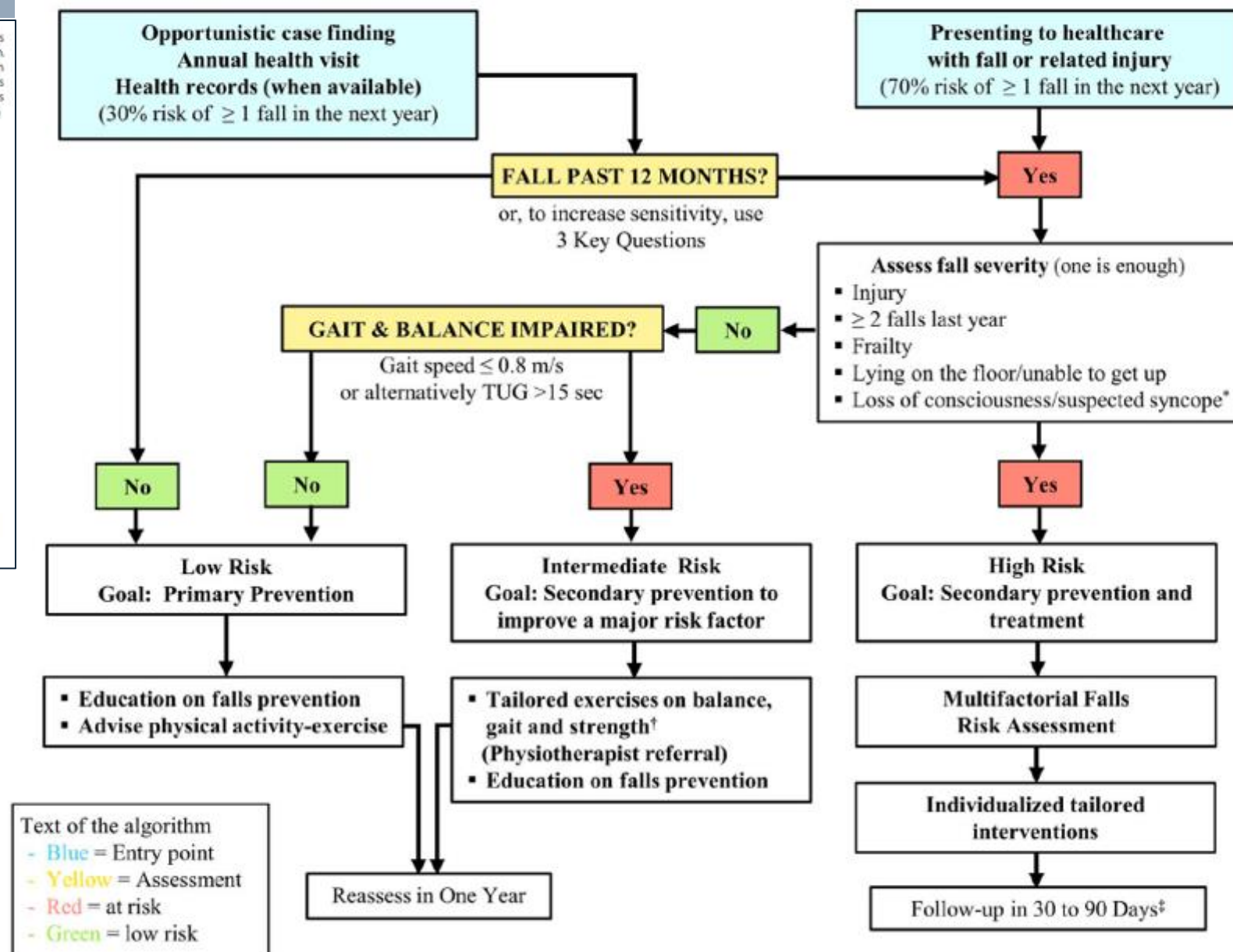
World guidelines for falls prevention and management for older adults: a global initiative

MANUEL MONTERO-ODASSO^{1,2,3,†}, NATHALIE VAN DER VELDE^{4,5,†}, FINBARR C. MARTIN⁶, MIRKO PETROVIC⁷, MAW PIN TAN^{8,9}, JESPER RYG^{10,11}, SARA AGUILAR-NAVARRO¹², NEIL B. ALEXANDER¹³, CLEMENS BECKER¹⁴, HUBERT BLAIN¹⁵, ROBBIE BOURKE¹⁶, IAN D. CAMERON¹⁷, RICHARD CAMICOLI¹⁸, LINDY CLEMSON¹⁹, JACQUELINE CLOSE^{20,21}, KIM DELBAERE²², LEILEI DUAN²³, GUSTAVO DUQUE²⁴, SUZANNE M. DYER²⁵, ELLEN FREIBERGER²⁶, DAVID A. GANZ²⁷, FERNANDO GÓMEZ²⁸, JEFFREY M. HAUSDORFF^{29,30,31}, DAVID B. HOGAN³², SUSAN M.W. HUNTER³³, JOSE R. JAUREGUI³⁴, NELLIE KAMKAR¹, ROSE-ANNE KENNY¹⁶, SARAH E. LAMB³⁵, NANCY K. LATHAM³⁶, LEWIS A. LIPSITZ³⁷, TERESA LIU-AMBROSE³⁸, PIP LOGAN³⁹, STEPHEN R. LORD^{40,41}, LOUISE MALLET⁴², DAVID MARSH⁴³, KOEN MILISEN^{44,45}, ROGELIO MOCTEZUMA-GALLEGOS^{46,47}, MEG E. MORRIS⁴⁸, ALICE NIEUWBOER⁴⁹, MONICA R. PERRACINI⁵⁰, FEDERICO PIERUCCINI-FARIA^{1,2}, ALISON PIGHILLS⁵¹, CATHERINE SAID^{52,53,54}, ERVIN SEJDIC⁵⁵, CATHERINE SHERRINGTON⁵⁶, DAWN A. SKELTON⁵⁷, SABESTINA DSOUZA⁵⁸, MARK SPEECHLEY^{3,59}, SUSAN STARK⁶⁰, CHRIS TODD^{61,62}, BRUCE R. TROEN⁶³, TISCHA VAN DER CAMMEN^{64,65}, JOE VERGHESE^{66,67}, ELLEN VLAEYEN^{68,69}, JENNIFER A. WATT^{70,71}, TAHIR MASUD⁷², the Task Force on Global Guidelines for Falls in Older Adults[†]

HIGH RISK

- Past fall with injury
- Multiple falls (≥ 2 falls) in last yr
- Inability to get up after the fall without help
- Frail

World guidelines for falls prevention and management for older adults





The Falls Management Exercise (FaME) programme

- Aimed at adults >65 at risk of falling
- 24-week exercise programme
- Delivered by Postural Stability Instructors
- Group based, in the community
- Challenges balance, improves strength
- Increases in difficulty and resistance
- Includes
 - Home exercises
 - Floor work
 - Progressive tailored exercise
 - Tai Chi moves





Benefits

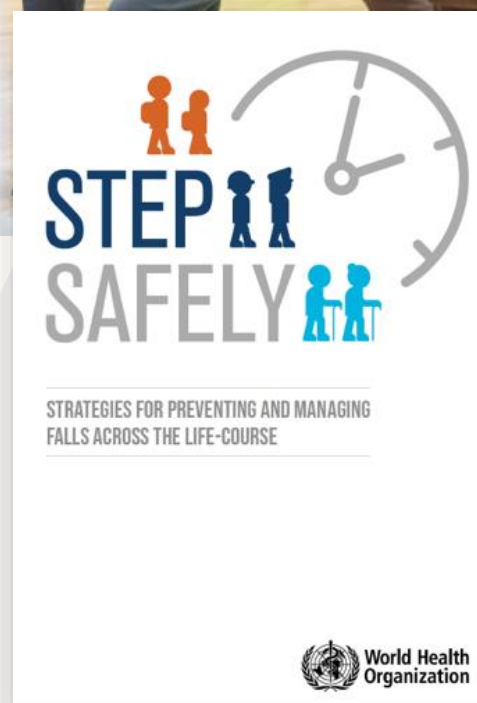
- reduces falls rate by between 26-54²⁰%
 - (depending on population and duration)
- Supports self management and transition onto other activity opportunities
- Increases habitual physical activity
 - (> 105-167 minutes per week by end of programme)
- Improves confidence, reduces concern about falls
- Improves physical function and quality of life
- Maintains bone density
- Changes peoples' lives
- Return on Investment reports range from £2.89-£13.00 - £50.59 for every £1 invested





Policy context and support for FaME

- 2009 Department of Health Prevention Package recommends FaME
- 2012 RCP Audit of falls services in NHS recommend FaME
- 2015 CDC in US Cite FaME in Falls Compendium
- 2017/8 Public Health England recommended FaME as cost-effective and presented Return on Investment data
- 2020 FaME Implementation Manual for Commissioners of Services endorsed by NICE
- 2022 World Falls Guidelines exercise recommendations include FaME and links to Implementation Manual and RoI data





Falls in care homes

- Three times more common
- 400,000 people live in care homes in the UK
- 40% of admissions from care home
- Action Falls (previously Guide to Action) – Logan et al*
 - Co-designed
 - Multi-domain
 - 1 hour training (all staff)
 - Falls incident chart (patterns)
 - Drug falls risk chart
 - Checklist (screening and assessment with actions)
 - Use on all residents
 - repeated 3-6m



Logan et al., 2021

<https://www.bmj.com/content/375/bmj-2021-066991>

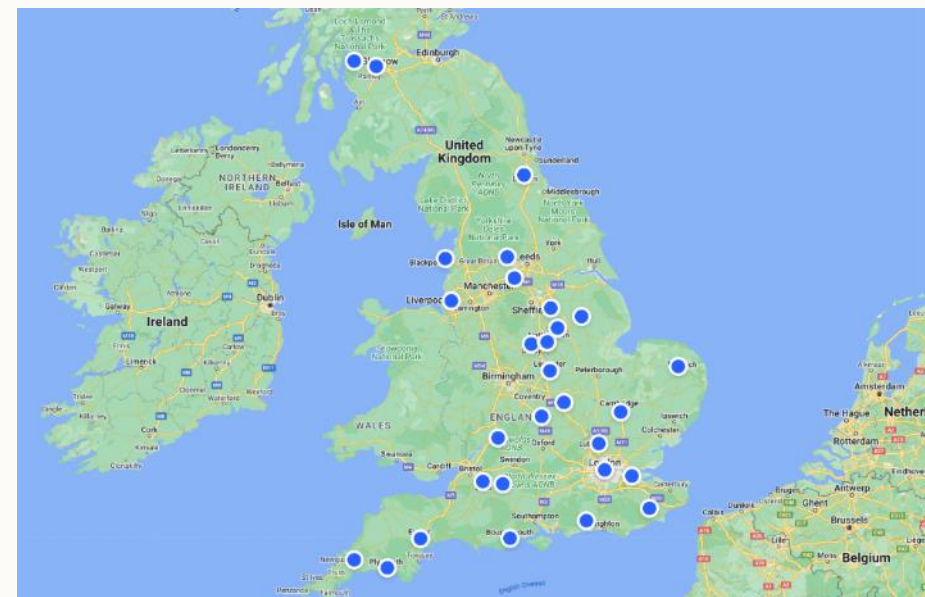


Action Falls

- Study of 84 care homes (39 intervention)
- Fall rate 3-6 month post training
 - 6/1000 Action Falls group
 - 10.4/1000 control group
 - 43% reduction in falls rate
 - Reduction in fractures at 6m-1year (small numbers)
 - No change in physical activity
- Cost effectiveness
 - Cost/QALY £4,544
 - Cost per fall averted £191
 - Cost per participant £108
 - 92% likely to be cost effective at £20,000/QALY

By March 2023, 300 different care homes were using Action Falls

In Nov 2023 NHS England endorsed it as the Falls Prevention Tool to use





Structured medication review

People who live in a care home are likely to be taking multiple medicines (polypharmacy) and risks can outweigh benefits



Learning disability and autism

third largest setting that people with learning disabilities reside



Nutrition and hydration

higher prevalence of over-nourishment and undernourishment – which can lead to greater risk of falls, wounds, infections and catheter issues



Falls, Physical Activity, Strength & balance exercise

Greater prevalence of frailty and chance of falls. Recommendation to implement Action Falls (falls prevention and management programme)



Mental health

Complex conditions and ageing can negatively impact mental health



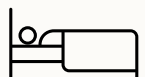
Dementia

>70% of people living in care homes have dementia or severe memory problems



Deterioration

Care home staff can recognise when a person may be becoming unwell before the person exhibits obvious clinical signs of a deterioration –prevents escalation of care



Palliative and end of life care

Caring for people who are at the end of their lives is a large part of what care homes provide

ACTION FALLS

Key Components of the Action Falls Programme

Action Falls Checklist (resource)

1 hour care home training programme



ACTION FALLS Checklist: A Guide to Action for Care Homes

Resident's Name: _____ D.O.B.: _____

• Underline statements relevant to the person you are completing the tool with
• If section is not relevant, write this in action box
• Date and sign when actions taken

Falls History (1 of 4 sections)	Suggested action	Action taken	Date action taken & by whom
Falls risk factors History of falls prior to admission to care home Falls reason for admission to care home	Review all incidents using Incident Analysis form, look for any patterns to falls e.g. time of day, activity at time of fall - fill in 'Fall Incident Analysis' Inform GP of falls history and any recent falls		
History of falls History of falls since admission	Postural blood pressure to be checked i.e. in lying, sitting and standing - alert GP if drop is greater than 20mmHg Request medical review to identify any medical causes of falls e.g. infection, vitamin low blood pressure, heart problems Identify any possible causes of falls and take steps to reduce those risks		
Recent falls 2 or more falls in past 6 months (A fall is defined as an unexpected event in which residents come to rest on the ground or floor)			
Fractures Has broken bones as result of fall: Wrist, hip, arm, pelvis, spine, ribs, collar bone, shoulder, ankle Is at risk of fracture because takes steroids, has rheumatoid arthritis or drinks 3 or more units of alcohol a day	At risk of Osteoporosis Ask GP to review if person is falling and has previous fracture(s)		
Hospital admission Attended A&E due to fall Ambulance called - not taken to hospital Admitted to hospital due to fall	Review causes of fall Initiate any treatment recommended Inform GP		
Other injury due to fall Head injury, cuts, bruises, grazes, skin tear			
Coping strategies Unable to get up from floor without help Unable to summon help	Ensure call buzzer easily accessible and working. Consider use of sensor equipment. Increase level of supervision and document		
Fear of falling Is anxious/worried about falling, lacks confidence Remains seated for much of the day due to fear of falling	Consider reasons for fear of falling Increase supervision Ensure mobility maintained Encourage and reassure		



Falls risk factors	√	Suggested action	Action taken	Date action taken & by whom
FALLS HISTORY				
History of falls History of falls prior to admission to care home Falls reason for admission to care home		Review all incidents using Incident Analysis form, look for any patterns to falls e.g. time of day, activity at time of fall – fill in 'Fall Incident Analysis' Inform GP of falls history and any recent falls		
History of falls History of falls since admission		Postural blood pressure to be checked i.e. in lying, sitting and standing - alert GP if drop is greater than 20mmHg, Request medical review to identify any medical causes of falls e.g. infection, stroke, low blood pressure, heart problems Identify any possible causes of falls and take steps to reduce those risks		
Recent falls 2 or more falls in past 6 months (A fall is defined as inadvertently coming to rest on the ground or at a lower level, including slipping from side of bed or misjudging where chair seat is)				
Fractures Has broken bones as result of fall: Wrist, hip, arm, pelvis, spine, ribs, collar bone, shoulder, ankle		At risk of Osteoporosis Ask GP to review if person is falling and has previous fracture(s)		
Hospital admission Attended A&E due to fall, Ambulance called - not taken to hospital, Admitted to hospital due to fall		Review causes of fall, initiate any treatment recommended, inform GP		
Other injury due to fall Head injury, cuts, bruises, grazes, skin tear				
Coping strategies Unable to get up from floor without help, Unable to summon help		Ensure call buzzer easily accessible and working, Consider use of sensor equipment Increase level of supervision and document		
Fear of falling Is anxious / worried about falling, lacks confidence, remains seated for much of the day		Consider reasons for fear of falling, increase supervision, ensure mobility maintained, encourage and reassure		



EHCH health and wellbeing focus areas



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People who live in a care home are likely to be taking multiple medicines (polypharmacy) and risks can outweigh benefits



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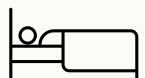
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Palliative and end of life care

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Falls pathway

- Primary prevention
 - Environmental, personal actions
 - Physical activity
 - Medicines reviews
- Secondary prevention
 - Tailored exercise interventions
 - Falls service
 - Fracture liaison service
 - falls service communication
- Tertiary prevention
 - Frailty assessment



Thank you

Any questions?

Proactive Care

Michael Azad

Consultant Geriatrician

NUH

Introduction

- Number 10 Delivery Unit – Acute Clinical Reference Group member
- BGS Frailty in Urgent Care Settings Specialist Interest Group Chair
- BGS Policy and Communications Committee member
- Previous BGS England Council Chair
- NHSE Hospitals Steering Group member
- NHSE SDEC Workforce Group member

Be proactive: Delivering proactive care for older people with frailty



Reablement, Rehabilitation, Recovery: Everyone's business



Bringing hospital care home: Virtual Wards and Hospital at Home for older people



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[Integrated care](#), [Older people](#), [Personalised care](#)

Proactive care: providing care and support for people living at home with moderate or severe frailty

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Content

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Introduction

This guidance is for integrated care boards (ICBs) and provider organisations involved in the design and delivery of proactive care.

Proactive care is personalised and co-ordinated multi-professional support and interventions for people living with complex needs. Many systems are already delivering proactive care.

The specific aims of proactive care are to improve health outcomes and patient experience by:

1. delaying the onset of health deterioration where possible
2. maintaining independent living
3. reducing avoidable exacerbations of ill health, thereby reducing use of unplanned care.

Core components

1. Identifying the target cohort for whom there is the greatest potential impact on health and system outcomes.
2. Carrying out holistic assessments, such as a Comprehensive Geriatric Assessment
3. Developing a personalised care and support plan
4. Delivering Co-ordinated multi-professional interventions to address the person's range of needs.
5. Providing a clear plan for continuity of care, including an agreed schedule of follow-ups

Key enablers

1. Flexible workforce
2. Shared care record
3. Clear accountability and shared decision-making

Proactive care – what to measure?

- services should consider using patient reported outcomes or functional measures, such as Activities of Daily Living (ADLs) and patient experience measures
- use of unplanned care
- outcome measures for proactive care are difficult to implement, process measures may provide another approach to demonstrate the value of an intervention
- healthy life expectancy (PHM)
- some system benefits may not be realised for a few years

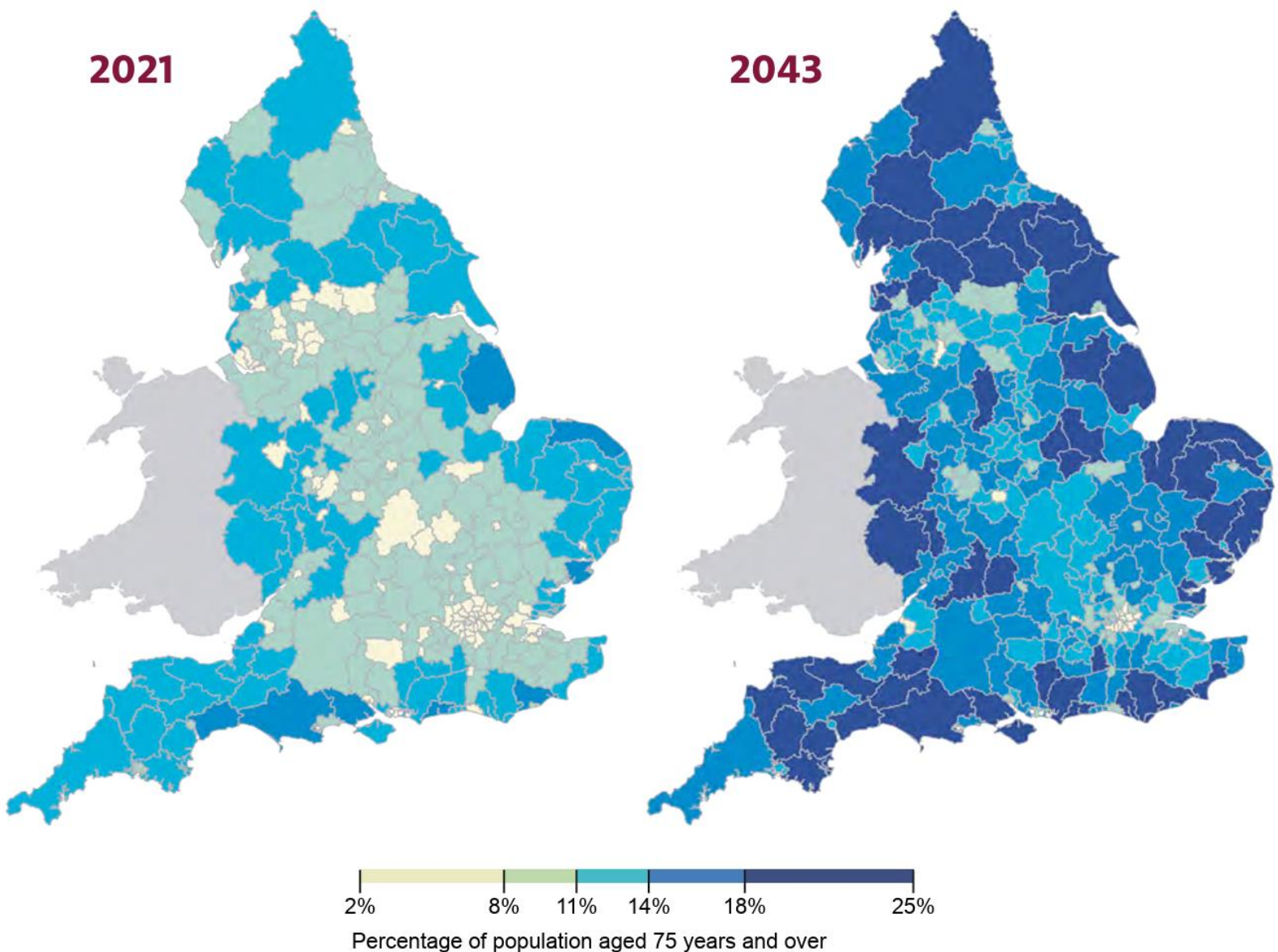
Recommendations for delivering proactive care

1. Proactive care services should be aligned to the approximate geography of a Primary Care Network (PCN)/Primary Care Cluster (PCC) or equivalent, with a dedicated proactive care team in each equivalent area across the UK.
2. Policy makers and commissioners should prioritise national funding and contractual arrangements to ensure that proactive care is available to all older people living with frailty in the community.
3. Leadership is vital to the delivery of successful proactive care services, and it should be supported and nurtured through training opportunities and protected funding.
4. Outcome measures are vital in evaluating the success of proactive care interventions and should always be implemented when new services are launched. National guidance on how to measure the impact of proactive care interventions should be published, and investment is needed in clinical research and IT infrastructure focussed on data collection and evaluation.
5. Proactive care services should be staffed by a core multidisciplinary team, consisting of at least one GP with an interest in frailty, one Advanced Clinical Practitioner, and one Care Co-ordinator. A gold standard team would include professionals from social care, mental health services, therapies, pharmacy and geriatric medicine.
6. Local and national investment in training and development opportunities for the multidisciplinary team working in proactive care is needed, including mandatory frailty training, training in communication, leadership, and coaching, and education on the wider health and care system.
7. A culture of flexible and cross organisational working should be embedded in proactive care services, which requires good working relationships across services. A shared proactive care workforce plan across the partner organisations in each PCN/PCC or equivalent should be developed.
8. Services across the UK should use BGS's *Be proactive: Evidence supporting proactive care for older people with frailty*³ to make the case for proactive care services in their local area, and use *Be proactive: Delivering proactive care for older people with frailty* as a roadmap for implementing services.

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Figure 1: Map of England showing the projected rise in the percentage of the population aged 75 years and over



Source data: Office for National Statistics (ONS), 2021 mid-year estimates by local authority,³ and 2018-based subnational population projections for 2043⁴



TheKingsFund>

Ideas that change
health care

Making our health and care systems fit for an ageing population

Authors
David Oliver
Catherine Foot
Richard Humphries



University of
Nottingham

UK | CHINA | MALAYSIA

What to do about frailty



Rowan H Harwood

Professor, consultant geriatrician

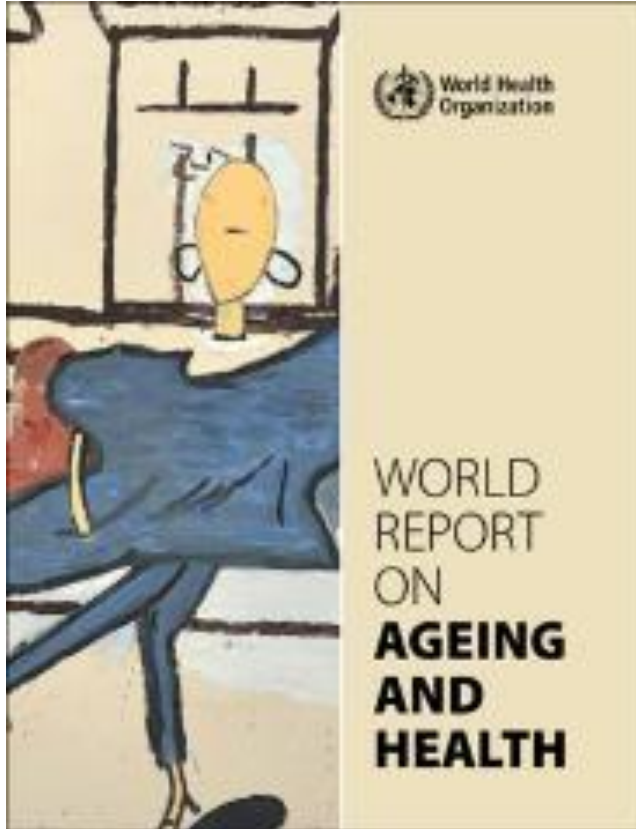
University of Nottingham and Nottingham University Hospitals.



Why me?

- Geriatrician, clinical academic
- Clinical epidemiologist, applied health researcher
 - 250 papers, 5 books, 10 trials, £17M grants, 2 NIHR programmes
 - Former Editor-in-Chief *Age and Ageing*
- Chair, WHO TAG for measuring Healthy Ageing and working group on Quality of Dying
- Topics:
 - Falls preventions (cataract surgery, screening, day hospital), community rehabilitation, care homes, MH problems in hospital, cognitive disorders ward, prevention of dependency in dementia, communication in dementia, operationalizing person-centred care.
- I just write a book chapter called ‘Is it time to move on from frailty?’

World Report Framework for Healthy Ageing



- Intrinsic capacity
 - Locomotor
 - Sensory
 - Vitality
 - Cognition
 - Psychological
- Functional ability
 - Meet basic needs
 - Learn, grow, make decisions
 - Mobility
 - Build and maintain relationships
 - Contribute to society
- Environments

What does the research evidence tell us will have most impact and what should we stop doing to enable the tertiary prevention of frailty?

- Exercise
- Dietary protein/amino-acids
- Deprescribing
- 'CGA'

Age and Ageing 2017; 46: 383–392
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REVIEW

Interventions to prevent or reduce the level of frailty in community-dwelling older adults: a scoping review of the literature and international policies

MARTINE T. E. PUTS¹, SAMAR TOUBAS¹, MELISSA K. ANDREW², MAUREEN C. ASHE^{3,4}, JENNY PLOEG⁵, ESTHER ATKINSON⁶, ANA PATRICIA AYALA⁷, ANGELIQUE ROY⁸, MIRIAM RODRIGUEZ MONFORTE¹, HOWARD BERGMAN⁹, KATHY MCGILTON⁸

¹University of Toronto—Lawrence S. Bloomberg Faculty of Nursing, Toronto, Ontario, Canada
²Dalhousie University—Division of Geriatric Medicine, Halifax, Nova Scotia, Canada
³University of British Columbia—Family Practice, Vancouver, British Columbia V5Z 1M9, Canada
⁴University of British Columbia—Centre for Hip Health and Mobility, 77 F-2635 Laurel St, Vancouver, British Columbia V9, Canada
⁵McMaster University—School of Nursing, Hamilton, Ontario, Canada
⁶University of Toronto—Geriatric Information Science, Toronto, Ontario, Canada
⁷University of Toronto—Geriatric Information Science Centre, Toronto, Ontario, Canada
⁸University Health Network—Toronto Rehabilitation Institute, Toronto, Ontario, Canada
⁹Department of Family Medicine, McGill University—Geriatric Medicine, Montreal, Canada

Address correspondence to: M. T. E. Puts. Tel: (+1) 416 978 6059; Fax: (+1) 416 978 8200. Email: martine.puts@utoronto.ca

Abstract

Background: frailty impacts older adults' ability to recover from an acute illness, injuries and other stresses. A systematic synthesis of available interventions to prevent or reduce frailty does not exist. Therefore, we conducted a review of interventions and international policies designed to prevent or reduce the level of frailty in community-dwelling older adults.
Methods and analysis: we conducted a scoping review using the framework of Arksey and O'Malley. We searched articles and grey literature to identify interventions and policies that aimed to prevent or reduce the level of frailty. Fourteen studies were included: 12 randomised controlled trials and 2 cohort studies (mean number of participants 260 (range 51–610)), with most research conducted in USA and Japan. The study quality was moderate to good. Interventions included physical activity; physical activity combined with nutrition; physical activity plus nutrition plus training; home modifications; prehabilitation (physical therapy plus exercise plus home modifications) and comprehensive geriatric assessment (CGA). Our review showed that the interventions that significantly reduced the number of frail markers present or the prevalence of frailty included the physical activity interventions (all types and combinations), a CGA, and the CGA studies had mixed findings.
Conclusions: nine of the 14 studies reported that the intervention reduced the level of frailty. The results need to be interpreted with caution, as only 14 studies using 6 different definitions of frailty were retained. Future research could target more frailty markers including cognitive or psychosocial well-being.

Keywords: scoping review, frail elderly, interventions, physical activity, nutrition, older people

RESEARCH

Multicomponent intervention to prevent mobility disability in older adults: randomised controlled trial (SPRINTT project)

Roberto Bernabei,^{1,2} Francesco Landi,^{1,2} Riccardo Calvani,¹ Matteo Cesari,^{1,4} Susanna Del Signore,⁵ Stefan D Anker,^{1,2} Raphael Bejuit,¹ Philippe Bordes,¹ Antonio Cherubini,¹ Alfonso J Cruz-Jentoft,⁶ Mauro Di Bari,^{1,2} Tim Friede,^{1,2,3} Carmen Gostisaga Ayestaran,^{1,2} Harmonie Goyeau,¹ Palmi V Jönsson,^{1,4} Makoto Kashiwa,^{1,5} Fabrizio Lattanzio,⁸ Marcello Maggio,^{1,6,7} Luca Mariotti,⁷ Ram R Miller,¹⁸ Leocadio Rodriguez-Mañas,¹⁹ Regina Roller-Wirnsberger,²⁰ Ingrid Ryznarova,²¹ Joachim Scholp,²² Annet M W J Schols,²³ Cornel C Sieber,²⁴ Alan J Sinclair,²⁵ Anna Skalska,²⁶ Timo Strandberg,^{27,28} Achille Tchalla,²⁹ Eva Topinkova,³⁰ Matteo Tosato,¹ Bruno Vellas,³¹ Stephan von Haehling,^{1,2,32} Marco Pahor,³³ Ronenn Roubenoff,³⁴ Emanuele Marzetti,^{1,2} on behalf of the SPRINTT consortium

ABSTRACT
OBJECTIVE
To determine whether a multicomponent intervention based on physical activity with technological support and nutritional counselling prevents mobility disability in older adults with physical frailty and sarcopenia.

DESIGN
Evaluator blinded, randomised controlled trial.

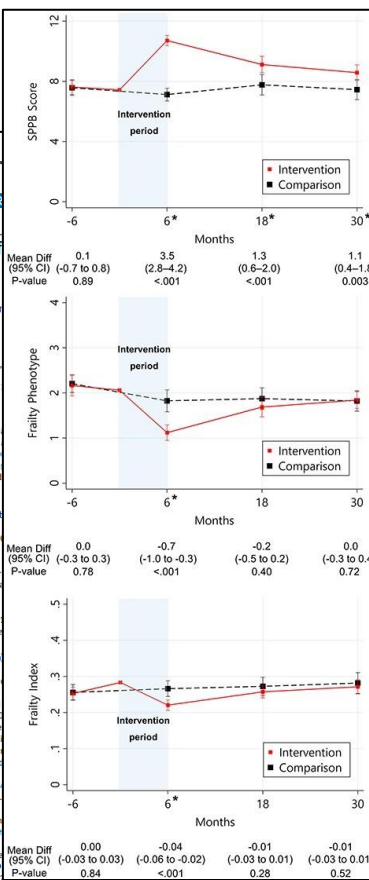
SETTING
16 clinical sites across 11 European countries, January 2016 to 31 October 2019.

PARTICIPANTS
1519 community dwelling men and women aged 70 years or older with physical frailty and sarcopenia, operationalised as the co-occurrence of low functional status, defined as a short physical performance battery (SPB) score of 3 to 5, low appendicular lean mass, and ability to independently walk 400 m. 760 participants were randomised to a multicomponent intervention and 759 received education on healthy ageing (controls).

INTERVENTIONS
The multicomponent intervention comprised moderate intensity physical activity twice weekly at a centre

WHAT IS ALREADY KNOWN ON THIS TOPIC
Mobility is a primary target to maintain function and foster active ageing. Lifestyle interventions (eg, physical activity alone or with nutritional counselling/ supplementation) are feasible, safe, and effective for improving physical function in older adults at risk of mobility disability. The identification of a condition encompassing reduced physical function and target organ damage (ie, muscle failure) might stimulate the development of preventive interventions against disability in older people who are at risk.

WHAT THIS STUDY ADDS
Physical frailty and sarcopenia is a novel, objectively measurable condition that identifies a subset of the older population at risk of adverse health-related events, including mobility disability, whose medical needs are currently unmet. A multicomponent intervention based on moderate intensity physical activity with technological support and nutritional counselling was associated with a reduction in the incidence of mobility disability over 36 months of follow-up in older adults



Oh et al Age and Ageing 2021

Trials in older people

- Populations are heterogeneous
- Interventions are complex
- Control groups are often 'active'
- Co-morbidities are common
- Adherence is uncertain
- Outcomes are multiple
- Stakeholders are multiple
- Context is crucial



‘The reductionist tendency to conclude that no RCT evidence implies that an intervention is ineffective, has been a betrayal’.



What outcomes do you want to prevent?

- Mortality
- Cure or reduce frailty
- Disability, immobility
- Falls, injuries
- Hospital admissions
- Dependency, care home admission
- Adverse events or healthcare-associated harm
- Well-being, mental well-being
- (Poor) quality of life /HALE
- Carer strain and poor carer quality of life
- Inclusion
- Occupation
- Personhood
- Enjoyment

King's Fund Integration Report

- Multiple interdependencies and transitions
- Right service and capacity in right place at right time
- End silo thinking

	Health outcomes	Patient experience	Savings	Ease
Self-management	M	H	L	L
Primary prevention	H	M	M	M
Secondary prevention	H	M	M	M
Managing ACS conditions	H	M	M	M
Integrating mental and physical health care	H	H	M	M
Care co-ordination and integration	H	H	L	L
End-of-life care	n/a	H	M	M
Medicines management	H	H	H	M
Managing elective activity	M	M	M	M
Managing emergency activity	H	H	H	L


Low impact / low ease (high difficulty)

Medium impact / medium ease


High impact / high ease (low difficulty)




NIHR review of frailty care

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[Care in the community for people with long-term conditions](#) [Key components of high quality care in the community](#) [Hospital care for people with long-term conditions](#) [Key components of high quality care in hospital](#) [Conclusion](#)


Key components of high quality frailty care in the community




Holistic assessment




Multidisciplinary team consultations




Continuity of care



Care coordination tailored to complexity



Individualised treatment and self management support



Medication review

Click on the headings below to read about research that could improve frailty care.

Comprehensive geriatric assessment in the community may reduce unplanned hospital admissions >


Primary Care Medical Home could improve quality of life and reduce hospital admissions >

Hospital at Home is supported by evidence, but more robust evaluations of virtual wards are needed >

Research identifies enablers and barriers to successful community care >


and Honorary Professor of Geriatric Medicine,
University College London

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Collection | 21.11.24

October 2024
www.evidence.nihr.ac.uk



RESEARCH

OPEN ACCESS

Check for updates

Promoting Activity, Independence, and Stability in Early Dementia and mild cognitive impairment (PrAISED): randomised controlled trial

Rowan H Harwood,^{1,2} Sarah E Goldberg,¹ Andrew Brand,³ Veronika van Der Wardt,⁴ Vicky Booth,^{2,5} Claudio Di Lorito,⁵ Zoe Hoare,³ Jennie Hancox,⁶ Rupinder Bajwa,⁵ Clare Burgon,⁵ Louise Howe,⁵ Alison Cowley,^{2,5} Trevor Bramley,⁷ Annabelle Long,⁵ Juliette Lock,⁵ Rachael Tucker,¹ Emma J Adams,¹ Rebecca O'Brien,¹ Fiona Kearney,² Katarzyna Kowalewska,⁵ Maureen Godfrey,⁸ Marianne Dunlop,⁸ Kehinde Junaid,⁹ Simon Thacker,¹⁰ Carol Duff,¹¹ Tomas Welsh,¹² Annette Haddon-Silver,¹³ John Gladman,^{2,5} Pip Logan,⁵ Kristian Pollock,¹ Kavita Vedhara,¹⁴ Victoria Hood,⁷ Roshan Das Nair,^{5,15} Helen Smith,⁷ Rhianon Tudor-Edwards,¹⁶ Ned Hartfiel,¹⁶ Victory Ezeofor,¹⁶ Robert Vickers,⁵ Martin Orrell,^{9,17} Tahir Masud²

For numbered affiliations see end of the article

Correspondence to: R H Harwood Rowan.harwood@nottingham.ac.uk (or @RowanHarwood on Twitter; ORCID 0000-0002-4920-6718)

Additional material is published online only. To view please visit the journal online.

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Accepted: 13 July 2023

ABSTRACT OBJECTIVE

To determine the effectiveness of an exercise and functional activity therapy intervention in adults with early dementia or mild cognitive impairment compared with usual care.

DESIGN

Randomised controlled trial.

SETTING

Participants' homes and communities at five sites in the United Kingdom.

PARTICIPANTS

365 adults with early dementia or mild cognitive impairment who were living at home, and family members or carers.

INTERVENTION

The intervention, Promoting activity, Independence, and Stability in Early Dementia and mild cognitive impairment (PrAISED), was a specially designed, dementia specific, rehabilitation programme focusing on strength, balance, physical activity, and performance of activities of daily living, which was tailored and progressive and addressed risk and the psychological needs of people with dementia. Up to 50 therapy sessions were provided over 12 months. The control group received usual care plus a falls risk

assessment. Procedures were adapted during the covid-19 pandemic.

MAIN OUTCOME MEASURES

The primary outcome was score on the carer (informant) reported disability assessment for dementia scale 12 months after randomisation. Secondary outcomes were self-reported activities of daily living, physical activity, quality of life, balance, functional mobility, fear of falling, frailty, cognition, mood, carer strain, service use at 12 months, and falls between months 4 and 15.

RESULTS

365 patient participants were randomised, 183 to intervention and 182 to control. The median age of participants was 80 years (range 65-95), median Montreal cognitive assessment score was 20 out of 30 (range 13-26), and 58% (n=210) were men. Intervention participants received a median of 31 therapy sessions (interquartile range 22-40) and reported completing a mean 121 minutes of PrAISED exercise each week. Primary outcome data were available for 149 intervention and 141 control participants. Scores on the disability assessment for dementia scale did not differ between groups: adjusted mean difference -1.3, 95% confidence interval -5.2 to 2.6; Cohen's d effect size -0.06, 95% confidence interval -0.26 to 0.15; P=0.51. Upper 95% confidence intervals excluded small to moderate effects on any of the range of outcome measures. Between months 4 and 15 the intervention group experienced 79 falls and the control group 200 falls (adjusted incidence rate ratio 0.78, 95% confidence interval 0.5 to 1.3; P=0.3).

WHAT IS ALREADY KNOWN ON THIS TOPIC

Dementia is associated with progressive loss of functional ability, including activities of daily living and mobility, and a high risk of falls

- No benefits from 12 months activity-based intervention
- BUT
 - COVID pandemic
 - Intensity
 - Socio-economically privileged population
 - Psycho-social vs bio-medical outcomes



Off-the-top-of-my-head top-tips

- Vaccination
- Falls prevention
- Deprescribing
- Community Mental Health, proactive dementia support
- Hospital-at-home
- Bed-based or community rehabilitation
- Specialist chronic disease management pathways (stroke, Parkinson's)
- Specialist community-based end-of-life care
- Specialist care home support (crisis, mental health, EOLC)
- Cataracts, hearing aids, arthroplasty, dentistry



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A large, high-resolution image of the Earth as seen from space, showing the Western Hemisphere with North and South America. The Earth is framed by a thin white rectangular border.

Pain and Frailty ICS Frailty programme

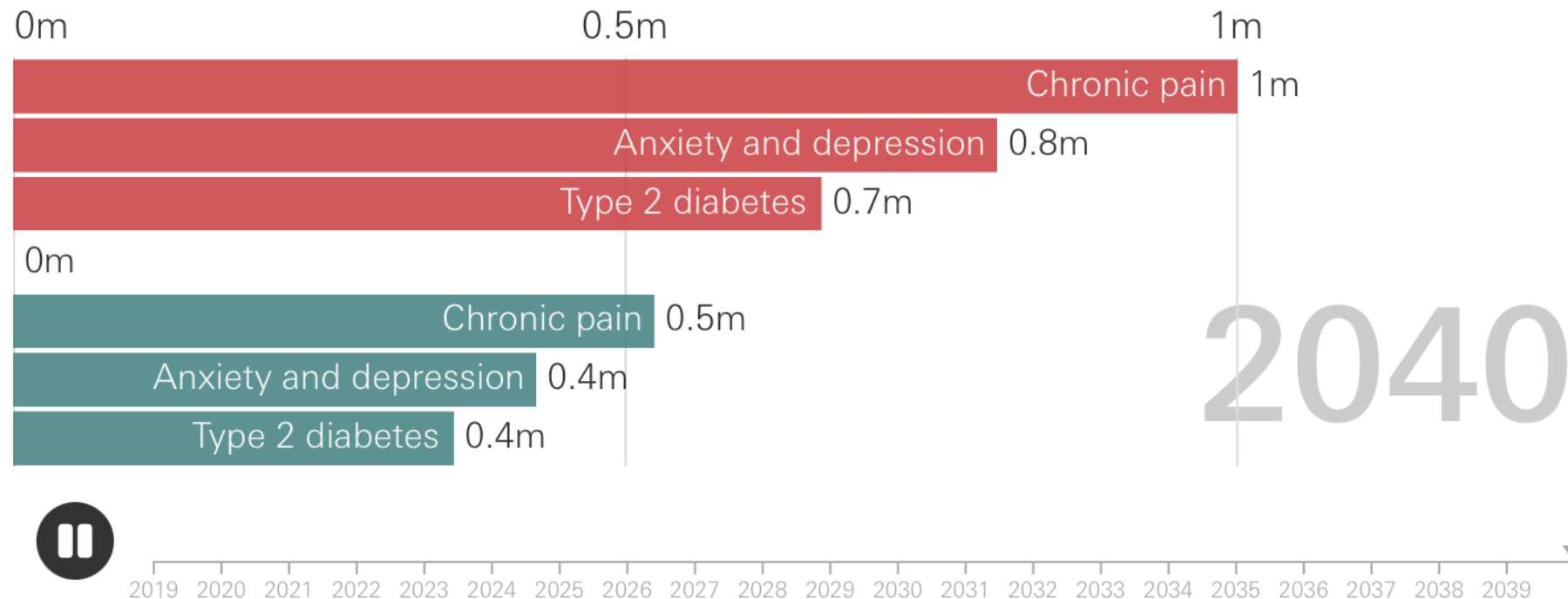
Dr Jemima Collins

Clinical Associate Professor, the University of Nottingham
Honorary Consultant Geriatrician, University Hospitals Derby and Burton
NHS Foundation Trust



Chronic pain projected to increase markedly by 2040

Projected number of people aged 20 years and older living with diagnosed condition, 2019 to 2040



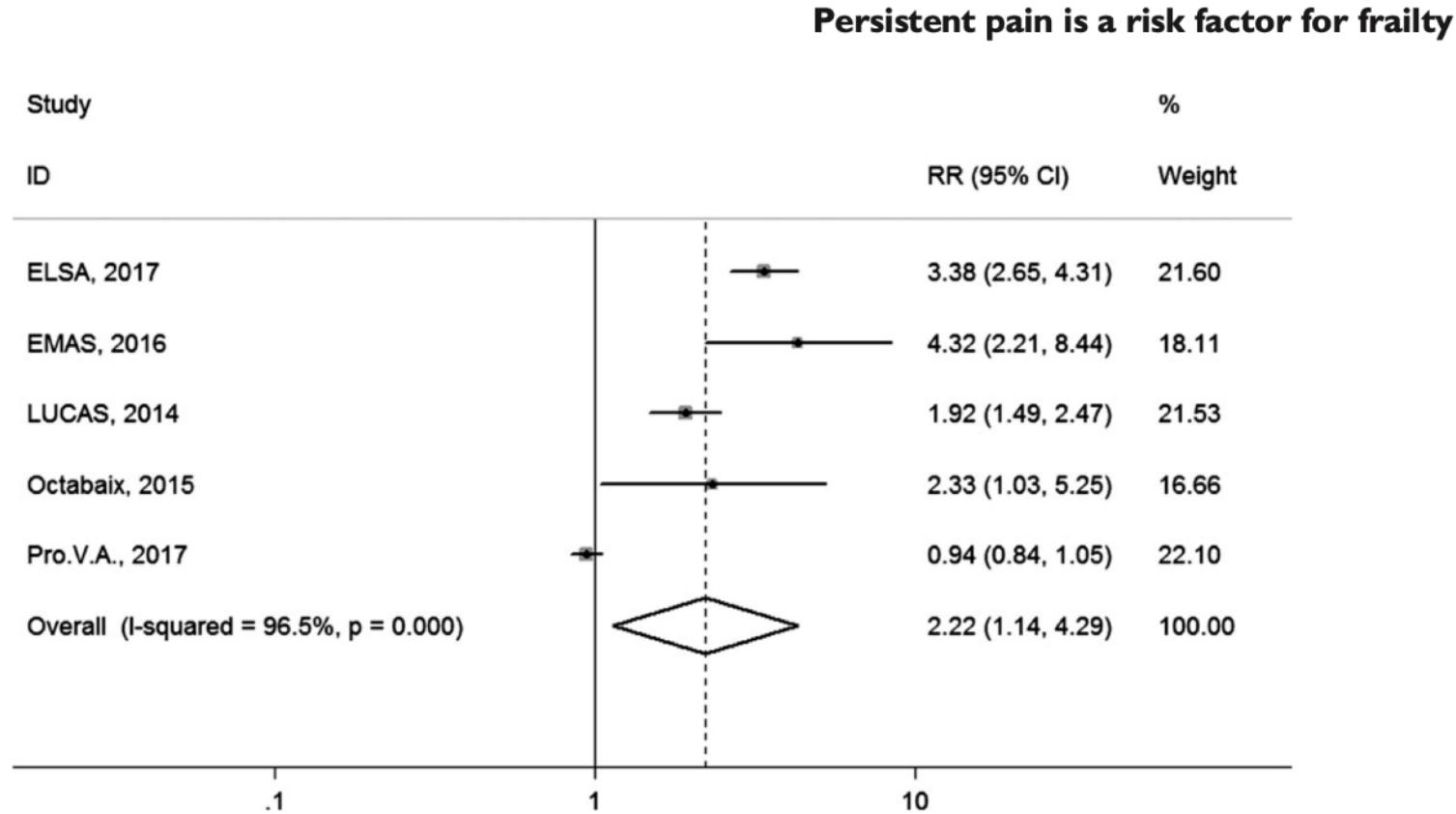
REAL Centre

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Figures are rounded to 1 decimal place. Transition reflects average growth rate between 2019 and 2040.



Pain and Frailty are closely linked



MA from
prospective
longitudinal
studies, N=13,120

Persistent pain at
baseline , RR 2.22
of developing frailty
at follow-up

Figure 2. Forest plot of the relative risks (RR) and 95% confidence intervals (CI) from a random-effects meta-analysis for the association between pain at the baseline and incidence of frailty during the follow-up. For each study, the size of the grey square is indicative of the relative weight each study carried in the meta-analysis. The rhombi represent the pooled RR for this association.

Saraiva et al, Age Ageing
2018; 47(6):785-793.
doi: 10.1093/ageing/afy104.



Physical activity is effective for pain and frailty

Frailty	Pain
<p>Puts et al, Scoping Review (2017) – In community dwelling older adults, physical activity ... reduced level of frailty.</p>	<p>Geneen et al, Cochrane Review (2017) – Physical activity and exercise is an intervention with few adverse events that may improve pain severity and physical function.</p>
<p>Travers et al, Systematic Review (2019) – In primary care frailty interventions, a combination of muscle strength training and protein supplementation ... delay or reverse individual frailty criteria and the easiest to implement in primary care.</p>	<p>Lam et al, Mapping Review (2023) – Using Pain Management Programmes and psychological therapies may improve responses to pain and well-being.</p>



Outcomes and Interventions

Prefrail

- Delay onset of frailty / Improve pain
- Exercise and **physical activity**

Frail

- Reverse frailty? Improve pain, HRQoL, maintain independence
- **Physical activity**, nutrition

Advanced Frailty

- HRQoL, admission avoidance
- **Holistic assessment interventions** e.g. CGA



Holistic assessment-based interventions for frailty

Arakelyan et al, Umbrella Review (2023) –

Comprehensive Geriatric Assessment – hospital and community settings

Outcomes:

- Improved HRQoL

- Hospital admission avoidance



Implementation and Impact

- Focus on prevention of frailty and improvement of pain
- Pain may be a key target for mitigating against frailty, given greater 'visibility'
- Physical activity as an intervention for both frailty and pain – research gap



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Thank you

jemima.collins@nottingham.ac.uk