

# Greater Manchester Falls Prevention Awareness Week: Online Bitesize Lunchtime Learning session

Wednesday 20<sup>th</sup> September

**12:05-12:20pm**

**Strength and Balance in Care Homes Project**

(Niall Bradley, Age UK Bolton)

**12:20-12:35**

**Fear of Falling**

(Prof Chris Todd & Dr Jodi Ventre, The University of Manchester)

**12:35-12:50pm**

**Recording: FAIR games for timely falls prevention in people with  
Parkinson's (Recording)**

(Dr Chesney Craig, Manchester Metropolitan University)



**GREATER  
MANCHESTER**  
**DOING HEALTH DIFFERENTLY**



# Age UK Bolton

## Strength & Balance in Care Homes Project



# Introduction

Having had experience of an initial concept pre covid the programme came about working with the neighbourhood transformation programme manager to develop a business case which received 15 months funding to deliver as a test and learn pilot. The aim was to reduce the number of NWAS call outs and conveyances due to falls.

Due to the impact of the pilot, we were successful and awarded 2-year funding to convert the pilot into a project.





# Objectives

- - To help reduce falls occurrences
- - To work towards reducing fall related NWS call outs.
- - To reduce hospital admissions by increasing physical activity in care homes.
- The project delivered by Age UK Bolton's Strength & Balance Exercise team, who are certificated in Postural Stability Instruction (PSI), Otago, Tai Chi, GP referral, Dementia Awareness, and qualified to safely deliver sessions tailored for people living with a wide range of further long-term conditions.
- It consists of a 12- sessions of:- 6 sessions with 4 – 5 people on a person centered 1:1 and small groups approach, chosen in following an agreed selection criteria 6 additional sessions working with staff to train and upskill their falls prevention knowledge, further embed movement within daily care, and evaluate each resident
- After the 12 sessions the staff will be empowered to keep up the exercises in line with FAME and OTAGO principles and should be continued for 12 months 2 – 3 times a week, per individual plus once as part of a group.



# Mini Objectives

- We know that any physical movement can be deemed exercise and what is difficult for some may not be for others. With that in mind for residents that may not be able to follow an Otago or psi structured Programme we aim to:
  - Use movement to improve overall physical and mental wellbeing.
  - Empower residents to express themselves and move freely when they get the urge. Staff need to be empowered to enable high risk residents to stand as opposed to asking them to sit back down.
- We need to use signs and expressions of residents to create an understanding of what the person is trying to tell us. E.G a dementia patient rising from the chair to stand when they are usually supported to do so could be showing us – discomfort, no longer wanting to sit, may not be happy in that room etc. This is also an opportunity to encourage that movement which will benefit muscular strength and bone density if aloud frequently.
- Use various equipment such as resistance bands, Pilates balls, soft balls, bean bags, music and be creative with movement.



# Challenges

Selecting and allowing staff that are able to commit time to support instructors. This is an important aspect to ensure continued success post Age UK Bolton support.

Staff support is necessary to aid with communication and ensure repetition is carried out through the week for continued progression. Key exercise prompts can be learnt to give regular reminders to residents E.G Where possible avoid slouching

in chairs to improve posture and abdominal/low back strength.

2. Annual Leave – this is going to occur both with care home staff and the instructors.

If more than one support staff is selected the other should be able to take over.

YouTube exercises have been created to follow in absence and any other activity is encouraged along with following home exercise booklets provided.





## Continued

3. Covid – Care home closures are expected to occur now and then to limit the spread. Our learning is that we can use this time to revisit previous homes to ensure continuation, support the staff and assist with any new challenges.

4. Attendance – Although residents may be selected it is apparent that from time to time they are likely to have appointments, be taken out by family, attend trips preorganized by the home or simply do not wish to engage each week. Again, this is where repetition is key, with the use of home exercise booklets, encouraged staff and YouTube classes. The exercises can be performed at a later date.

5. A class setting won't suit everybody just as an individual 1-1 session won't. We are going to be adaptable where possible to ensure each resident selected is empowered. Keeping residents engaged has been an on-going challenge and with the support from Empowered Movement and Later Life Training we understand that our expectations are sometimes too high. For residents with cognitive and concentration difficulties a 20 second outburst of movement in some form can be empowering. This can be encouraged and repeated throughout the day with care home staff.



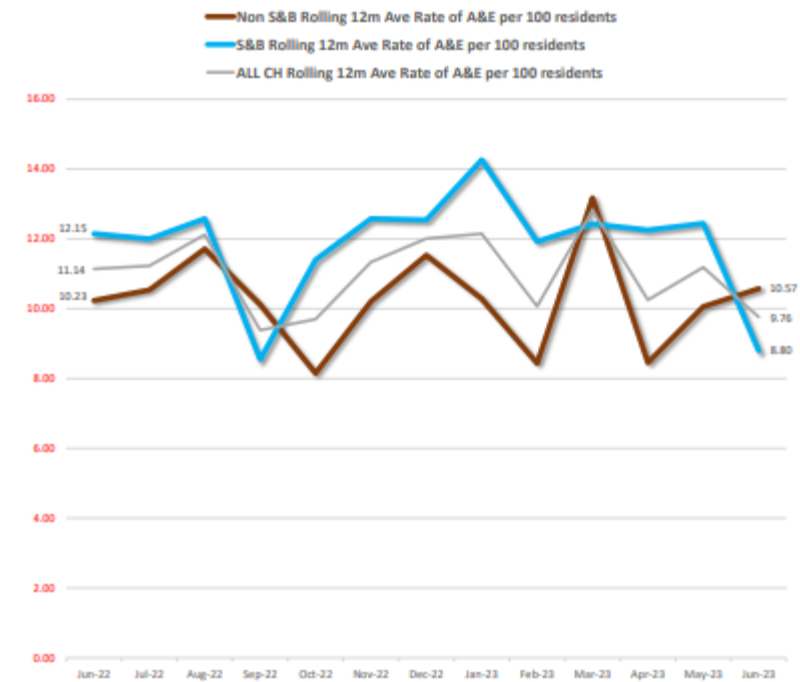
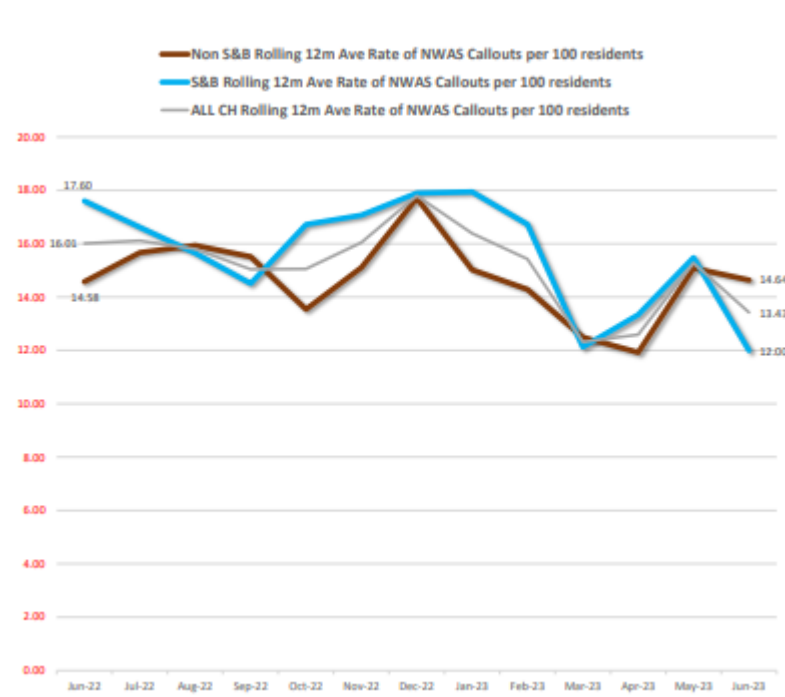
## Successes

- Even though we are a small part of a wider programme. We have regular consultations with the lead information analyst in Bolton. Our most recent meeting showed that the care homes we have worked in have shown a reduction in the average rate of falls.





## Evidence/Data





 Bolton  
ageUK

# Falls Prevention In Care Homes

Spring 2023

 Bolton  
ageUK

# Falls Prevention In Care Homes

Spring 2023



# Fear and Concerns about Falling

## *How Psychological Factors Affect Balance and Fall Risk*



Dr. Jodi Ventre  
Professor Chris Todd  
University of Manchester  
Jodi.ventre@manchester.ac.uk

*Dr Jodi Ventre and Professor Chris Todd are funded by the National Institute for Health and Care Research, Applied Research Collaboration-Greater Manchester (NIHR200174). The views expressed are those of the authors and not necessarily those of the NHS, the NIHR, the Department of Health and Social Care, or its partner organisations.*



# Early Take Home Messages

- Concerns/fear about falling are common in older adults
- High concern indicates that ‘something is not right’ and is a ‘cause for concern’
- This represents an opportunity for clinical engagement and a target for intervention
- Associated with a variety of **negative outcomes**:
  - Reduced mental wellbeing: in the form of increased depression and greater perceived vulnerability (Painter et al., 2012)
  - Leads to activity avoidance → resulting in deconditioning (Hadjistavropoulos et al., 2011)
  - Leads to increased risk for future falls..? (Friedman et al., 2002)

# Terminology

**CONCERNS ABOUT  
FALLING**



A lasting feeling of dread and apprehension about situations that are believed to threaten or challenge balance



**QUALITATIVE PAPER**

**Protective or harmful? A qualitative exploration of older people's perceptions of worries about falling**

TOBY J. ELLMERS<sup>1,2,3</sup>, MARK R. WILSON<sup>1</sup>, MERIEL NORRIS<sup>2</sup>, WILLIAM R. YOUNG<sup>1,2</sup>





# Fear of Falling: Causes

*What causes fear of falling?*

1. The perception that balance is threatened
2. Previous falls
3. Having known/observed others who have fallen



*Recognition of risk for  
an injurious fall*



**CONCERNS ABOUT  
FALLING**



***POSTURAL  
THREAT***



**Fear of falling:** An emotional response to  
present/imminent threat to balance

**Emotional response  
(fear of falling)**

**Behavioural response**

*Recognition of risk for  
an injurious fall*



**CONCERNS ABOUT  
FALLING**

*How does a postural threat trigger  
an emotional response?*

*What responses are protective?  
And what are maladaptive?*



***POSTURAL  
THREAT***



**Emotional response  
(fear of falling)**

**Behavioural response**




# Traditional vs. New Concepts



JOURNAL ARTICLE

## Why should clinical practitioners ask about their patients' concerns about falling? [Get access >](#)

Toby Jack Ellmers , Ellen Freiburger, Klaus Hauer, David B Hogan, Lisa McGarrigle, Mae Ling Lim, Chris Todd, Finbarr Martin, Kim Delbaere,  
The World Falls Guidelines Working Group on Concerns About Falling

*Age and Ageing*, Volume 52, Issue 4, April 2023, afad057,  
<https://doi.org/10.1093/ageing/afad057>

# Protective or harmful? A qualitative exploration of older people's perceptions of worries about falling

TOBY J. ELLMERS<sup>1,2,3</sup>, MARK R. WILSON<sup>1</sup>, MERIEL NORRIS<sup>2</sup>, WILLIAM R. YOUNG<sup>1,2</sup>

## LOW PERCEPTIONS OF CONTROL



Triggers persistent worries and panic: *"a really frightening feeling that everything's going to end"*

Panic distracted them from adapting behaviour in useful ways

*"...All this worrying stops me being able to focus on what I need to do when walking"*

## HIGH PERCEPTIONS OF CONTROL

Worries viewed as helpful... if preventing the worrisome fall is perceived as controllable

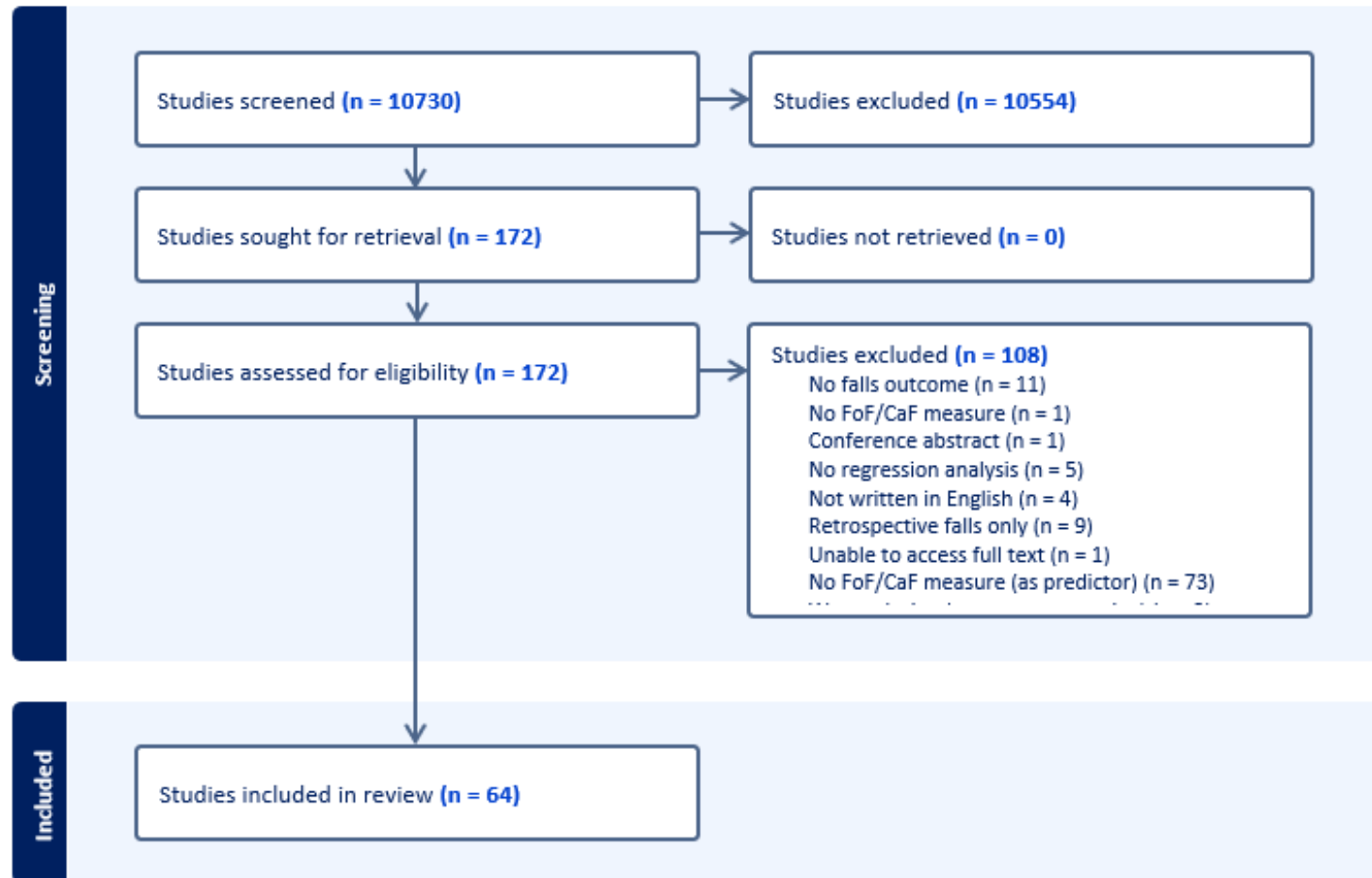


Protective adjustments to behaviour → reduced fear

Draw attention to threats

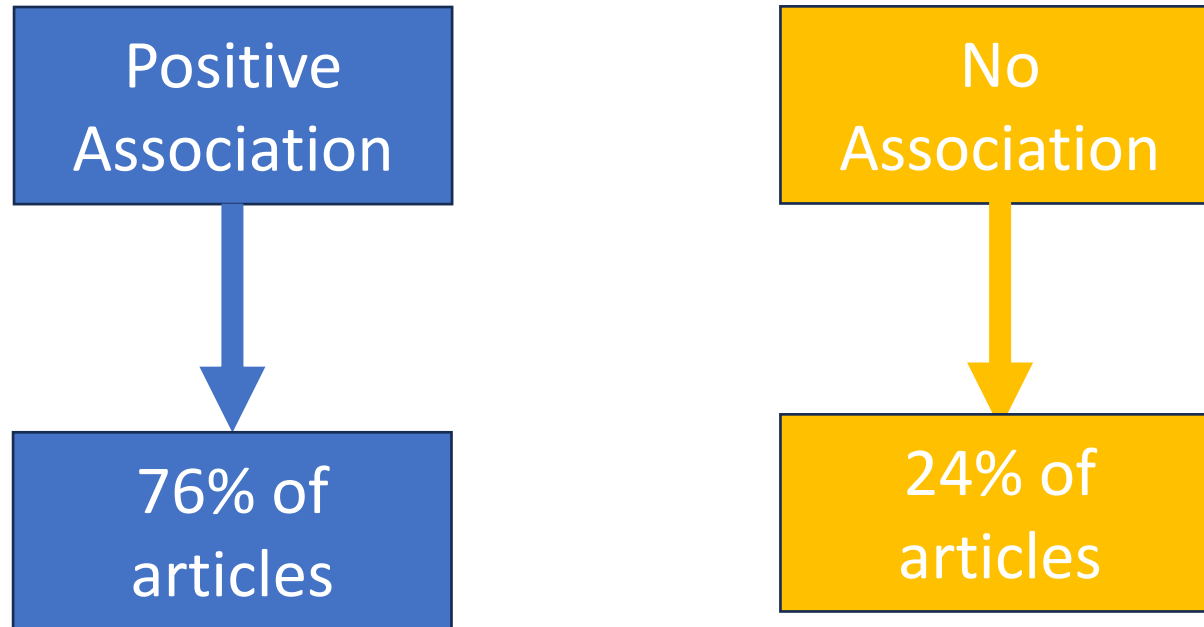
*"I'm still at the stage where if I concentrate and apply myself, I can avoid a fall"*

# Do Concerns about Falling Predict Future Risk of Falls?



Ellmers, T.J, Ventre, J., Todd, C., McGarrigle, L., Lim, M., Freiburger, E., Hauer, K., Hogan, D., Nyman, S. and Delbaere, K. on behalf of the Concerns about Falling World Falls Guidelines Working Group (In Prep)

# Do Concerns about Falling Predict Future Risk of Falls?



*Elmers, T.J, Ventre, J., Todd, C., McGarrigle, L., Lim, M., Freiberger, E., Hauer, K., Hogan, D., Nyman, S. and Delbaere, K. on behalf of the Concerns about Falling World Falls Guidelines Working Group (In Prep)*



# Clinical Recommendations

*Age and Ageing* 2022; **51**: 1–36  
<https://doi.org/10.1093/ageing/afac205>

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## GUIDELINE

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

#### *Recommendation 1:*

We recommend including an evaluation of concerns about falling in a comprehensive fall risk assessment of older people.

#### *Recommendation 2:*

We recommend using a standardised instrument to evaluate concerns about falling (such as the FES-I and Short FES-I) in community-dwelling older people.

#### *Recommendation 3:*

We recommend using the Short FES-I for assessing concerns about falling in acute care hospitals or long-term care facilities.

# Falls Efficacy Scale – International (FES-I)

## FES-I

Now we would like to ask some questions about how concerned you are about the possibility of falling. Please reply thinking about how you usually do the activity. If you currently don't do the activity (e.g. if someone does your shopping for you), please answer to show whether you think you would be concerned about falling IF you did the activity. For each of the following activities, please tick the box which is closest to your own opinion to show how concerned you are that you might fall if you did this activity.

		<i>Not at all concerned</i> 1	<i>Somewhat concerned</i> 2	<i>Fairly concerned</i> 3	<i>Very concerned</i> 4
1	Cleaning the house (e.g. sweep, vacuum or dust)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
2	Getting dressed or undressed	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
3	Preparing simple meals	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
4	Taking a bath or shower	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
5	Going to the shop	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
6	Getting in or out of a chair	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
7	Going up or down stairs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
8	Walking around in the neighbourhood	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
9	Reaching for something above your head or on the ground	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
10	Going to answer the telephone before it stops ringing	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
11	Walking on a slippery surface (e.g. wet or icy)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
12	Visiting a friend or relative	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
13	Walking in a place with crowds	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
14	Walking on an uneven surface (e.g. rocky ground, poorly maintained pavement)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
15	Walking up or down a slope	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
16	Going out to a social event (e.g. religious service, family gathering or club meeting)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

Age & Ageing 2005

## Short FES-I

Now we would like to ask some questions about how concerned you are about the possibility of falling. Please reply thinking about how you usually do the activity. If you currently don't do the activity, please answer to show whether you think you would be concerned about falling IF you did the activity. For each of the following activities, please tick the box which is closest to your own opinion to show how concerned you are that you might fall if you did this activity.

		<i>Not at all concerned</i> 1	<i>Somewhat concerned</i> 2	<i>Fairly concerned</i> 3	<i>Very concerned</i> 4
1	Getting dressed or undressed	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
2	Taking a bath or shower	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
3	Getting in or out of a chair	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
4	Going up or down stairs	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
5	Reaching for something above your head or on the ground	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
6	Walking up or down a slope	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>
7	Going out to a social event (e.g. religious service, family gathering or club meeting)	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>

Age & Ageing 2008

Widely used  
42+ languages  
3000+ citations  
[www.fes-i.org](http://www.fes-i.org)

## A systematic review and meta-analysis of the measurement properties of concerns-about-falling instruments in older people and people at increased risk of falls

LISA MCGARRIGLE<sup>1,2</sup>, YANG YANG<sup>1,2,3</sup>, REENA LASRADO<sup>1,2,3</sup>, MATTHEW GITTINS<sup>1,2,4</sup>, CHRIS TODD<sup>1,2,3,4</sup>

Cut offs	FES-I	Short FES-I
Low	≤19	≤8
Medium	20-27	9-13
High	≥28	≥14

Age & Ageing 2010

# Final Take Home Messages

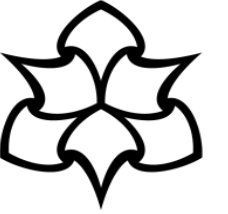
- High concerns about falling are ‘cause for concern’ and can lead to activity restriction, reduced quality of life and increased risk for falls.
- As a result of this - World Falls Guidelines advise clinicians to ask all patients about their concerns routinely – not just those who have recently fallen or with balance/mobility limitations.
- FES-I/Short FES-I provides a structured validated way to do this as recommended in World Falls Guidelines.
- The disclosure of concerns presents the opportunity for clinical engagement.

[www.fes-i.org](http://www.fes-i.org)

[Jodi.ventre@manchester.ac.uk](mailto:Jodi.ventre@manchester.ac.uk)

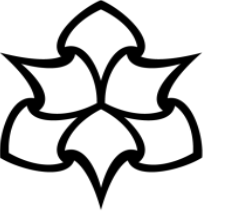
[chris.todd@manchester.ac.uk](mailto:chris.todd@manchester.ac.uk)





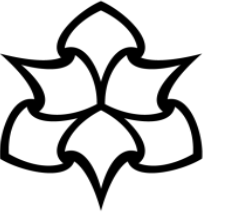
# FAIR games for timely falls prevention in people with Parkinson's

Dr Chesney E. Craig  
c.craig@mmu.ac.uk



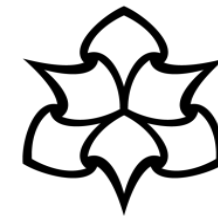
## What is Parkinson's?

- Neurodegenerative disease that affects all aspects of daily living
- Main symptoms include; tremor, slowness of movement and rigidity
- Motor symptoms: balance impairment, difficulty swallowing, speech problems
- Non-motor symptoms: pain, sleep disturbance, dizziness, incontinence, lethargy, thinking problems
- ~153,000 people living with Parkinson's in the UK



## Falls, Ageing and Parkinson's

- 30-40% of adults aged 65+ fall at least once each year
- Increases to 50% in those aged 80+
- Increases to 60% in people living with Parkinson's
- 2x as likely to fall as people with other neurological conditions (Stolze et al., 2005)
- Falls and imbalance are the most cited concern for people living with late-stage PD (Port et al., 2021)



## Gait Changes in Parkinson's



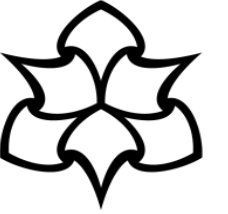
(Gait is the manner of  
someone's walking)

~**60%** of people with Parkinson's disease  
report **at least one fall** and recurrent fallers  
report **4.7** to **67.6 falls per year** (Allen et al. 2013)

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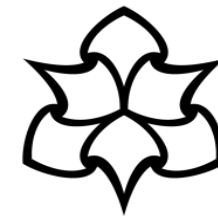




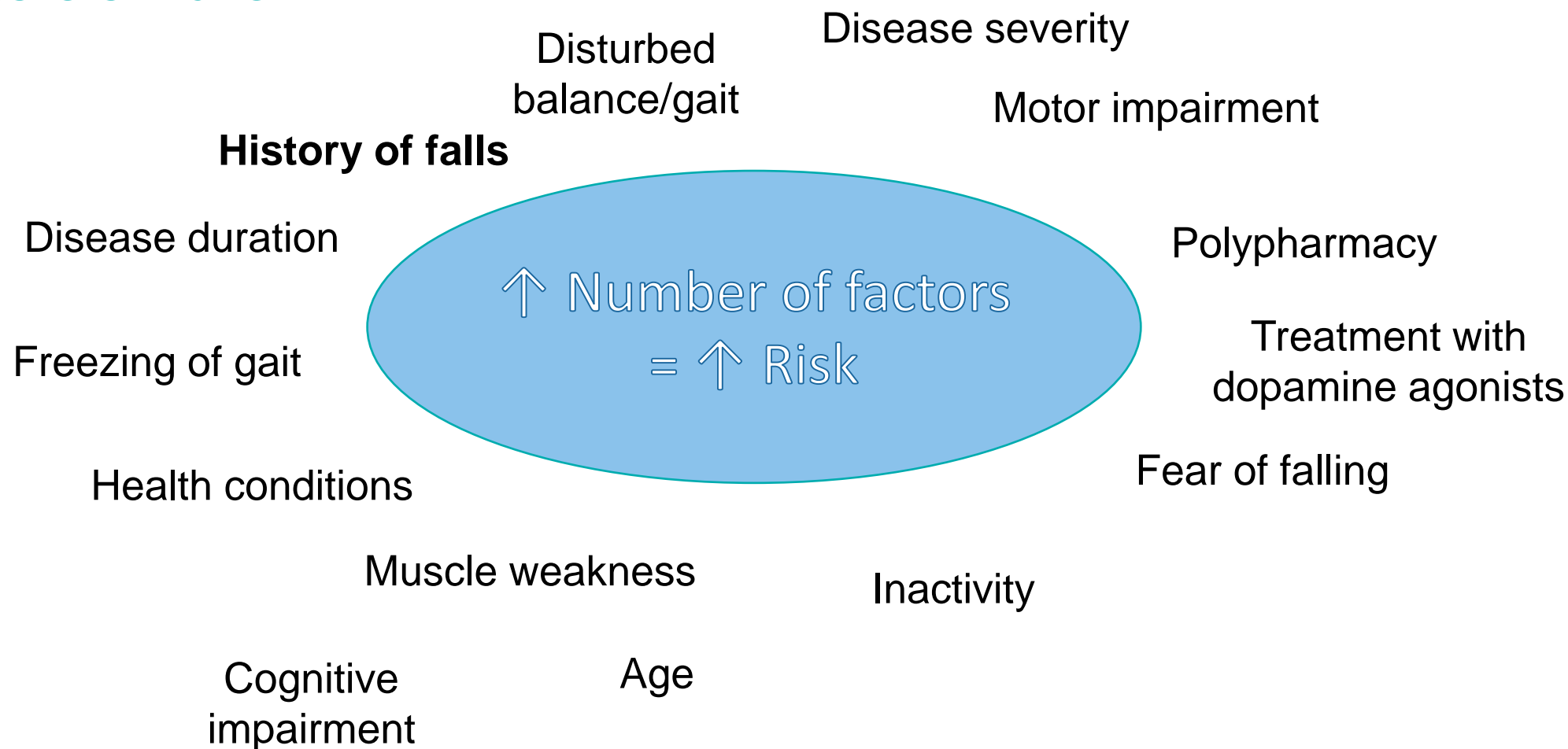


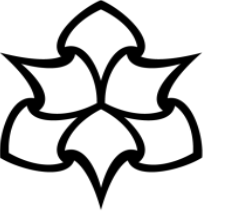
## Not so simple...

- 1 in 5 people with early Parkinson's experience falls (Voss et al, 2012)
  - Over 10% of these early stage fallers are habitual fallers
- 13/100 respondents said they fell more than once per week, with most falling more than once daily (Koller et al., 1989)
- ~25% of PD falls are injurious



## Predictors of Falls





## Our Research

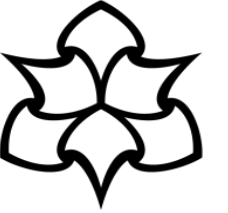
- AIM: To discover why Parkinson's causes some people to fall, whilst others don't.

Objectives:

1. To improve understanding of the neural mechanisms that contribute to potential falls in Parkinson's
2. To prevent falls before they happen through identification of markers and early intervention

Observational  
lab-based  
research

Applied  
research



## Medication Management in Hospital

- Parkinson's is a fluctuating disorder
- Can be managed by a strict regime of antiparkinsonian medication
- Even a delay of ~30 minutes can result in severe health problems
- Can include; tremors, rigidity, inability to walk, speech problems, confusion, pain and anxiety

PARKINSON'S<sup>UK</sup> CHANGE ATTITUDES. FIND A CURE. JOIN US.

# GET IT ON TIME

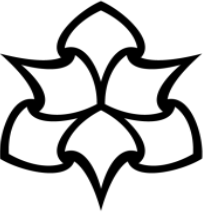
People with Parkinson's need their medication on time – every time.

*get it ontime*

© Parkinson's UK, February 2013. Parkinson's UK is the operating name of the Parkinson's Disease Society of the United Kingdom. A charity registered in England and Wales (202113) and in Scotland (SC037264).

The image shows a promotional poster for Parkinson's UK. It features a blue background with the text 'GET IT ON TIME' in large, white, bold, sans-serif capital letters. Below this, in smaller white text, it says 'People with Parkinson's need their medication on time – every time.' To the left of the main text, there is a vertical line of text: 'PARKINSON'S<sup>UK</sup> CHANGE ATTITUDES. FIND A CURE. JOIN US.' In the bottom right corner, there is a yellow sticky note with the words 'get it ontime' written in a cursive, handwritten style. At the very bottom, there is a small line of fine print.





## Medication Management in Hospital

- 63% of people with Parkinson's didn't receive their medication on time in hospital
- 78% reported health declines as a result of delayed medication
- Hospitalisation is a huge risk factor for falls
- AIM: To determine whether missed/delayed medication in hospital can affect health outcomes, extend hospital stays and contribute to future falls

PARKINSON'S<sup>UK</sup> CHANGE ATTITUDES. FIND A CURE. JOIN US.

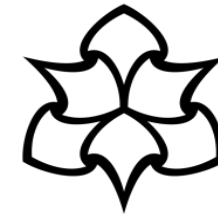
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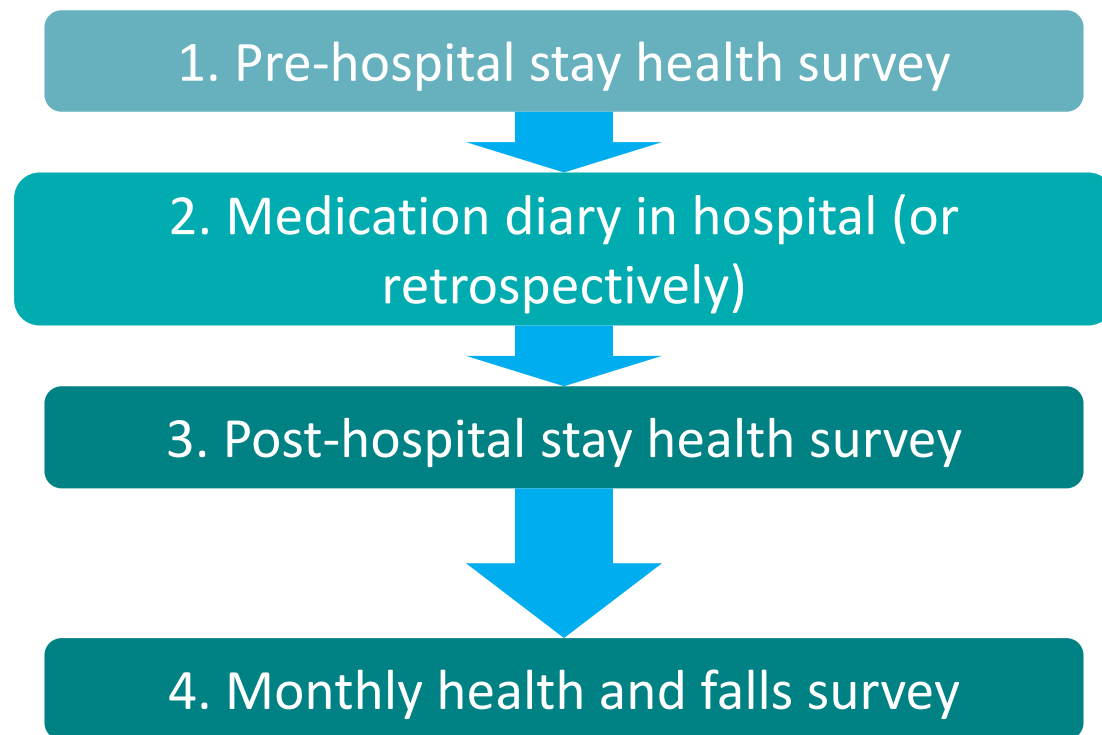
*get it ontime*

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## Medication Management in Hospital



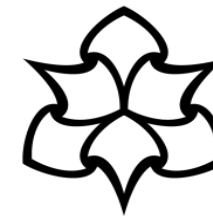
**GET IT ON TIME**

People with Parkinson's need their medication on time – every time.

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## How to Find Out More

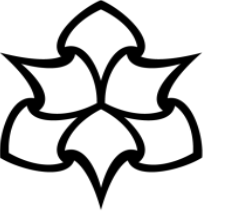


### A research opportunity for your patients

Researchers at Manchester Metropolitan University are investigating whether changes or delays in how Parkinson's medication is administered to people with Parkinson's while in hospital has an impact on their recovery when they return home.

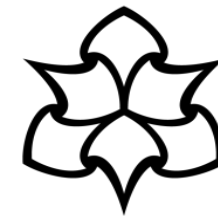
They are looking for people with Parkinson's who are taking medication for their Parkinson's, and who have recently attended hospital, or who have a hospital visit planned.

[More about this research opportunity](#)



## Functional and Interactive Rehabilitative (FaIR) Games for Falls Prevention

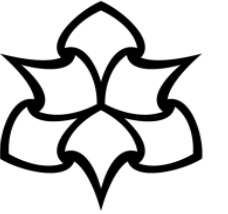
- Global falls guidelines recommend falls prevention interventions in all hospitalised adults aged 65+ and younger high-risk groups, including those with Parkinson's
- Few falls prevention interventions target recently discharged patients
- Pre-habilitation rather than rehabilitation?



# Functional and Interactive Rehabilitative (FaIR) Games for Falls Prevention



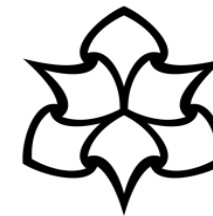




## Functional and Interactive Rehabilitative (FaIR) Games for Falls Prevention

- Pilot aims:
  1. To test the usability of the games in people with Parkinson's
  2. To assess whether balance and mobility changes can be witnessed across a 5-week intervention





## Quotes from participants

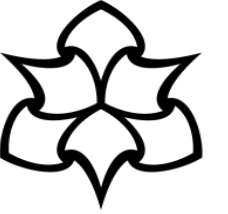
It's made me do more exercise at the moment ...when you've got Parkinson's you lose your **motivation**...your get up and go, sort of thing...so once you've got that starting point, well then you're motivated. It motivated me to go back to... training

You've enjoyed it as well. You've told all your friends now and they're interested... We're sad it's coming to an end, really

...the exercising **isn't like exercising** in a way. That's the whole point, it's fun!

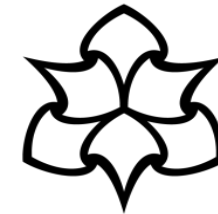
I've found it really helpful. I think I have improved but I don't know if that's psychological or an actual improvement. But **I feel more able to balance** and not as shaky as I was.

I'm surprised at ... how the simplicity of the presentation has such immediate effects... with relatively simple games to play, it very quickly points out "Oh, I can do that or can't do that"... People say to you when you take your medications "Has it improved your symptoms?", well you might have felt worse even though it has improved your symptoms, so to do something (like the games) that within an instant (gives feedback), there's a **feel good factor** to that. I think all medication, whether it's something you take or something you do, if it makes you feel good then it won't disappoint

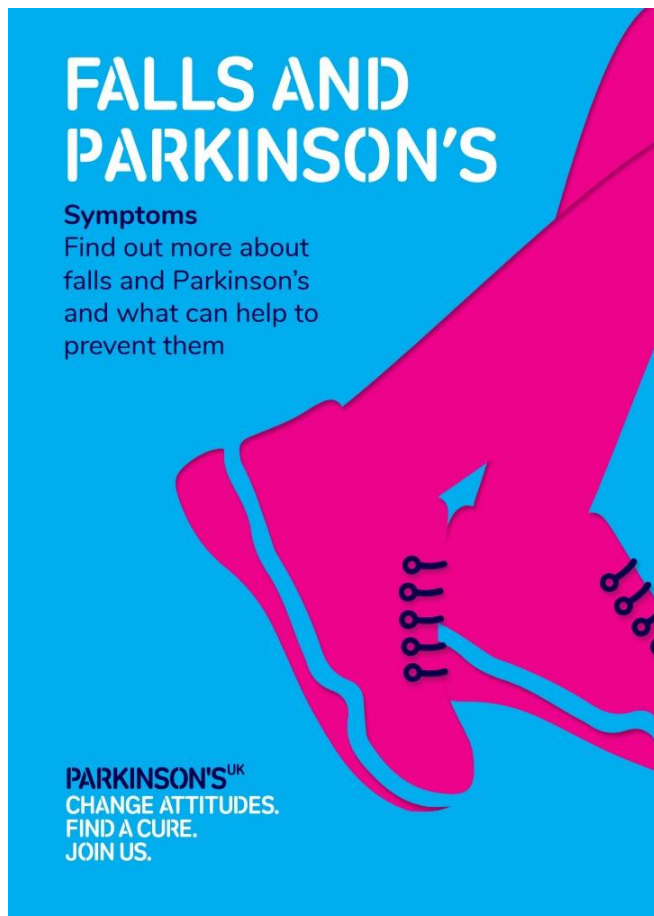


## Next steps

- Target individuals before they go into hospital
- Translate the games into a more portable format
- Longitudinal monitoring of falls outcomes following the intervention



## Resources



We want to make sure that you can take your own medication in hospital or that your healthcare professional makes sure you get it on time, every time.

Our range of Get It On Time resources can help. Order or download them now.

Get It On Time poster



Get It On Time laminated clock poster

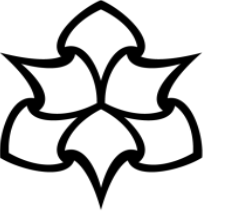


Get it on time stickers



Get It On Time washbag



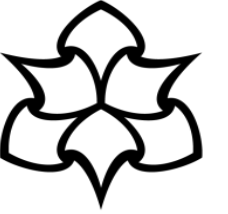


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**Questions can be sent to:**

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# Thank you for attending the session 😊

The recording and slides from today will be available soon.

For any questions and feedback, please do email me on:

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