#spspFalls

SPSP Acute Adult Webinar Series
Falls: Time for Movement

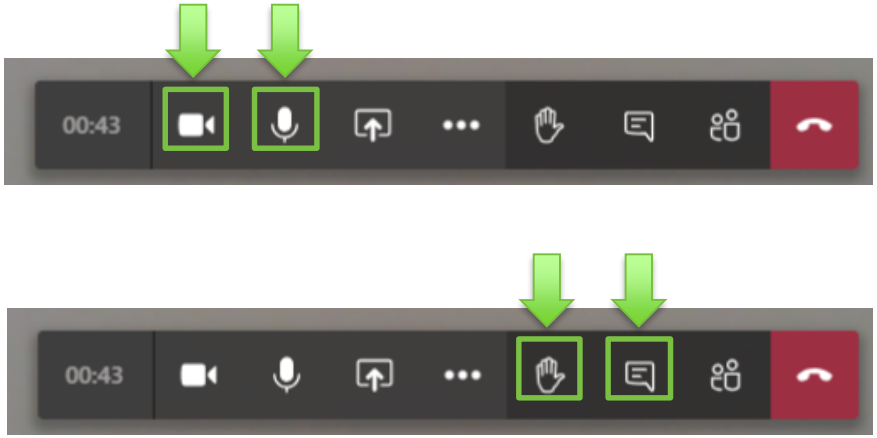
9 March 2022: 2pm – 3pm

Welcome

Claire Mavin

Portfolio Lead, Acute Care Portfolio,
Healthcare Improvement Scotland

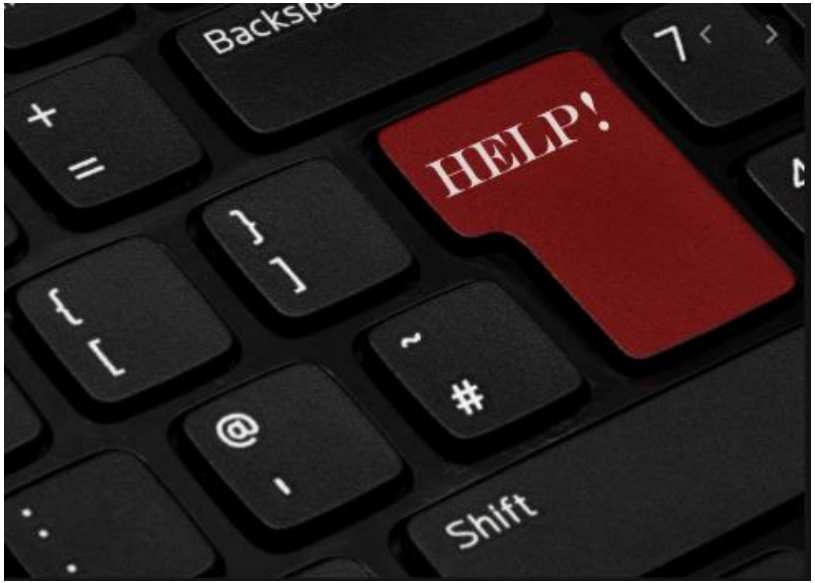
Meeting participation



During the meeting please have your microphone on mute, video will automatically be turned off.

- To take part in discussions use the **chat box** or **raise your hand** and wait to be invited to speak, please then:
- unmute your mic
- after speaking please re-mute

Trouble shooting



Any technical issues, please contact:

Sara Turner

- MS Teams chat or
- Email: hisacutecare@nhs.scot

Agenda

Time	Topic	Lead
14:00	**Welcome and housekeeping**	**Claire Mavin,** Portfolio Lead, Acute Care Portfolio Healthcare Improvement Scotland
14:05	**Falls, frailty and deconditioning: are your patients fit to sit?**	**Professor Dawn Skelton,** Professor of Ageing and Health (ReaCH), Glasgow Caledonian University
14:25	**Active Wards in Context**	**Erin Walker**, Practice Development Physiotherapist, NHS Greater Glasgow & Clyde
14:45	**Q & A**	**Claire Mavin,** Portfolio Lead, Acute Care Portfolio Healthcare Improvement Scotland
14:55	**Close and evaluation**	**Claire Mavin,** Portfolio Lead, Acute Care Portfolio Healthcare Improvement Scotland

We want to hear from you……

Poll 1

- How did you find out about today's Webinar?

Poll 2

- What is your role?

Aims of the session

- Discuss best practice in relation to falls, frailty and deconditioning
- Share experience of promoting an Active Wards approach in an acute hospital setting
- Provide an opportunity for discussion and Q & A

Welcome and introduction

Professor Dawn Skelton

Professor of Ageing and Health (ReaCH),
Glasgow Caledonian University

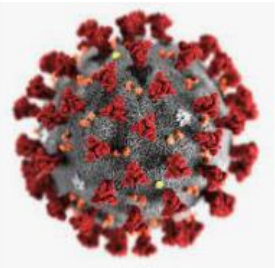
Falls, frailty and deconditioning: are your patients fit to sit?

Professor Dawn Skelton
Professor of Ageing and Health, Director of Later Life Training, Glasgow Caledonian University

@GCUReach @LaterLifeTrain

Are you seeing more frailer older adults?

Restrictions to activity due to Covid-19 (over last 2 years) has meant that many older adults have vastly reduced their physical activity (126 mins to 77 mins per week strength and balance activity 2019-2020)



Modelling on the reduction of strength and balance activity in first lockdown (3 months) period in England predicted >250,000 more falls in 110,000 people, costing £211 million over next 2.5 years

Many community activities, clubs etc. are still not open - these predictions vastly underestimate the potential wave of frailty and fallers coming

(*PHE, 2021*. 'Covid-19 impacts on people aged 65 and over')

Aim: To reduce falls in hospital

What are we trying to achieve...	We need to ensure...	Which requires...
National Aim: • reduce all falls by 20% • reduce falls with harm by 30% by Sep 2023	Person centred care*	Patient and family inclusion and involvement* Individualised assessment Targeted evidence based falls risk interventions Regular review Patient / family / carer involvement* Maintain a safe environment Meaningful activity Maximise opportunities for supported positive risk taking
Local Aim: • reduce all falls by .... • reduce falls with harm by .... by Sep 2023	Promote mobilisation Multidisciplinary Team intervention and communication* Organisational safety culture*	Management of communication in different situations* Use of standardised communication tools* Communication between primary and secondary care Multidisciplinary falls risk assessment and intervention Psychological safety* Staff wellbeing* Safe staffing* System for learning*

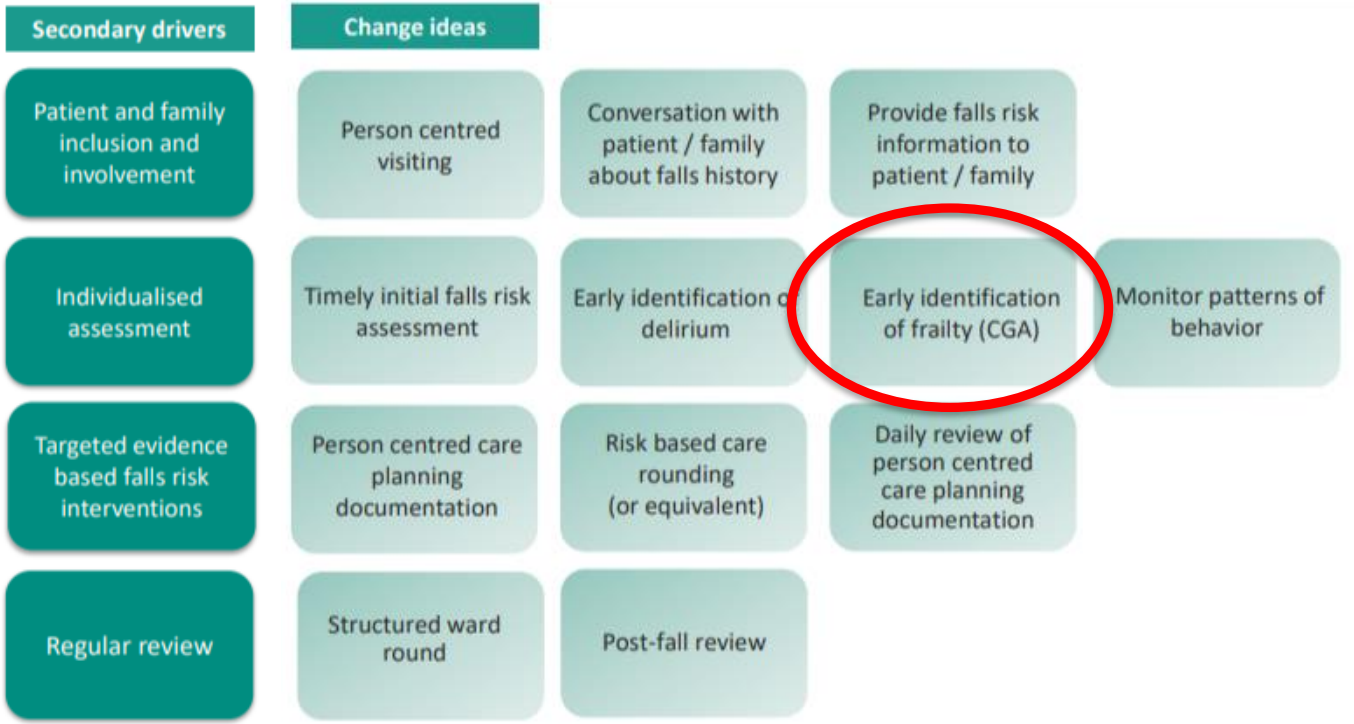
**Essentials of Safe Care*

Falls among inpatients are the most frequently reported safety incident in NHS hospitals

- 30-50% some injury
- 1-3% fracture
- Poor sequelae

Morris & O'Riordan, 2017
'prevention of hospital falls'

Identify frailty early



Frailty at admission is associated with in patient falls

Odds Ratio 1.29 per increase in frailty index (same as risk of length of stay >28 days)

Hubbard et al. 2017
'frailty status at admission'

Frailty

Frailty is a distinctive health state related to the ageing process in which multiple body systems gradually lose their in-built reserves.

The frailty state for an individual is not static; it can be made better and worse.

British Geriatrics Society
'Fit for Frailty'

A fifth of >75s admitted to hospital are frail. These account for almost half of all hospitalisation days

Searle & Rockwood. 2018
'what proportion of older adults are frail'

Frailty costs

Extra annual cost to the healthcare system per person

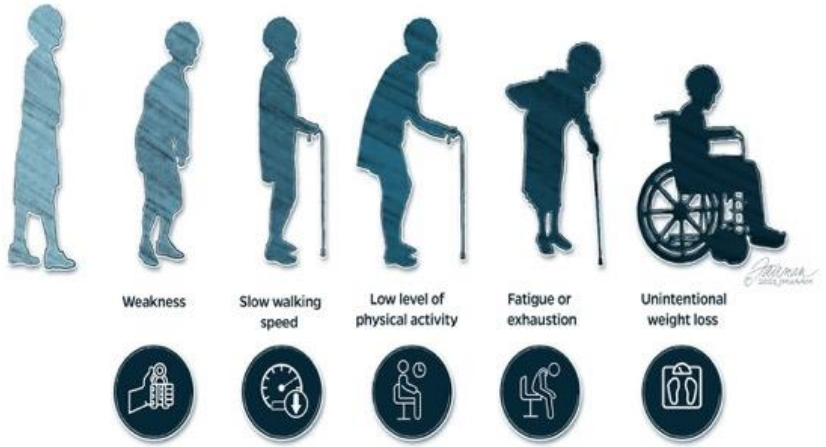
£561.05 for mild
£1,208.60 for moderate
£2,108.20 for severe frailty

This equates to a total additional cost of £5.8 billion per year across the UK.

Han et al. 2019
'the impact of frailty'

E-learning in frailty identification, assessment and personalised care
'frailty'

>75 a flexed spine associated with higher risk of falls (IRR 1.67)
Koelé et al. 2022
'the association between hyperkyphosis and fall incidence'



Frailty leads to higher risk of:

- **Falls**
- **Hospital Deconditioning**
- **Longer length of stay**
- **Death**

What happens to those who fall in hospital?

Healthcare Improvement Scotland

Scottish Patient Safety Programme

Those who have multiple falls in hospital are more likely to fall at home after discharge

- 35% will be readmitted in the next month
- 5% will die

Davenport et al. 2009
'falls following discharge after an in-hospital fall'

47% develop post-fall syndrome (retropulsion in stance and anxiety about movement)

Mathon et al. 2017
'post-fall syndrome'

Few are aware about how to prevent falls when they do go home (or prioritise it even if they do know!)

Hill et al. 2011
'falls after discharge from hospital'

Increased concern about falls and decreased confidence in movement

Meyer et al. 2018
'falls not a priority'

The evidence for falls prevention in hospital

Cochrane Library
Trusted evidence.
Informed decisions.
Better health.

Additional physiotherapy in rehabilitation wards (3 studies)

- Mixed results so uncertain effects on rate of falls or on reducing number of fallers

Bed and chair sensor alarms (2 studies)

- Mixed results so uncertain effects on rate of falls or on reducing number of fallers

Multifactorial Interventions (5 studies)

- May reduce rate of falls (RaR 0.80) – maybe more likely in subacute settings
- Uncertain effects on reducing number of fallers

Cameron et al. Cochrane Review. 2018
'interventions for preventing falls in older people'

Possible falls reducing interventions

Single interventions such as:

- High risk wristbands/bed signage
- Medication review
- Urinalysis
- Vit D prescription
- Bed/chair alarms

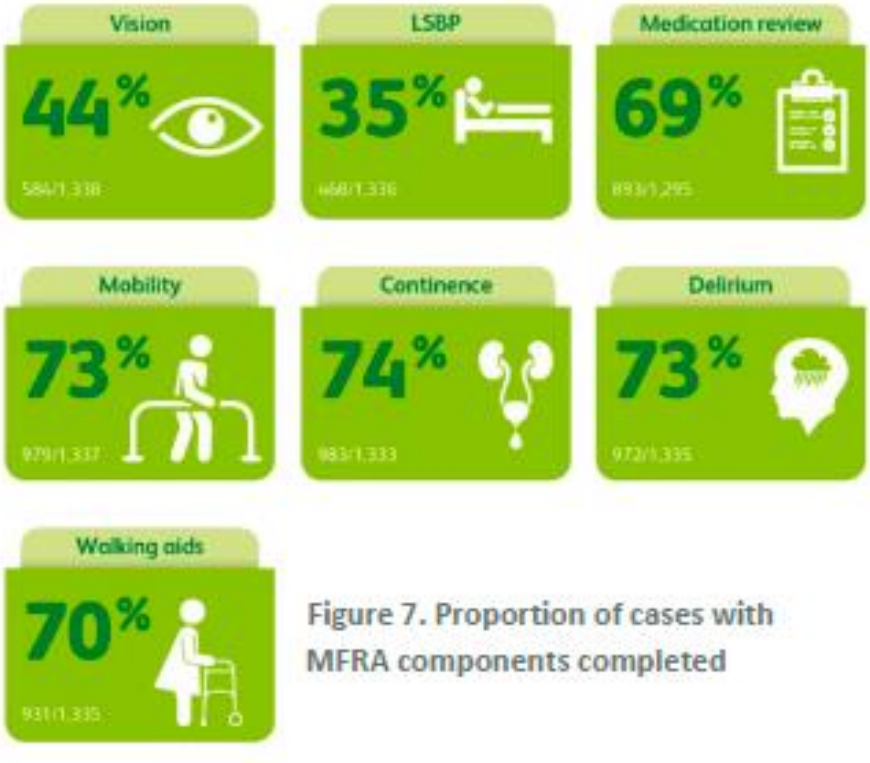
Are NOT generally successful

Morris & O'Riordan, 2017
'prevention of falls in hospital'

Complex multiple components of risk and intervention are MORE successful including:

- Mobility and aids
- Toileting and continence needs
- Medication review
- Vision and glasses nearby
- Confusion
- Orthostatic hypotension
- Minimising clutter
- Clear pictorial signage
- Appropriate footwear
- Hearing aids

National Audit of Inpatient Falls



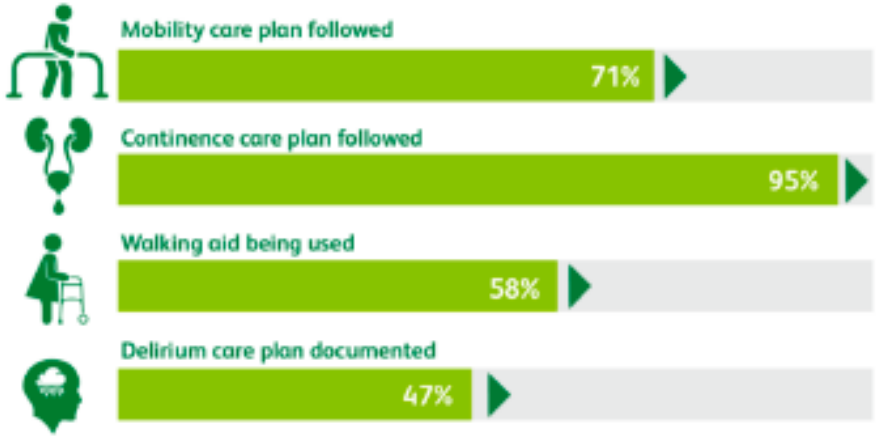


Figure 7. Proportion of cases with MFRA components completed

NAIF 2021 report
'national audit of inpatient falls'

Promote mobilisation

Secondary drivers	Change ideas			
Patient / family / carer involvement	Test 'What matters to you?'	Personal outcomes discussions	Family involvement in therapy sessions	
Maintain a safe environment	Desks in bay with staff member presence	Seats placed around the ward for patients to rest	Bed rail assessment to inform plan of care	
Meaningful activity	Use of volunteers	Risk enablement to encourage patient mobility	Group based exercise programmes	Structure staff and ward activity
Maximise opportunities for supported positive risk taking	Posters of activities around ward e.g. sit to stands at bed space	Communication of patient mobility needs e.g I Can	Daily plan for patients to get up and dressed	Individualised prescribed mobility plans with visual exercise prompts

Available falls risk screening tools are insensitive

20-30% of falls can be prevented

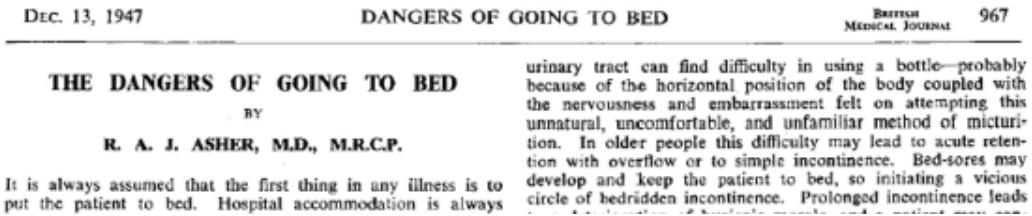
Morris & O'Riordan, 2017
'prevention of falls in hospital'

What's happening?

Over a 4 year period:

- Those who were less active became more frail
- Those who were frail sat more
- Uni-directional relationship between frailty and activity

Manas et al. 2020
'movement behavior or frailty?'



DEC. 13, 1947 DANGERS OF GOING TO BED BRITISH MEDICAL JOURNAL 967

THE DANGERS OF GOING TO BED

BY

R. A. J. ASHER, M.D., M.R.C.P.

It is always assumed that the first thing in any illness is to put the patient to bed. Hospital accommodation is always

urinary tract can find difficulty in using a bottle—probably because of the horizontal position of the body coupled with the nervousness and embarrassment felt on attempting this unnatural, uncomfortable, and unfamiliar method of micturition. In older people this difficulty may lead to acute retention with overflow or to simple incontinence. Bed-sores may develop and keep the patient to bed, so initiating a vicious circle of bedridden incontinence. Prolonged incontinence leads

With thanks to Brian Dolan

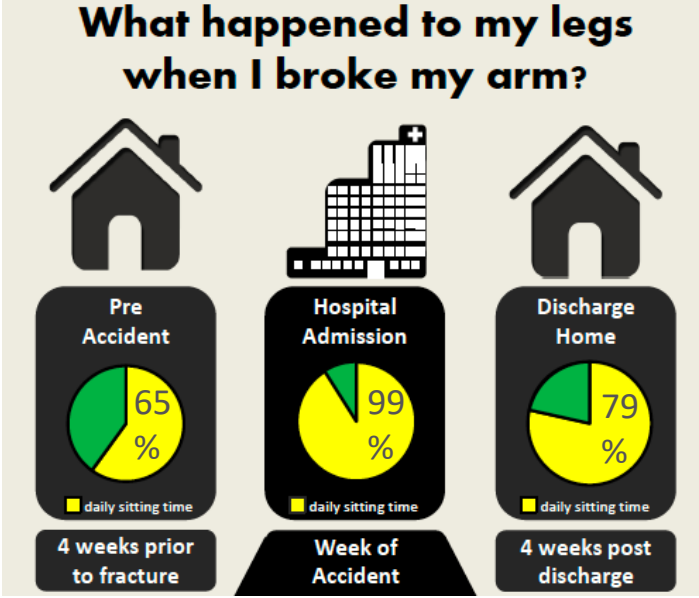
Deconditioning in Hospital

Deconditioning syndrome comprises physical, psychological and functional decline that occurs as a result of prolonged bed rest and associated loss of muscle strength, commonly experienced through hospitalisation

(*Arora & Dolan 2021*) 'avoiding deconditioning'
(*British Geriatrics Society 2017*) 'deconditioning awareness'

Hospital admission in past 12 months single most predictive risk for functional decline (OR 3.9)

(*Arnau et al. 2016*) 'risk factors for functional decline'



4 weeks after discharge:

- Still 15% less active than prior
- TUG 3 sec longer than prior
- Chair rise – 2 less than prior

Harvey et al. 2018 'what happened to my legs when I broke my arm'

Active time when in Hospital

Systematic Review

Included studies of people who COULD receive Hospital At Home (so not the 'sickest' who could not move)

- Barthel Index, Functional independence Measure, Quadriceps force scores declined

Active time over 24hrs

Seven studies

6.6%

Step count over 24 hrs

Eight studies

881.8

Scott J et al. 2021. *'the physical activity levels of acutely ill older adults'*

Edmonds & Smith. 2014. *'pilot study of physical activity on an acute older persons unit'*

Table 1: Position and activity summary

Position	***% of time***
Bed	31%
Chair	63%
Standing	6%
Activity	
Sleep/rest	78%
Care needs	7%
Non-essential activity	3%
Off ward	12%

What else do we see?

Loss of motivation

Lethargy

Loss of appetite

Torpor

Grumpiness

Agitation

48% of people over age 85 will die within a year of a hospital admission
(*Clark et al. 2014*)
https://bit.ly/3gXOtiD

Don't keep them in hospital! Get them moving and more likely to be discharged home #1000days

Physiological responses to not moving

Deconditioning and functional decline can occur within 2 days of hospitalisation. Regular movement is important but also consider…….(thanks to Derek Laidler) 'physiological results relating to inactivity'

Problem	How fast?	If you cannot mobilise regularly
Maximal oxygen uptake and muscle strength	1-1.5% per day	Isometric exercise and marching exercise in sitting
Blood volume	5% in 24 hrs, 10% in 6 days	Adequate hydration & strategies to reduce postural hypotension
Bone Density	Decreased mineralization within days	Adequate hydration
Respiratory Tract	Increased risk of pneumonia and inefficient cough within a day	Adequate hydration and breathing exercises
Continence & constipation	17-50% become incontinent after 24 hrs Constipation within days	Plan for continence and constipation /recognise risk factors
Blood Glucose	Within 3 days	Sit to stands hourly

Consensus on reducing SB in hospital

- A person-centred approach should be taken to engage and enable older adults to be physically active and minimise sedentary behaviour during hospitalisation
- Enabling movement is a shared responsibility all health care professionals, people at different organisational levels, caregivers and relatives, volunteers, and older adults have abilities to contribute
- Opportunities for PA and minimising SB should be incorporated into the daily care of older adults with a focus on function, independence and activities of daily living

Baldwin CE et al. 2020.
'recommendations for older adults' physical activity and sedentary behaviour during hospitalisation'

Archive

Falls Case Studies
Sit Less, Move More Professor Dawn Skelton
Bone Health Kirstie Stenhouse
Event flash report

Sit Less, Move More

ihub.scot

Are we too worried about falls?

Fear of falling increases risk of frailty (OR 1.18 - 9.87)

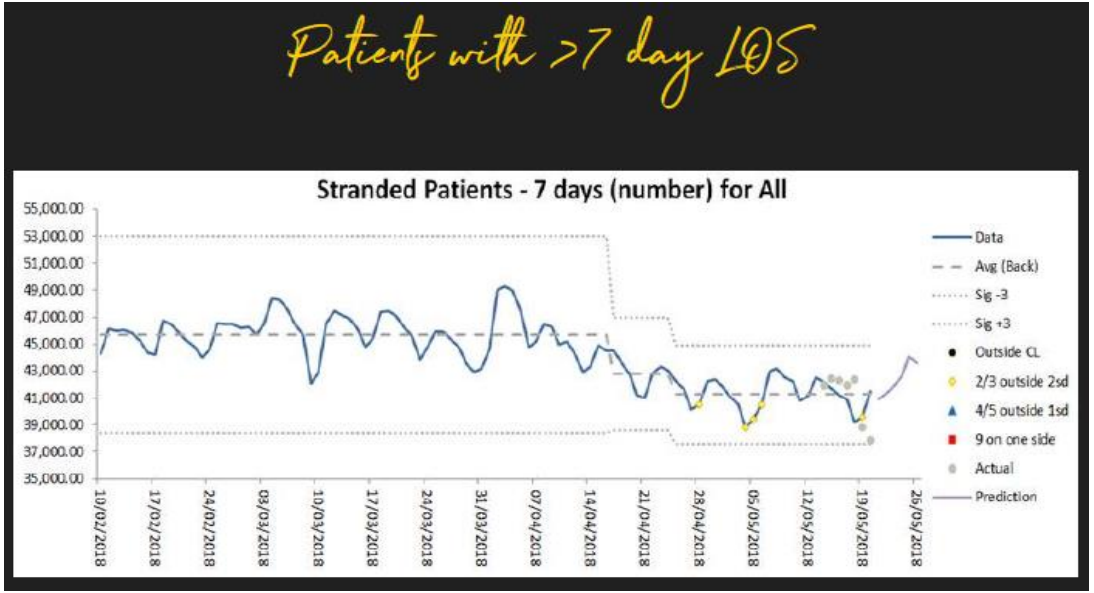
De Souza et al. 2022
'association between fear of falling and frailty'

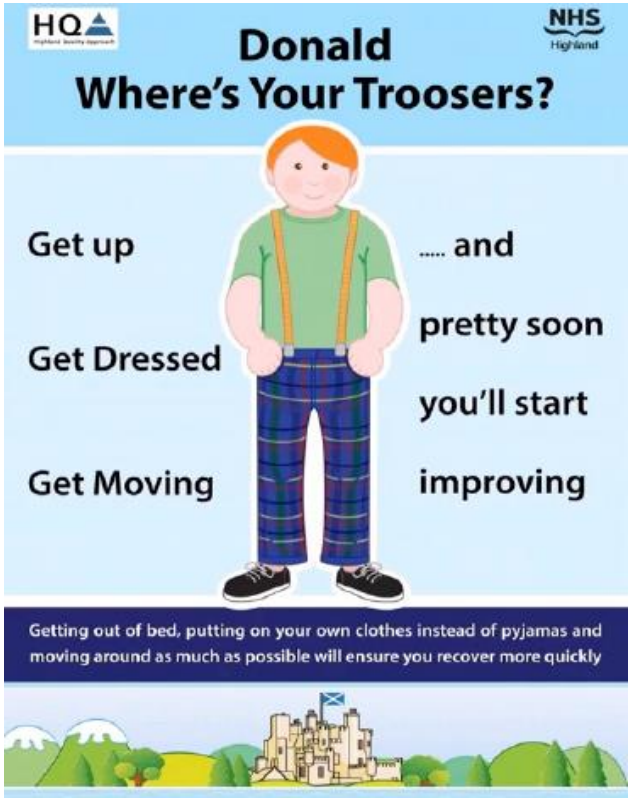
Fear of falling increases after hospitalisation (62% to 82%)

Visschedijk et al. 2015
'follow-up study on fear of falling during and after rehabilitation'

#EndPJParalysis

Nationwide 70 day, 1 million patient challenge
17 April 2018 - 26 June 2018





Webinar by Prof Brian Dolan End PJ Paralysis

@GCUReach @LaterLifeTrain

Resources available

Leaflets for patients, SOPs for use of leaflets and posters for wards available from BGS

[Deconditioning Awareness and Prevention poster]

Avoiding Deconditioning

Amit Arora & Brian Dolan OBE

LEARNING OBJECTIVES

- Describe the clinical syndrome of deconditioning and explain why it is harmful
- Identify opportunities to help patients to get up, get dressed and get moving

@GCUReach @LaterLifeTrain

Help patients reduce sedentary time

Original Article

Breaking sedentary behaviour has the potential to increase/ maintain function in frail older adults

Juliet A. Harvey, Sebastien F.M. Chastin, Dawn A. Skelton

Breaking sedentary behaviour has the potential to increase / maintain function in frail older adults

Two ways of thinking about 'sitting less'

- Reduce time spent sitting
- Break up periods of sitting ('sitting bouts')

Stomp Out Sitting Study

- Over 12 weeks,
- sit to stand 1X hour
  - Improved Timed Up & GO
  - Improved Chair Rise time

Having that conversation

How much time have you got for a conversation? And what can you do to help change habits with that conversation?

Hospital Associated Deconditioning

@GCUReach @LaterLifeTrain

And a reminder for when they are home

[Sit Less Move More Leaflet]

@GCUReach @LaterLifeTrain

Thank you

Welcome and introduction

Erin Walker
Practice Development Physiotherapist,
NHS Greater Glasgow & Clyde

Active Wards in Context

Erin Walker
Practice Development Physiotherapist,
NHS Greater Glasgow & Clyde
@ErinW20physio

How it all began in NHSGGC....

Brian Dolan – #endpjparalysis campaign

Physios and OTs within Glasgow all doing similar QI work to reduce deconditioning/increase PA

Group of physios in NHSGGC began a SIG - "Active Wards Group." Developed principles and informed work and has become a reference group board wide.

Ongoing body of work within NHSGGC

NHSGGC Active Wards Principles

Active Wards Principles

- All patients and those involved in their care are supported to understand the benefits of being active in hospital and on discharge.
- We take every opportunity to encourage patients to be physically active.
- We minimise environmental barriers to promote physical activity. ◆
- We have a culture where enabling physical activity◆ is everyone's* responsibility.

KEY:

* Everyone is defined as all staff groups, patients, carers, family, friends.
◆ Physical Activity includes a wide range of energy expending activities involving body movement, the activity should be person centred and tailored to individuals needs.

NHS GGC Active Wards Principles Harvey et al. (2020)

Primary Driver
Promote mobilisation

Healthcare Improvement Scotland

SCOTTISH PATIENT SAFETY PROGRAMME

Secondary drivers	Change ideas			
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Examples of Projects

Resources

A guide for patients about the role of the Physiotherapist and Occupational Therapist

Successes

- Active Wards SIG
- Ongoing work within NHSGGC using QI approach
- Changes that have made care better for patients and improvements for staff
- Active Wards principles

Challenges

- COVID!!!
- Engagement/Involvement of all the MDT
- Deconditioning vs competing priorities
- Measurement/Outcomes

Next steps…

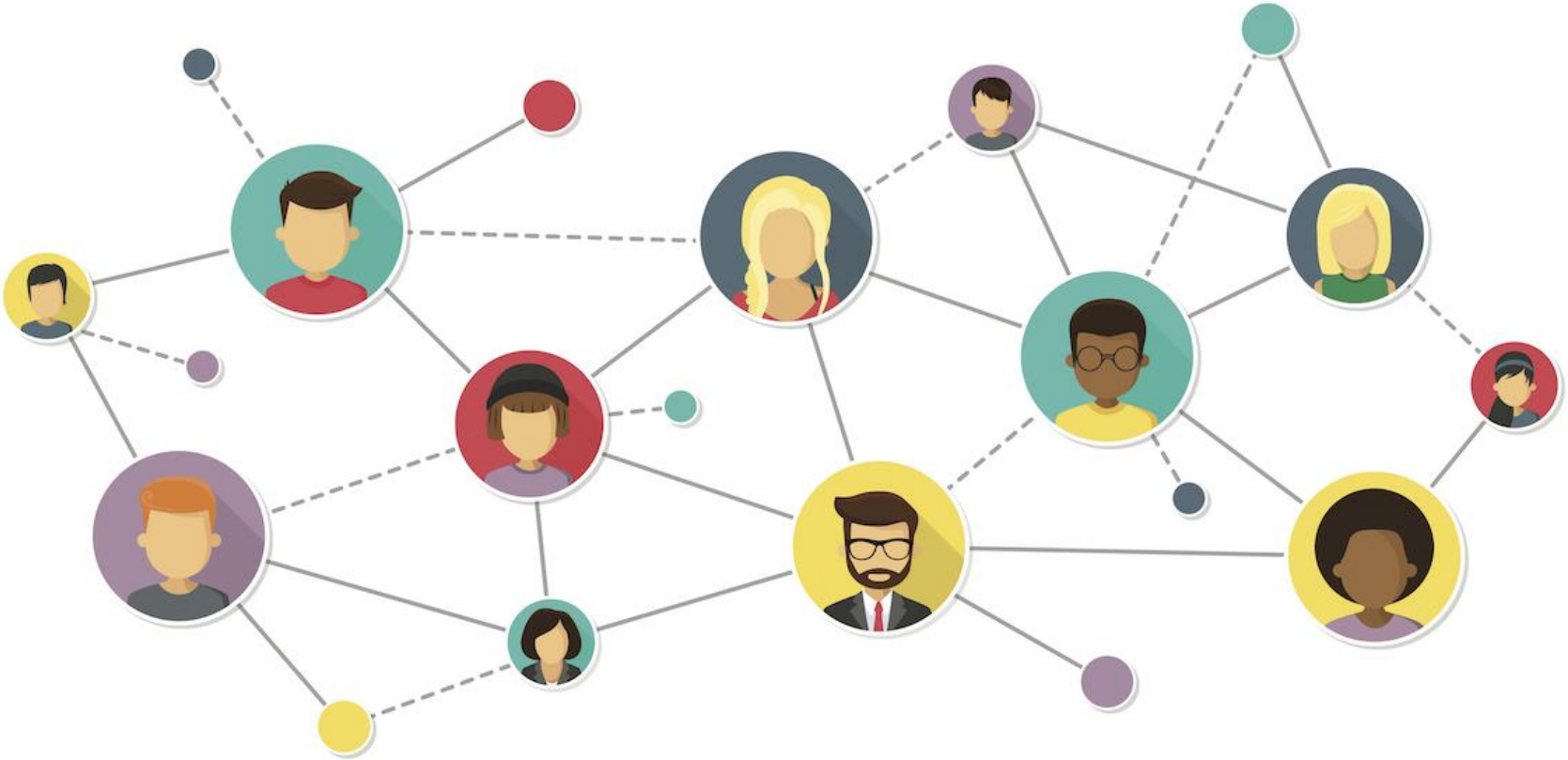
- Further spread of projects and AW principles
- Embedding AW principles within other guidelines/standards.
- Website
- Developing staff to become AW champions within NHSGGC
- Further look at how we measure AW success and how we link it to other outcomes e.g. falls

Thank you

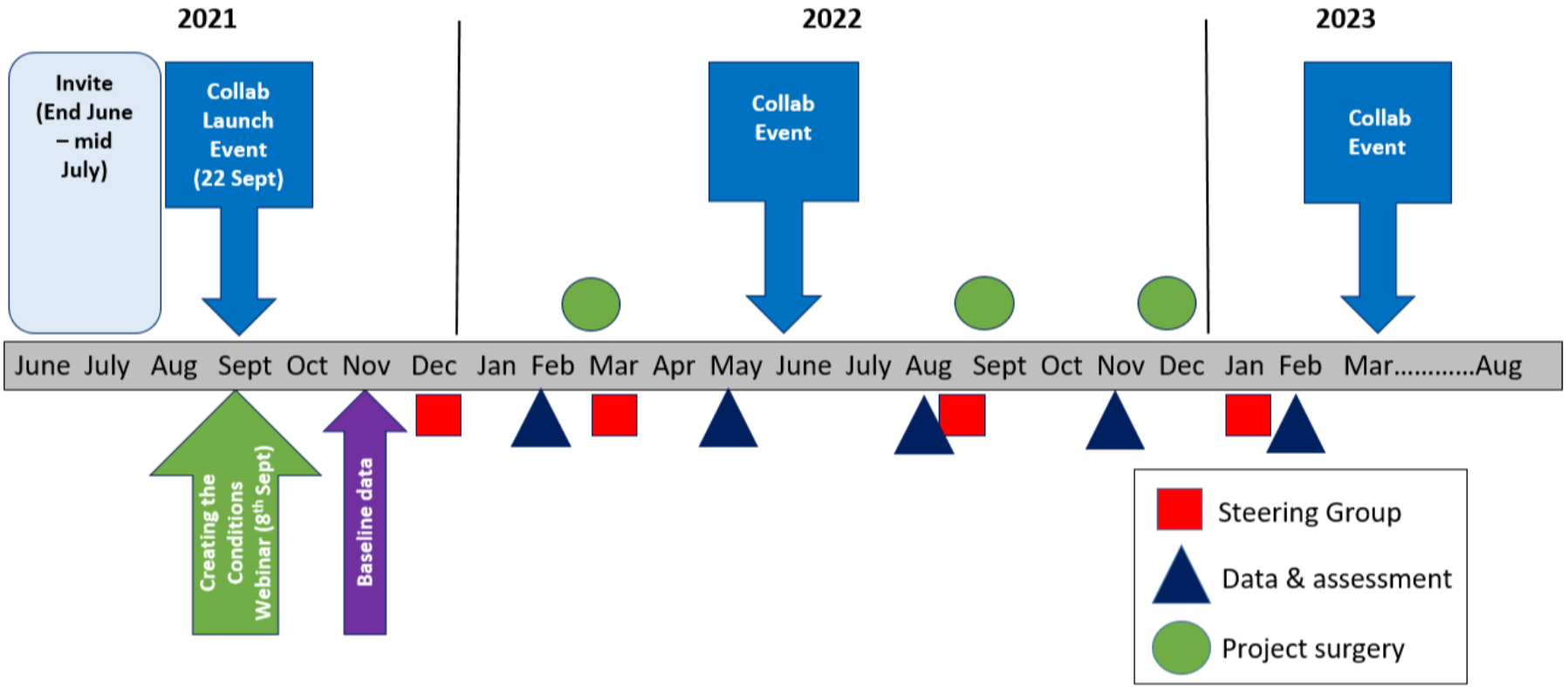
Thank you to the NHSGGC Active Wards group for allowing me to share their work.

erin.walker@ggc.scot.nhs.uk
@ErinW20physio

Q & A



Collaborative update



Resources

- ihub.scot
- Falls
- Deteriorating Patient
- SPSP Acute Adult Collaborative
- Older People in Acute Care
- Essentials of Safe Care

Events

EoSC: Supporting Implementation

- 14 March 2022

SPSP Acute Adult Collaborative

- Learning Session: 31st May 2022

Evaluation

Thank you

Keep in touch

his.acutecare@nhs.scot

@SPSP_AcuteAdult

To find out more visit ihub.scot