Enhanced Care for Older People
Learning Session Number 6

‘Safe or Sedentary’: Promoting Physical Activity with Older People

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The Newcastle upon Tyne Hospitals NHS Foundation Trust

EnCOP Lead: Angela Fraser. Date: 26th April 2022

Housekeeping

During the session

We will keep participants muted whilst we are presenting. This avoids distracting our speakers and reduces sensory stimulation which is important for some people. However, if you wish to ask a question you can do this by adding it to the chatbox. We will address as we go or follow up afterwards.

Please feel free to turn your camera on and off as you need to. If you need it off the whole time, that is totally fine.

If you need a break at any time during the session, then please leave the meeting and re-join again when you feel ready.

Accessibility

Information on accessibility features in Teams can be found here: https://support.microsoft.com/en-us/office/accessibility-support-for-microsoft-teams-d12ee53f-d15f-445e-be8d-f0ba2c5ee68f and you can contact us with any other accessibility questions.

After the event

Presentations will be circulated following the event

The webinar is being recorded and will be available after this session. Head over to the AHSN NENC's YouTube channel at: youtube.com/ahsnnenc and click the subscribe button and notification bell, to keep up-to-date on further video content, webinars, workshops and live events.

Session Aim & Linked Competencies

Aim: To develop an understanding of risk factors that contribute to physical and mental decline & de-conditioning in older people and recognise how a proactive multi-disciplinary approach can promote healthy ageing through the delivery of relevant care.

Linked EnCOP Domains:

A: Values, attitudes and ethics
B1: Interprofessional & Interorganisational Working & Communication
B2: Teaching, Learning & Supporting Competence Development
C2: Improving Care
D1: Communication with Older People, Families & Friends
D2.1: Frailty – Understanding, identification and recognition
D2.2: Assessing, planning, implementing and evaluating care
D2.3: Ageing well – promoting and supporting holistic health and wellbeing
D2.4:Ageing well- promoting and supporting independence and autonomy
D2.5:Management of physical health in frailty
D3:Management of dementia
D4:Management of mental health

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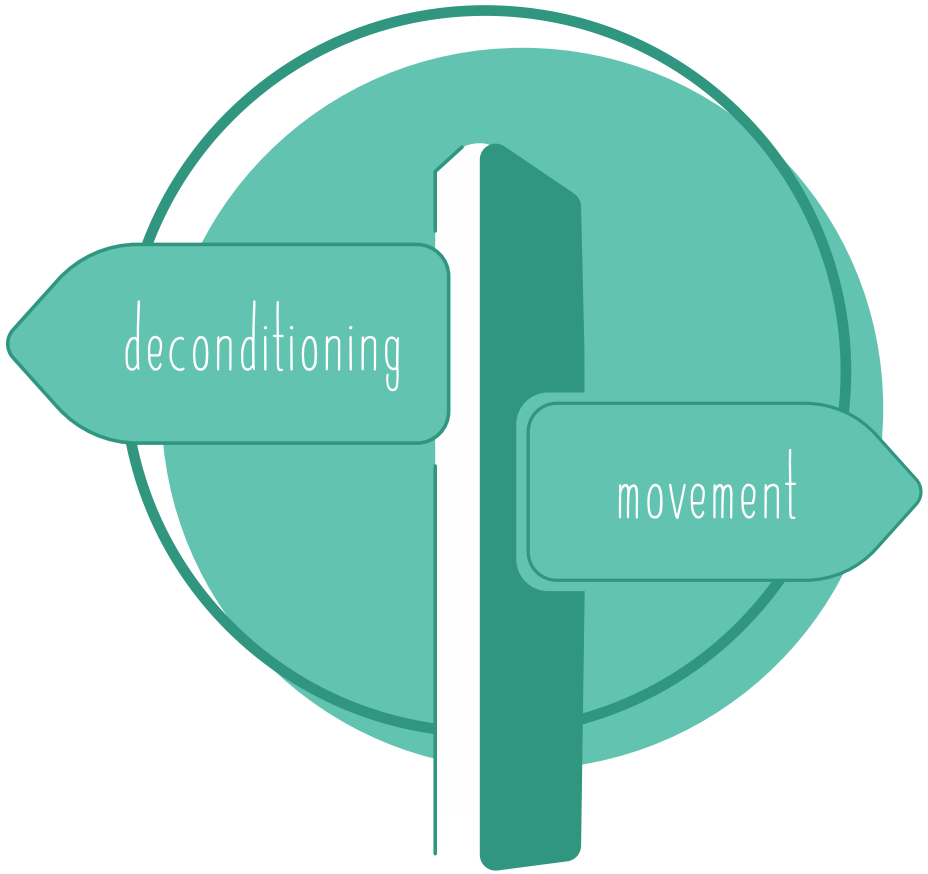
Safe or Sedentary? Promoting physical activity in hospital.



Overview

1. Ageing population trends
2. Impacting factors on ageing
3. Hospital acquired deconditioning?
4. Attempts to prevent deconditioning
5. What next

Changing Society.

Every second, TWO people in the world turn 60.

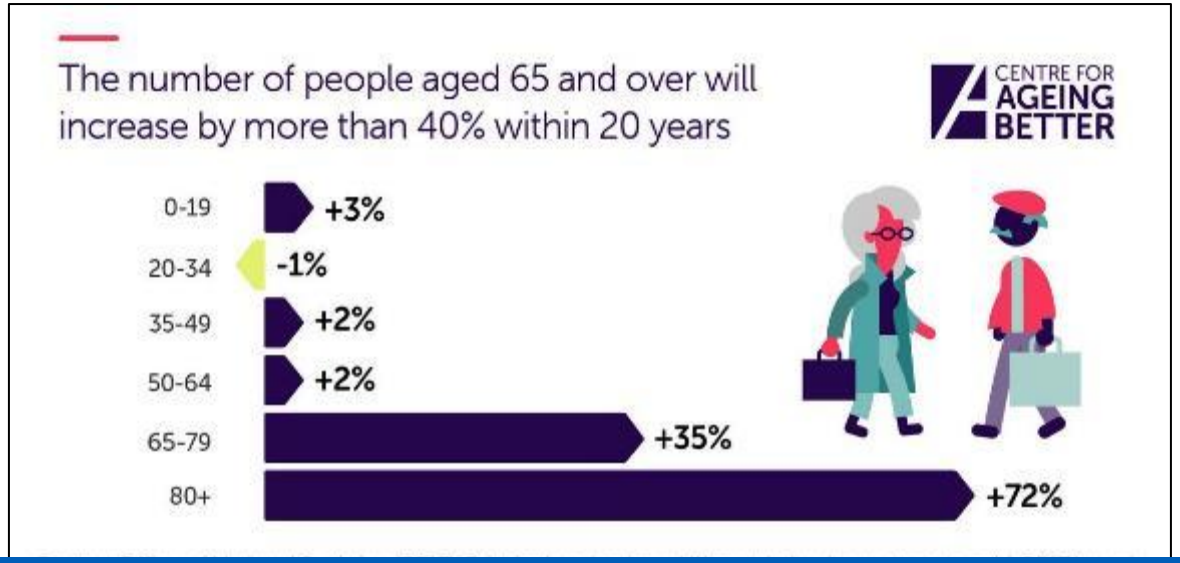
Hedda Bolger age 102 - psychotherapist

Fauja Singh age 101 – London marathon

Population trends:

- By 2045 the over 65s are expected to grow to 1 in 4
- By 2050 it is expected there will be approximately 280,000
- people aged 100 or above.
- Today 15,000 people aged 100 or over

Mean **healthy** life expectancy in the UK (ie, 71·9 years)
Expected years in ill health 17·9 years for women and 18·6 years for men



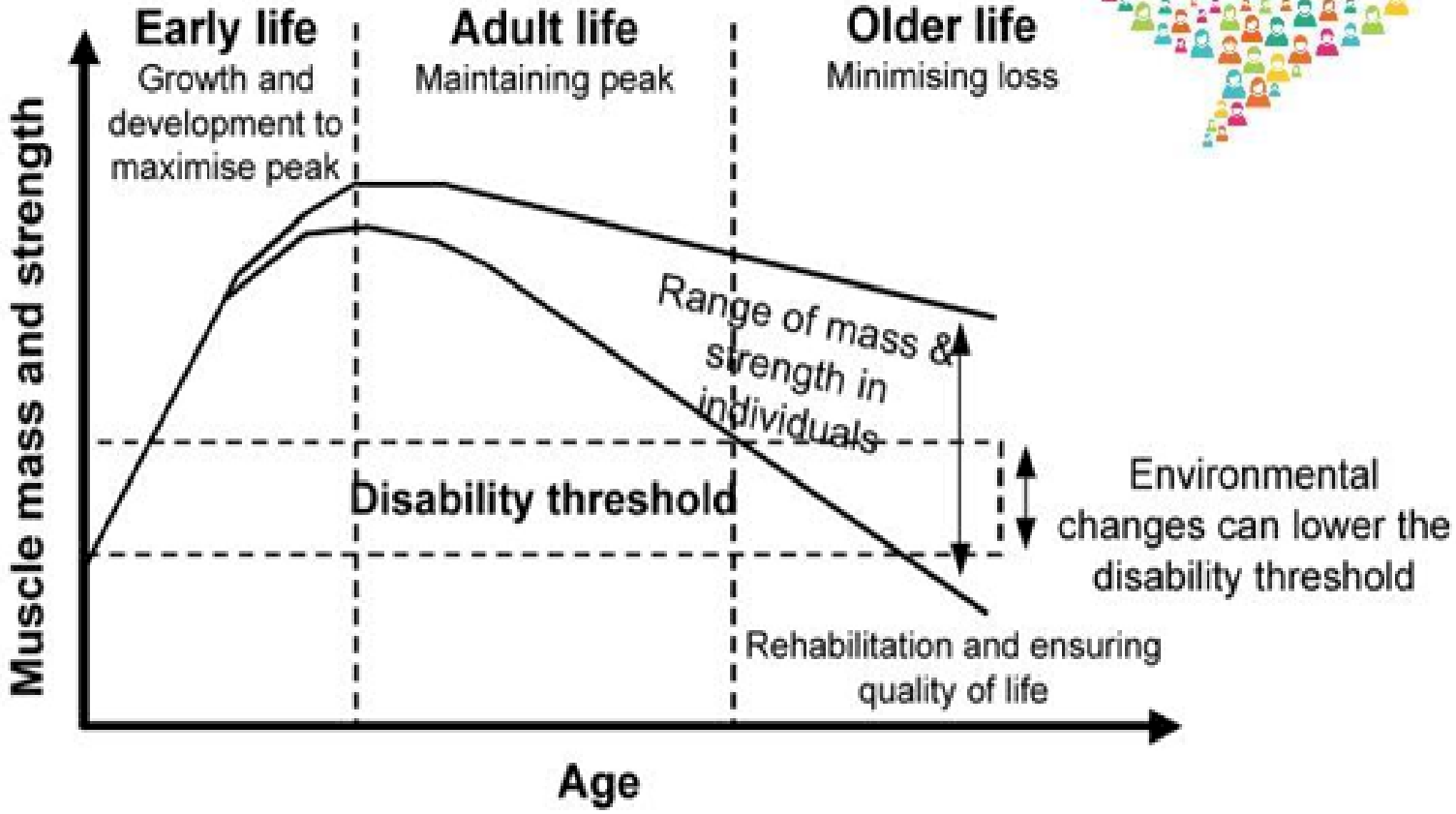
Disability-free life expectancy:

- lower for Pakistani (men: 55·7 years; women: 55·1 years) and Bangladeshi (men: 54·3 years; women: 56·5 years) people
- than for White British (men: 61·7 years; women: 64·1 years) people.

Strength through life

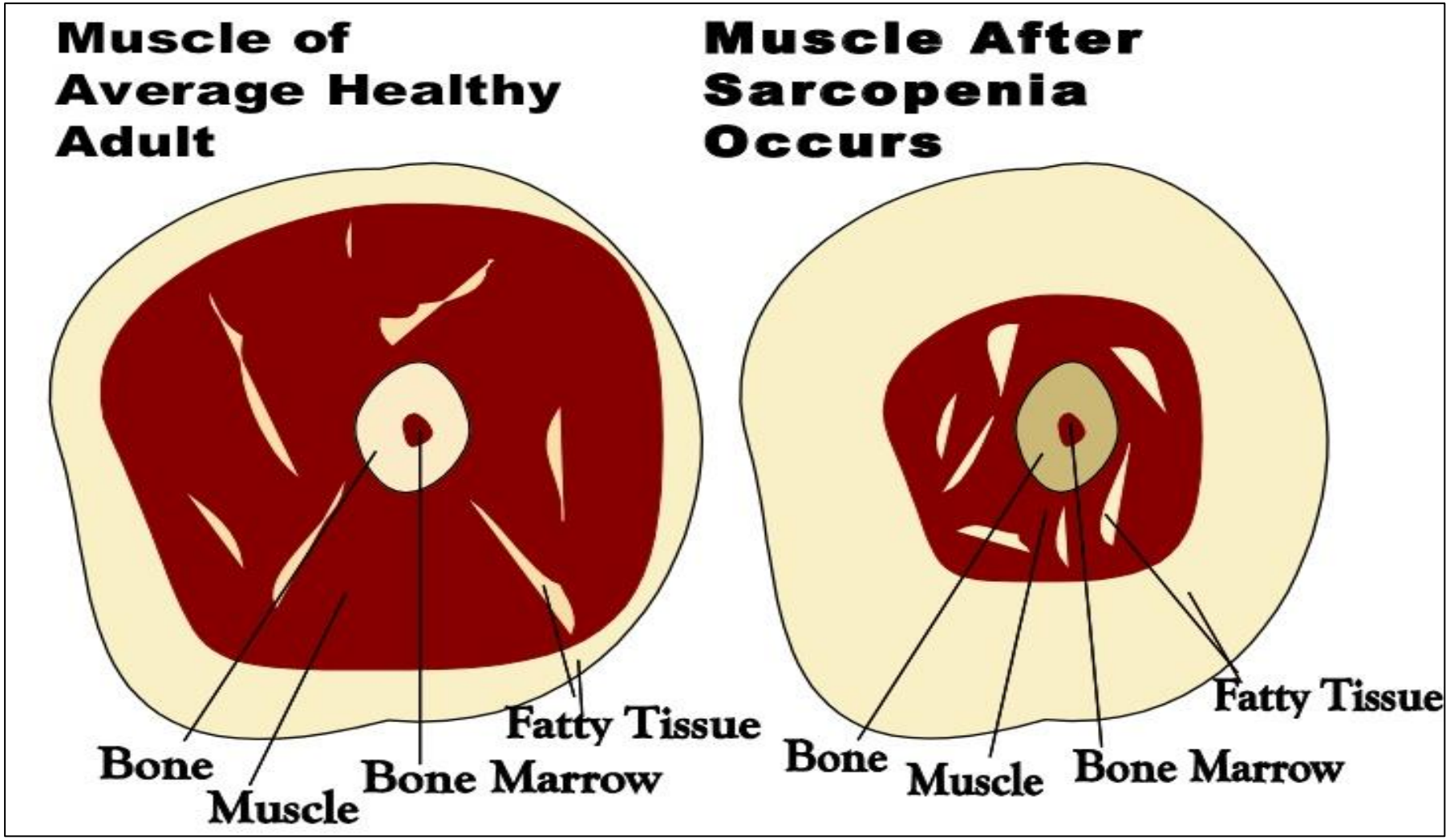
- As strength reduces into the 'disability threshold' independence in mobility and ADL's is limited

- Regular activity can delay disability up to 15 years



Modified WHO/HPS, Geneva 2000

(slide 3-7 courtesy of Chris Hattersley)



Muscular weakness & osteoporosis estimated to have an annual health care cost of over £10 billion in the UK

50% of the physical decline associated with ageing is actually **disuse atrophy** from prolonged physical inactivity

Effect of Muscle Mass on Health

The clinical impact and biological mechanisms of skeletal muscle aging

Zaira Aversa [a, b, 1], Xu Zhang [a, b, 1], Roger A. Fielding [c], Ian Lanza [d], Nathan K. LeBrasseur

Skeletal Muscle Regulates Metabolism via Interorgan Crosstalk: Roles in Health and Disease

Josep M. Argilés PhD [a], Nefertiti Campos PhD [b], José M. Lopez-Pedrosa PhD [b], Ricardo Rueda MD, PhD [b], Leocadio Rodriguez-Mañas PhD [c]

Physical Function

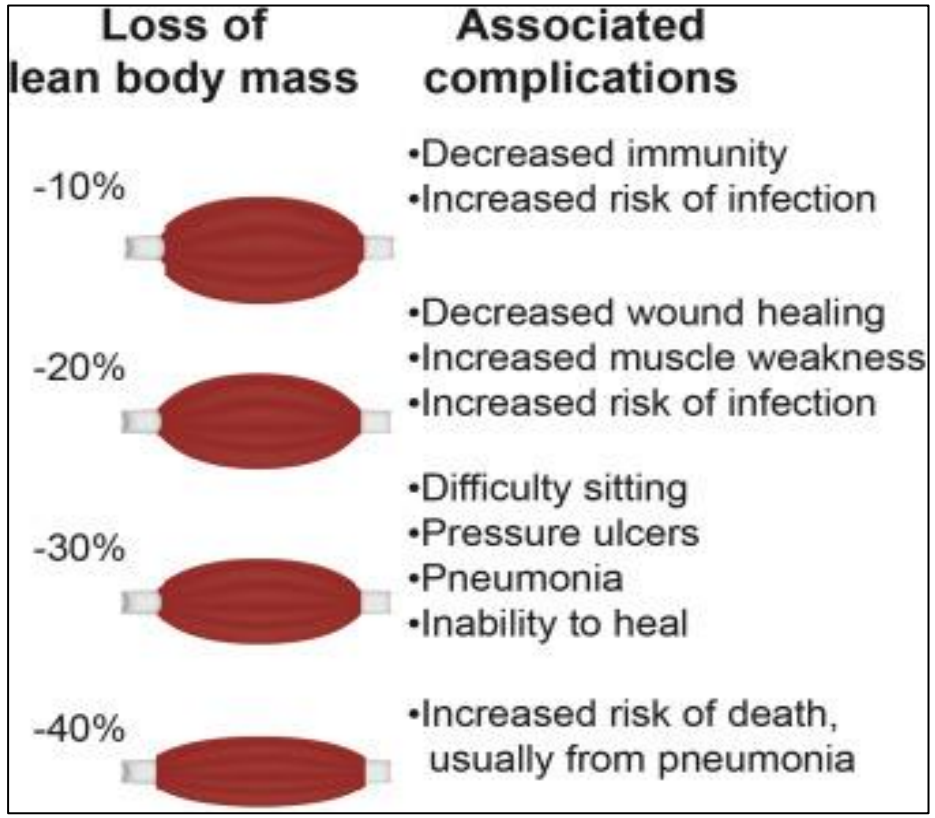
- Generates force and power
- Drives movement
- Enables function/activity

Metabolism

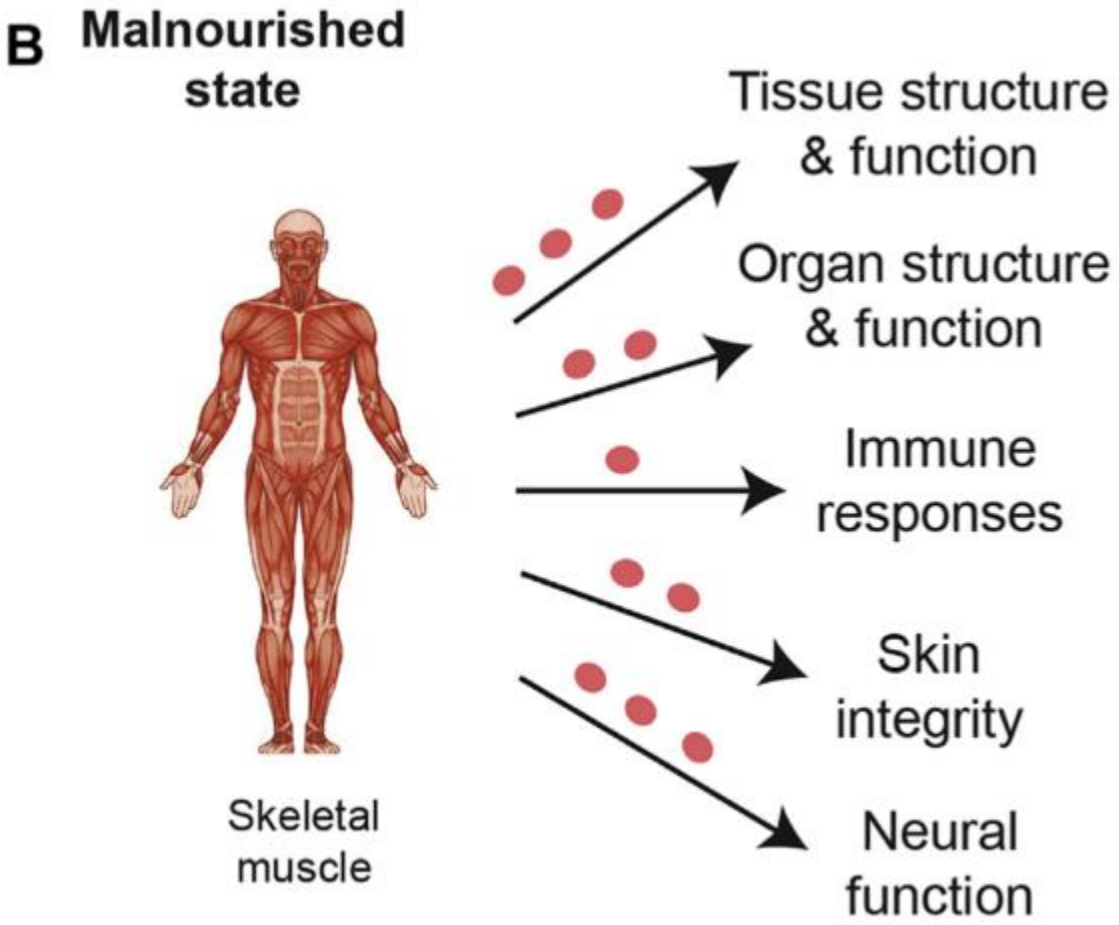
- Primary site of insulin-mediated glucose disposal
- Largest reservoir of glycogen in body
- Primary determinant of REE and AEE

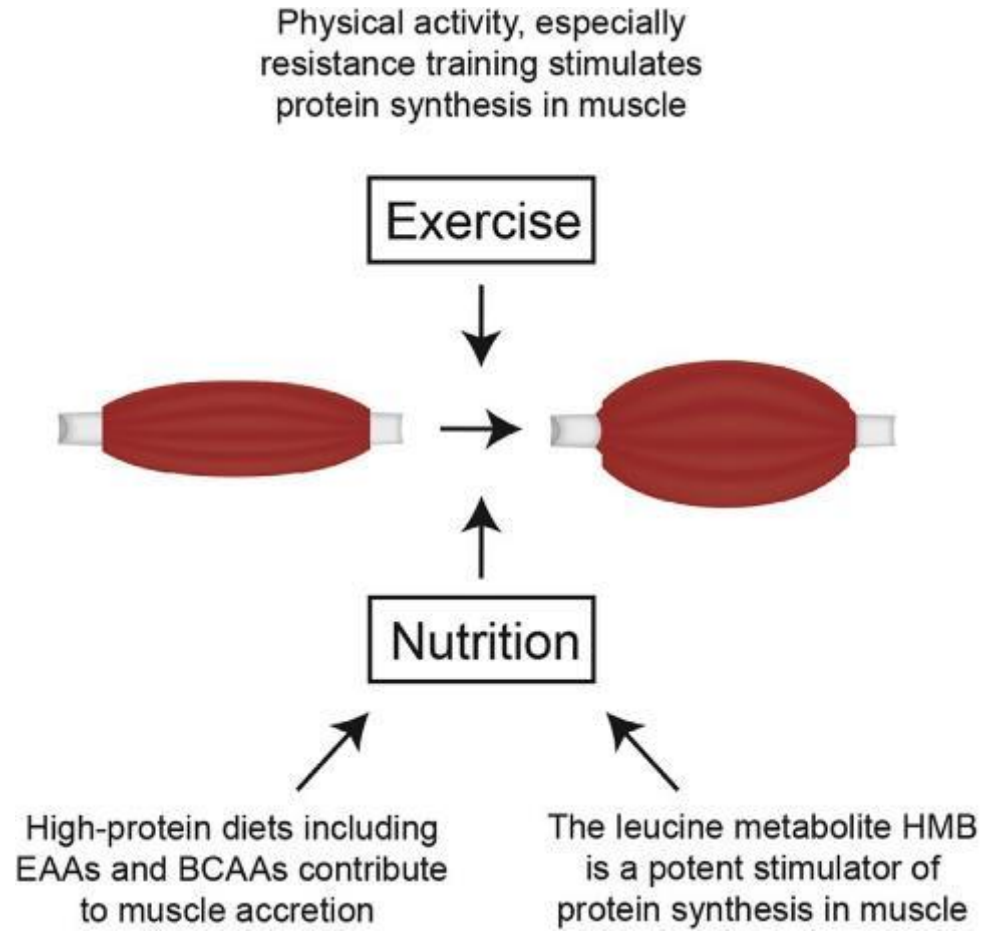
Resilience

- Strength, mobility, physical activity and endurance are operational criteria for frailty
- Low muscle mass predicts adverse outcomes in multiple disease states

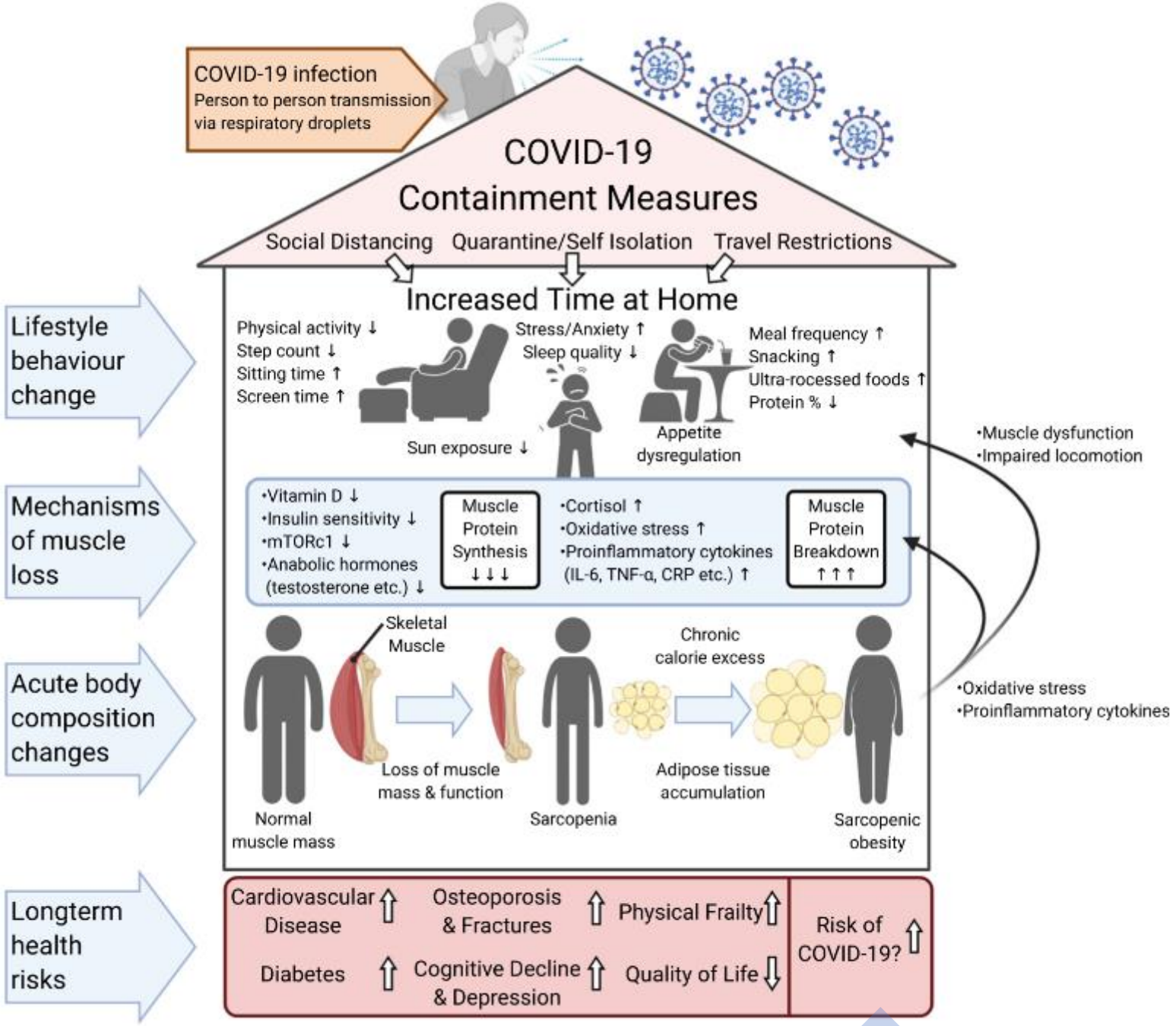


Sarcopenia and Nutrition





The perfect Storm… COVID-19



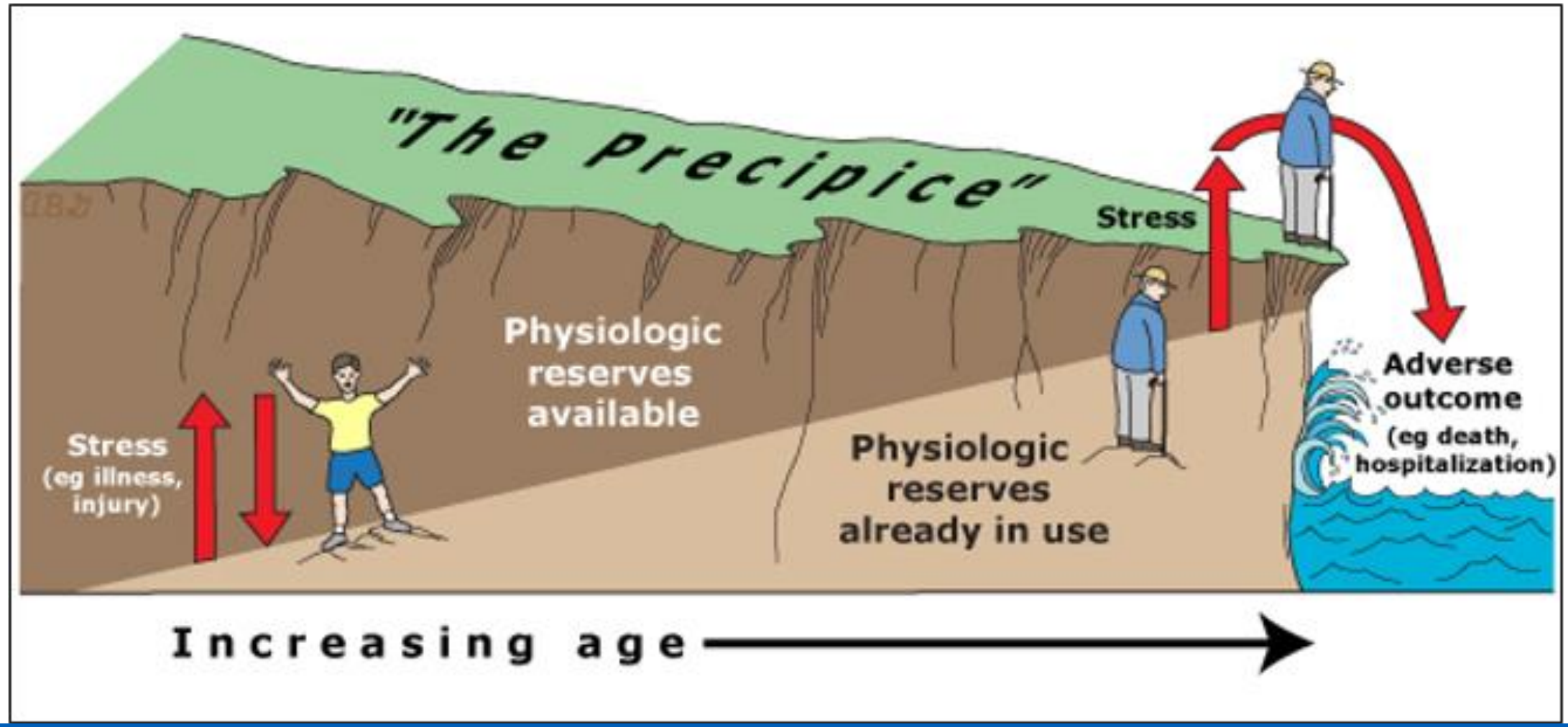
Sarcopenia & COVID-19

- Physical activity across all older groups
- Most impacted is 70-74 years of age (45% male, 49% female)

Without mitigation:

- 110,000 more people having at least 1 fall due to decreased strength & balance
- 124,000 more falls for men
- 130,000 more falls for women
- £211 million additional cost to health & social care over 2 years

Personal impact of deconditioning



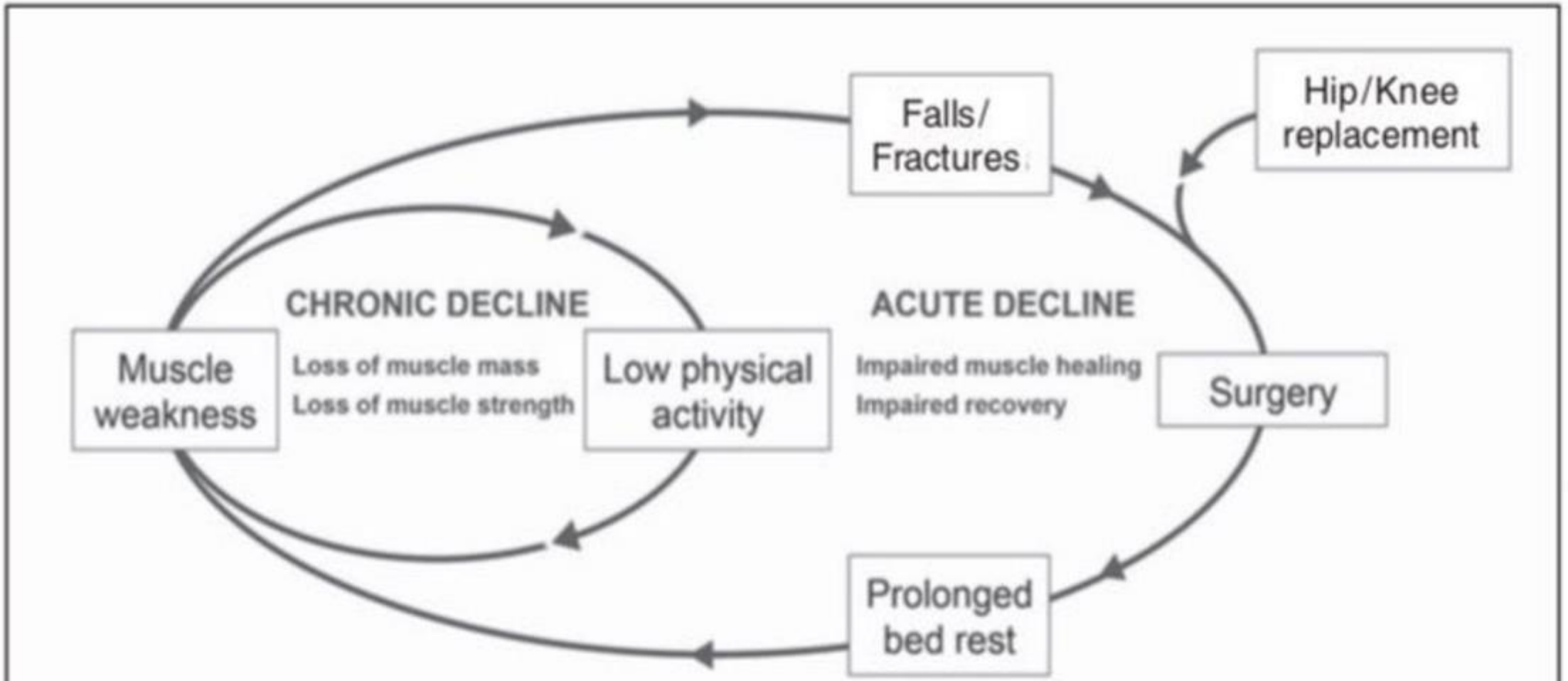
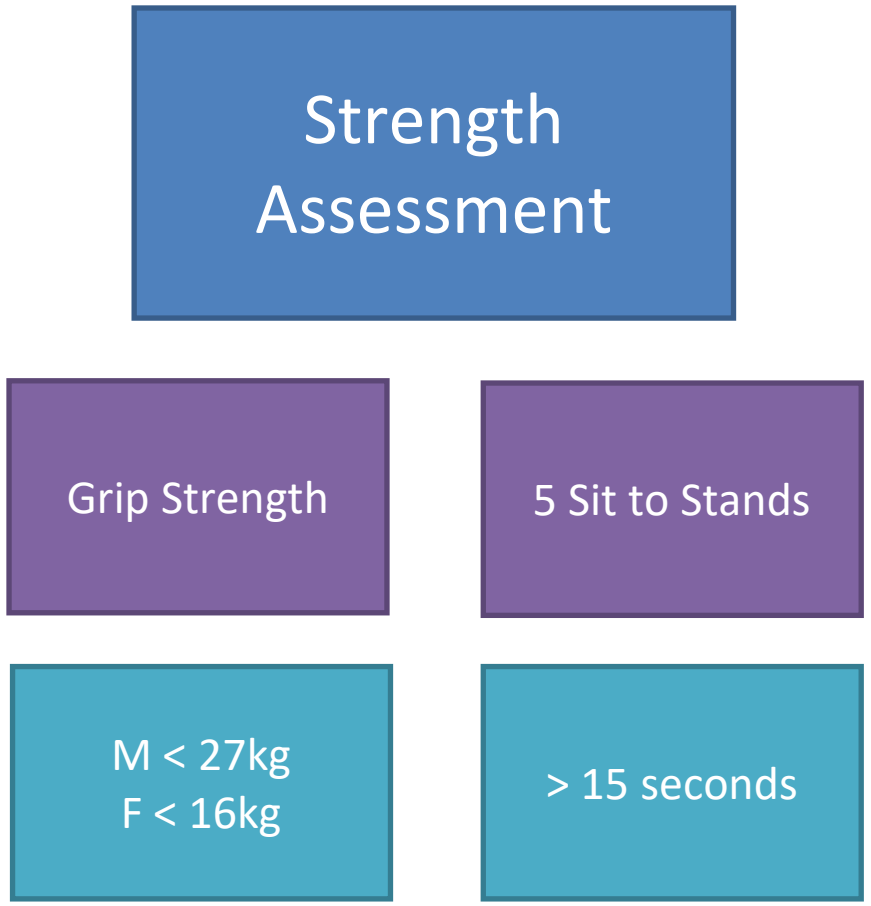


Figure 2. Chronic and acute vicious cycles of mobility decline in the elderly. Chronic physical decline happens over decades in community-dwelling individuals and largely depends on loss of muscle mass and strength. Acute physical decline happens after trauma or surgery, generally in a hospital setting, and largely depends on impaired muscle healing because of poor regeneration and altered muscle stem-cell function.

Sarcopenia & Older Adults



Patients under the thresholds should be seen as a cause for concern;

- Limited physical performance, reduced independence & reduced quality of life.
- Increased risk of falls and fractures.
- Increased need for support for ADL's & increased healthcare costs.
- Increased risk of multi-morbidity & mortality.

In bed .....

Deconditioning

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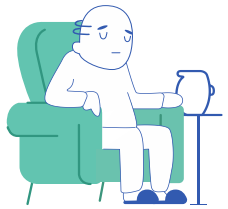
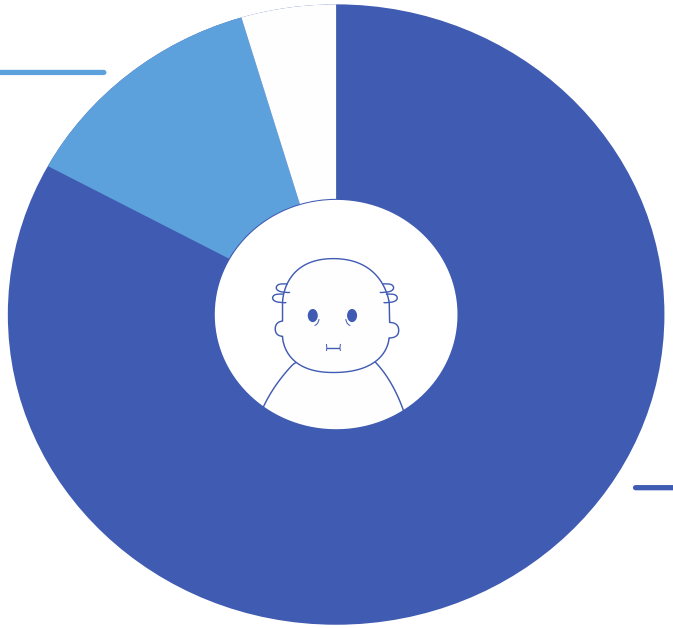
Mobility is medicalised.

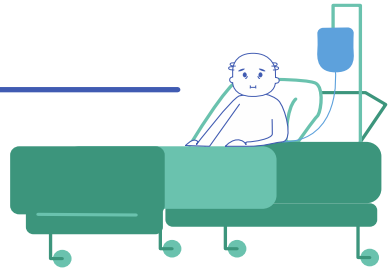
Older adults (>65years) are vulnerable to functional decline in hospital.

10 days in hospital = 10 years of physical ageing



12% in the chair





83% in bed

(Falvey et al, 2015, NAO, 2016)

What is hospital-acquired functional deconditioning?

'A complex process of physiological change that can affect multiple body systems' (Hanson et al 2019)

The process of decline results in the loss of ability to complete one or more basic activities of daily living independently at discharge (Ortiz-Alonso et al., 2019).

HAD is associated with long term disability, institutionalisation and death (Ortiz-Alonso et al. 2019).

Secondary complications; cardiovascular disease, diabetes, osteoporosis, frailty, cognitive decline and depression (Kirwan et al, 2020, p.1547).

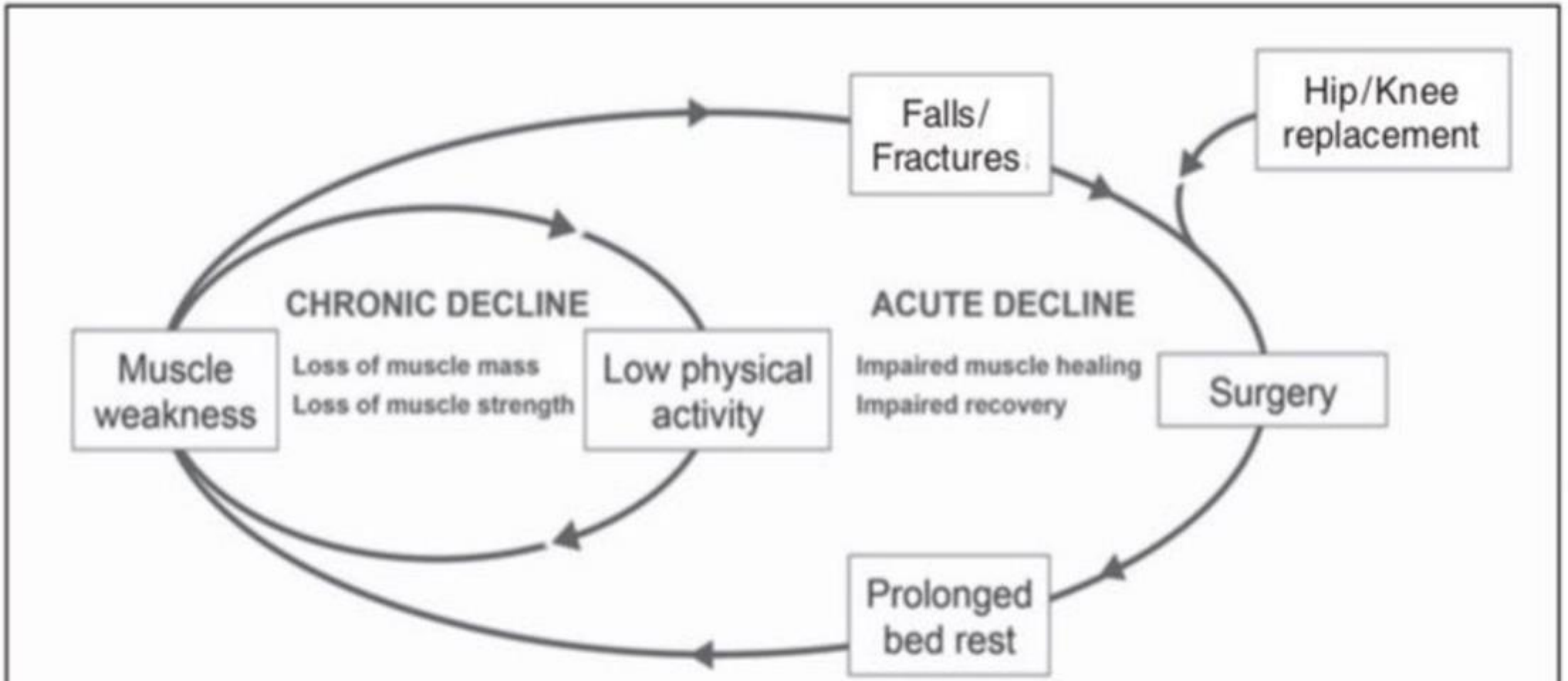


Figure 2. Chronic and acute vicious cycles of mobility decline in the elderly. Chronic physical decline happens over decades in community-dwelling individuals and largely depends on loss of muscle mass and strength. Acute physical decline happens after trauma or surgery, generally in a hospital setting, and largely depends on impaired muscle healing because of poor regeneration and altered muscle stem-cell function.

What does this mean for staff?

- Increased physical workload
- More staff required for transfers
- Rise in infections – cellulitis, chest infection, poor wound healing, UTI etc.
- Poorer health outcomes
- Delirium
- Behavioural difficulties with dementia
- Delayed discharge from hospital
- Social care requirements

What does this mean for families?

- Distressing for family to see their Mam, Dad, Aunt, Uncle, brother or sister declining in front of them
- Feel helpless
- Can't attend grandchildren's events like Christmas nativity
- Increased worry and fear about the future

What does that mean for hospitals or care homes?

- Locally

Northeast region – longstanding health inequalities

- referrals to physio/OT
- Higher numbers of admissions to hospital

Nationally

110,000 MORE falls

£211 million

Is this sustainable?

NHS

Home | About the NHS Long Term Plan | Areas of work | Case s

NHS Long Term Plan

As medicine advances, health needs change and society develops, the NHS has to continually move forward so that in 10 years time we have a service fit for the future. The NHS Long Term Plan is drawn up by frontline staff, patients groups, and national experts to be ambitious but realistic.

appg

All Party Parliamentary Group for Longevity

Levelling Up Health

April 2021

WHO GUIDELINES ON

PHYSICAL ACTIVITY AND SEDENTARY BEHAVIOUR

Policy paper

The Grand Challenge missions

Updated 26 January 2021

Ageing society

We will harness the power of innovation to help meet the needs of an ageing society.

Mission: Ensure that people can enjoy at least 5 extra healthy, independent years of life by 2035, while narrowing the gap between the experience of the richest and poorest

NHS

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Our advice for clinicians on the coronavirus is here.
If you are a member of the public looking for information and advice about coronavirus (COVID-19), including information about the COVID-19 vaccine, go to the NHS website. You can also find guidance and support on the GOV.UK website.

NHS Five Year Forward View

LSE–*Lancet* Commission on the future of the NHS: re-laying the foundations for an equitable and efficient health and care service after COVID-19

Michael Anderson, Emma Pitchforth*, Miqdad Asaria, Carol Brayne, Barbara Casadei, Anita Charlesworth, Angela Coulter, Bryony Dean Franklin, Cam Donaldson, Michael Drummond, Karen Dunnell, Margaret Foster, Ruth Hussey, Paul Johnson, Charlotte Johnston-Webber, Martin Knapp, Gavin Lavery, Marcus Longley, Jill Macleod Clark, Azeem Majeed, Martin McKee, John N Newton, Ciaran O'Neill, Rosalind Raine, Mike Richards, Aziz Sheikh, Peter Smith, Andrew Street, David Taylor, Richard G Watt, Moira Whyte, Michael Woods, Alistair McGuire†, Elias Mossialos†*

- Recommendation 3B: **Workforce Strategies**

❖ focus on achieving the optimal composition of multidisciplinary teams

❖ work across traditional boundaries;

❖ introducing educational reform on the basis of competency-based training;

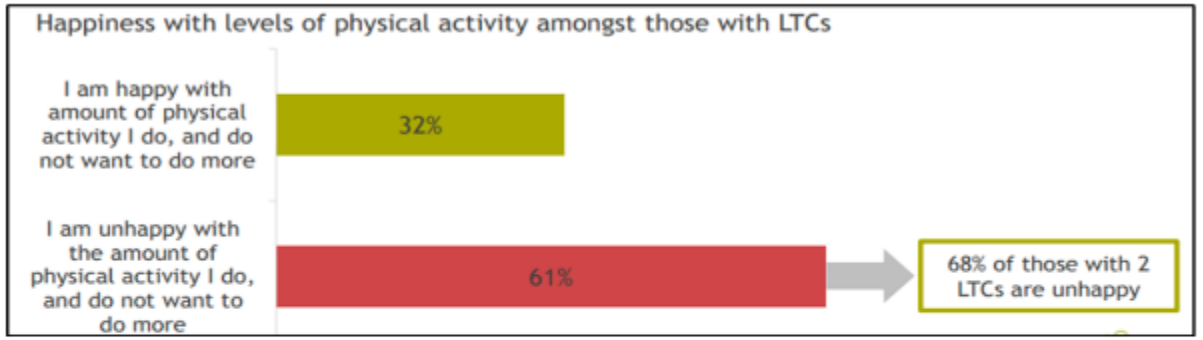
❖ incorporating technology to improve productivity; and

❖ developing new, **collaborative models** of care that actively engage patients, carers, and other service users

Why healthcare professionals?

- **More than 20** NICE clinical and public health guidelines include physical activity as part of treatment.
- **1 in 4 patients** felt they would be more motivated to take part in PA if advised to do so by their HCPs.
- Evidence demonstrates **most patients with long term conditions want to be more active.**
- Additionally, **68%** of those with 2 or more long term conditions **want to do more** physical activity

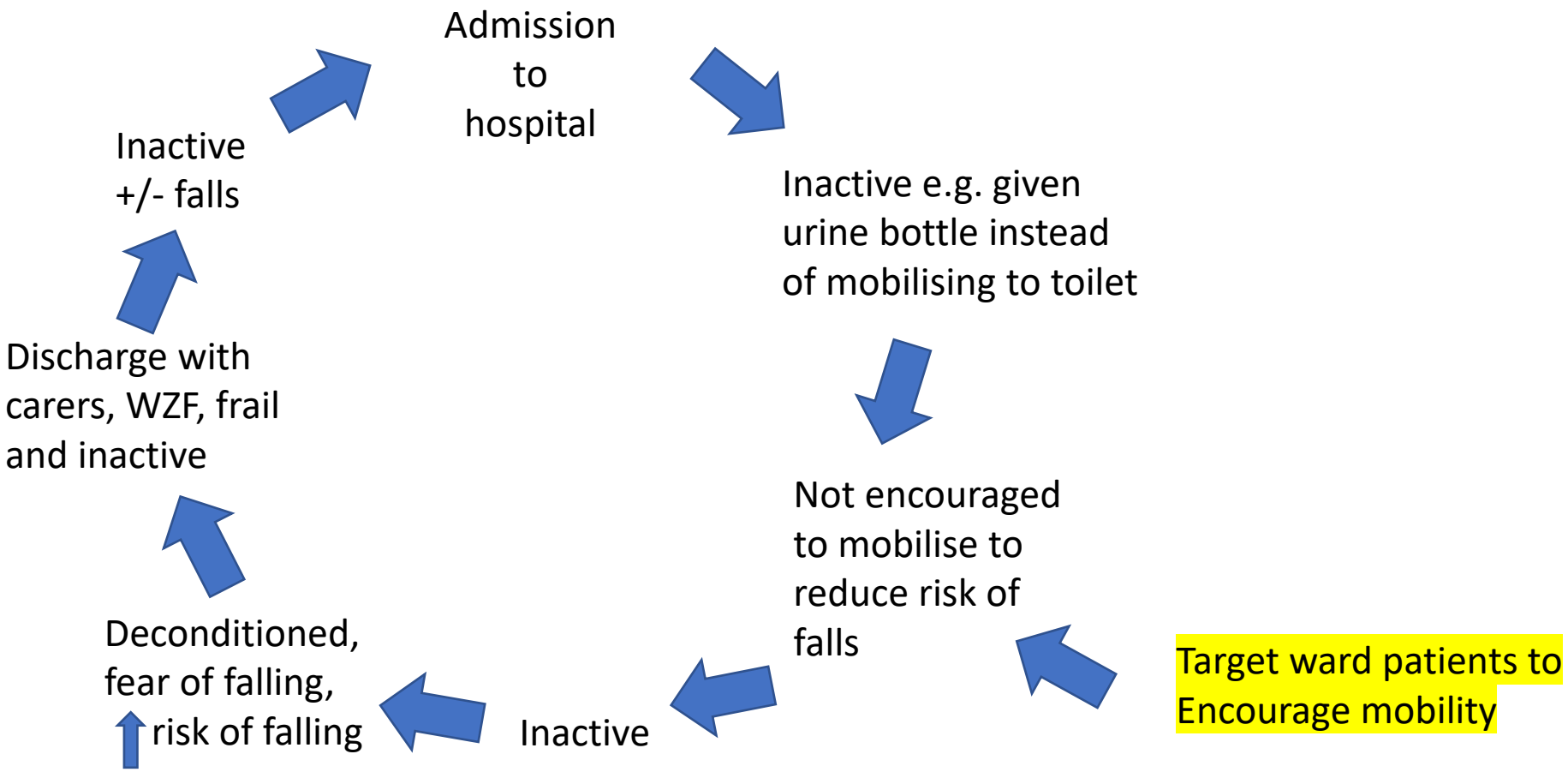
'It is clear that if health professionals prescribe exercise or provide counselling on physical activity, their patients will be more active' (WHO)



Slide from Active Hospitals presentation

BMJ (2019); NICE (2020); Richmond Group of Charities (2018); American Physical Activity Guidelines Advisory Committee Scientific Report (2018)

Where we started in 2019…



Date	Have you walked today? Tick √ to indicate number of times.				Where did you go? Toilet, window, ward doors, outside.	How do you feel? Tick √ underneath
	9am-12	12-3pm	3pm-6	6pm-9		  
Monday						
Tuesday						
Wednesday						
Thursday						
Friday						
Saturday						
Sunday						

Aim for being active 4 times a day, for at least 10 minutes at a time.

YOUR MUSCLES – IF YOU DO NOT USE THEM, YOU WILL LOSE THEM

MYTHS

- Patients should stay in bed because they will get better if they rest.
- It is not safe for patients to get out of bed.
- Patients are not supposed to wash or dress themselves.

Staying in bed for too long and not getting up and moving can mean that you struggle to get back to your normal level of independence when you return home.

BENEFITS

- ✓ **Better breathing and able to fight infection**
- ✓ **Better appetite**
- ✓ **Better sleep**
- ✓ **Better able to cope at home and you get there sooner**

Safe or Sedentary: A mixed methods survey exploring healthcare professionals' views of promoting mobility in hospital.

Authors: Roisin Fallen-Bailey email: dara-roisin.fallen-bailey@nhs.net &
Lisa Robinson email: lisa.robinson25@nhs.net

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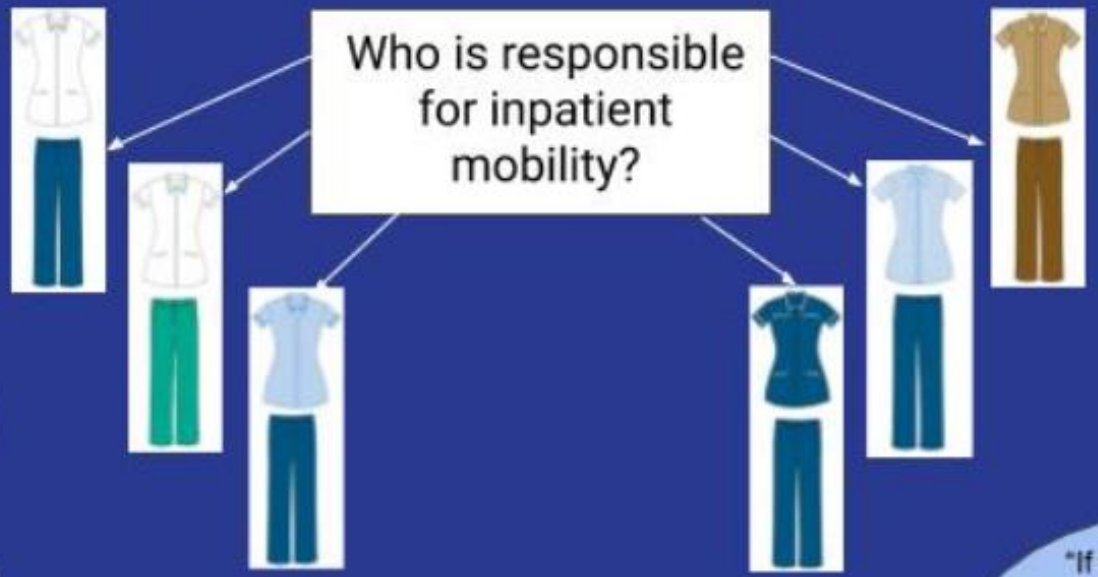
Who is responsible for inpatient mobility?



"Patients may not understand the benefits of being up and mobile and may be in the sick role."

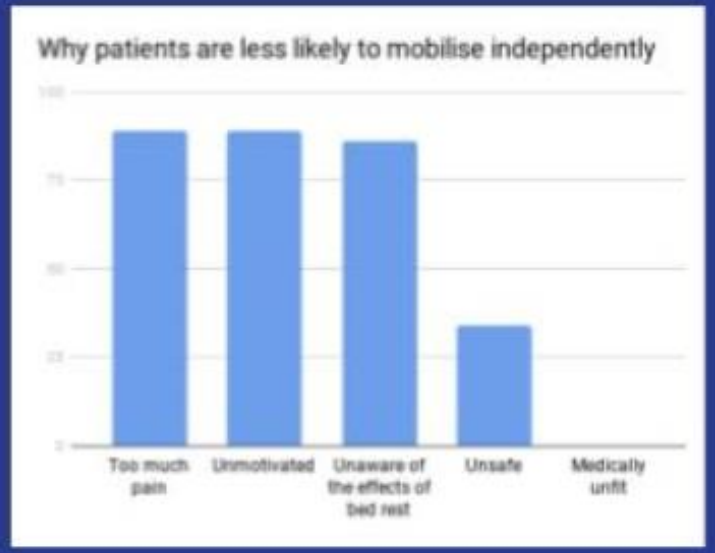
"Physio are needed to ensure patient safety."

"Anyone involved in the patient's care can promote and encourage mobility."

"The NHS is very institutionalised and people aren't encouraged to move around as they please."

"If the patient knew the risks they may be more willing to engage when in hospital to help with their recovery"

Problem	Aim	Outcome
↑Pressure on health & social care	Reduce functional decline	All staff participate in rehab
Culture of Risk Aversion	Education & clinical experience	Encourage professional autonomy
Physio are territorial about role	Understand safety culture	Unified rehabilitation strategies



What next?

Physiotherapists must relinquish their status as experts in ensuring patient safety without fear of professional dissolution, and move towards unified rehabilitation strategies that promote inpatient independence and wellbeing..

Themes form the survey

Safety Culture

- Avoiding making decisions about patient mobility/safety – lack of accountability
- Fear avoidance/risk adverse
- Afraid they will get blamed for making a mistake or the wrong decision
- Opportunities identified to educate

Staff recommendations

Better training and understanding of why people need to be mobilised and how this effects patients stay in hospital and how much better recovery tines would be and lengths of stays would be reduced

Education at induction - promote a culture of activity from day one

more specific training relating to mobilization and not just moving/handling, including falls prevention/mobility training for staff such as HCAS so that they have a greater understanding of mobility issues

More staff, more information for staff and patients regarding pros and cons of mobilisation.

more information for us to give to patients to help them understand the need for mobilising

Maybe focus on more e-learning. Staff given more support.

Maybe teaching sessions to nurses/doctors/allied health staff teaching them on the benefits of mobilising different patient groups so they understand why it's important, so they can see how it can make their job easier in the long run and so they can inform patients on why they should be mobilising.

To encourage all members of staff to engage with encouraging and participating in patient mobility safely.

Incentive/scheme like end pj paralysis

cahpr
Council for Allied Health Professions Research

About CAHPR | News | Activities | Regions | Resources

- £1000 from CAHPR small grant scheme
- MDT focus

- **Co-design and preliminary evaluation of a digital training resource to promote inpatient activity and reduce hospital-associated deconditioning.**
- Co-applicant, OT Catherine Thomas

Why Moving Matters

#MakeMovementCount

https://www.youtube.com/watch?v=MsZrhNsmLEQ

Why Moving Matters

The Newcastle upon Tyne Hospitals NHS Foundation Trust

Results

- Part of the induction training for all new staff at Newcastle including junior doctors
- Part of the training of Healthcare Assistants and volunteers
- Introduced into falls prevention training in hospitals in the south
- Part of the BSc and MSc physio students training at Northumbria Uni
- Patient groups have requested one

#MakeMovementCount

Would you jump….

1 metre?

5 metres?

20 metres?

60 metres?

for £1,000?

Why Moving Matters

The Newcastle upon Tyne Hospitals NHS Foundation Trust

Hold up your answer on a page or write them in the chat.

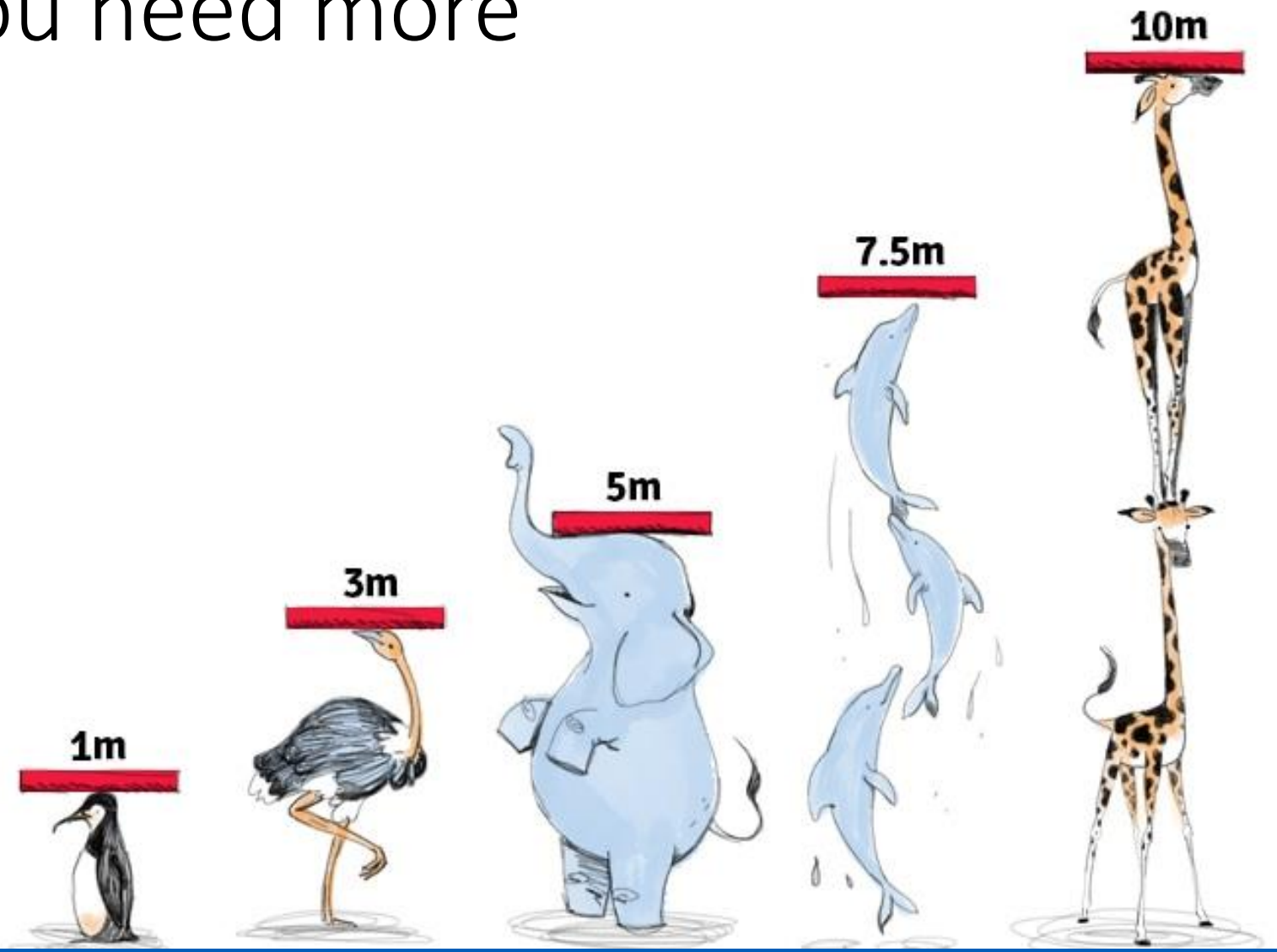
To assess the **risk**, you need more information.

Context:

In 2015, the world record was

58.8m in Switzerland….

After months of training.



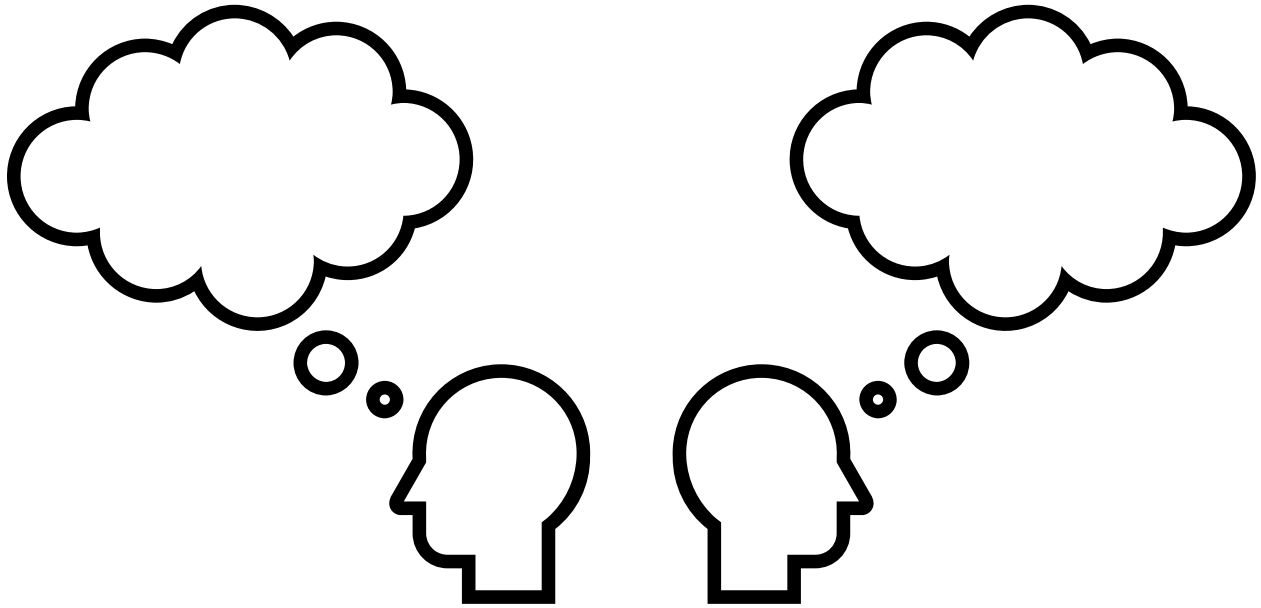
Enormous scientific uncertainty surrounds the potential risks and benefits of most chemicals. i.e. there are risks and benefits to all pharmaceuticals.

Therefore, every action — or inaction — represents a decision of some kind.

Why do we not apply the same logic to physical activity?

(Jellinek, 1981, on 'the inevitability of being wrong')

How do we change our practice now?



Be aware of the guidelines for Physical activity

Consensus statement

Benefits outweigh the risks: a consensus statement on the risks of physical activity for people living with long-term conditions

Hamish Reid ,[1,2] Ashley Jane Ridout ,[3] Simone Annabella Tomaz,[4] Paul Kelly ,[5] Natasha Jones,[1,3] on behalf of the Physical Activity Risk Consensus group

You can start small

- Ask everyone how active they are
- Anyone can offer activity advice which is different from exercise prescription
- Can you ask the person to stand or sit on the edge of the bed before assessing them on ward round
- Smaller actions of activity over the day and week will provide benefits.
- Recommended activity every day to prevent sarcopenic changes & functional decline.

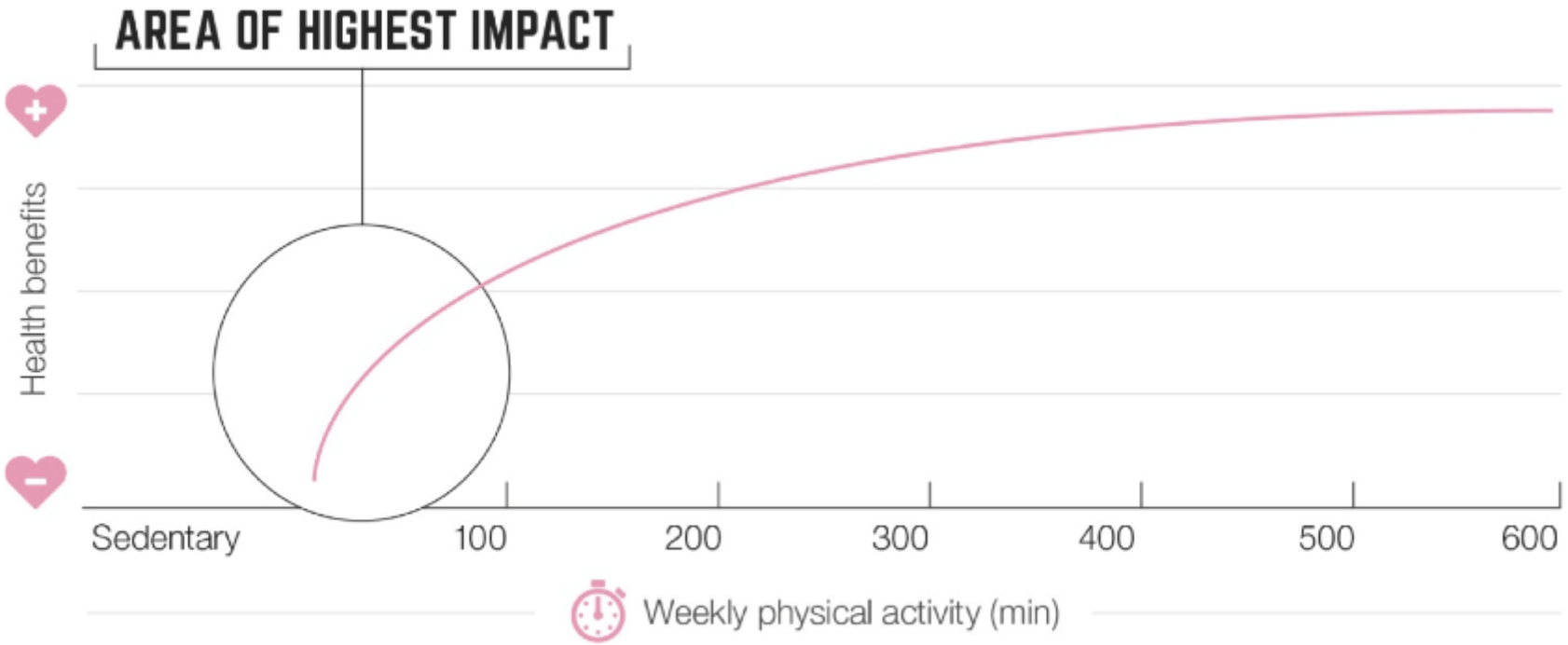
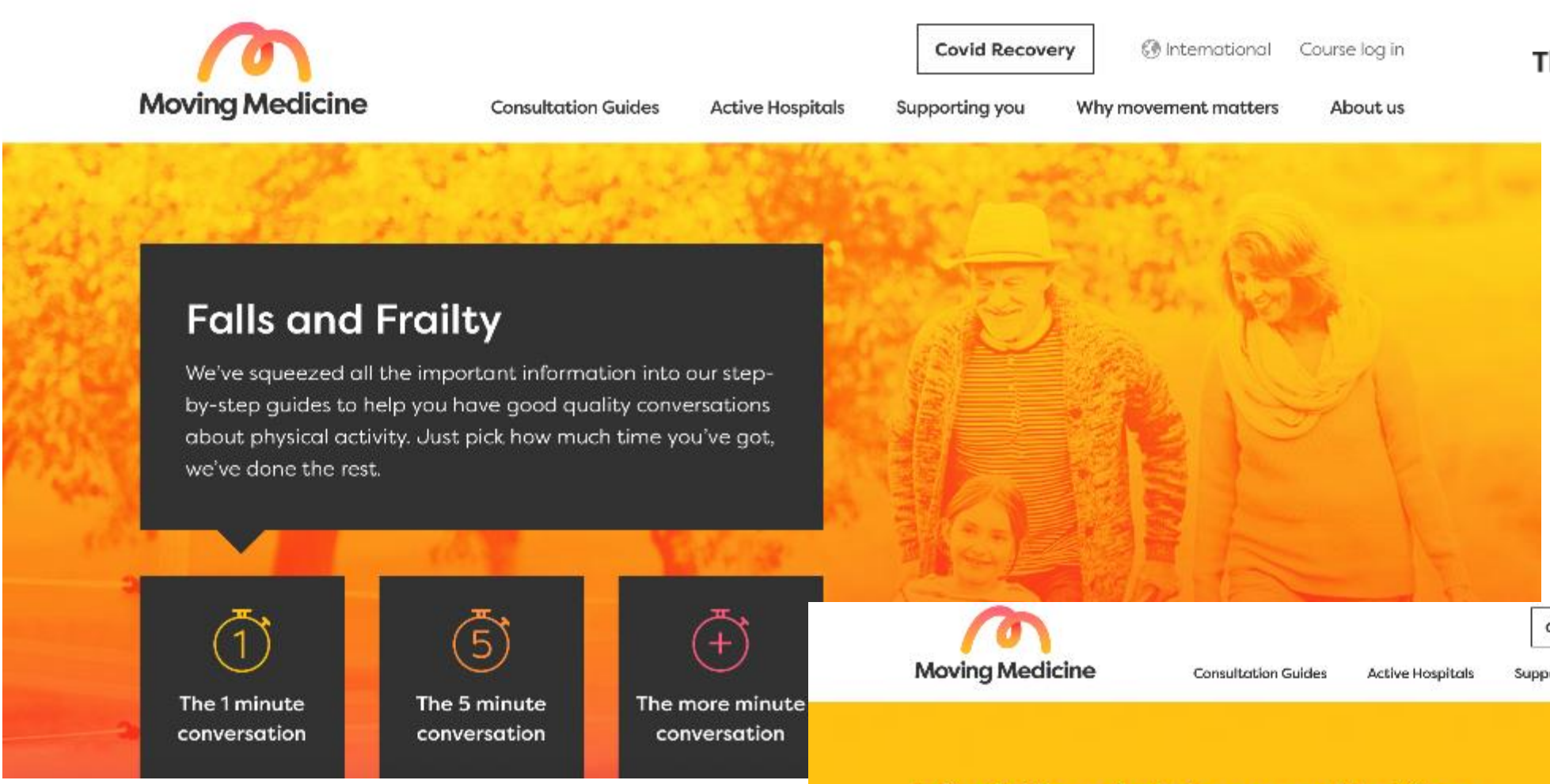
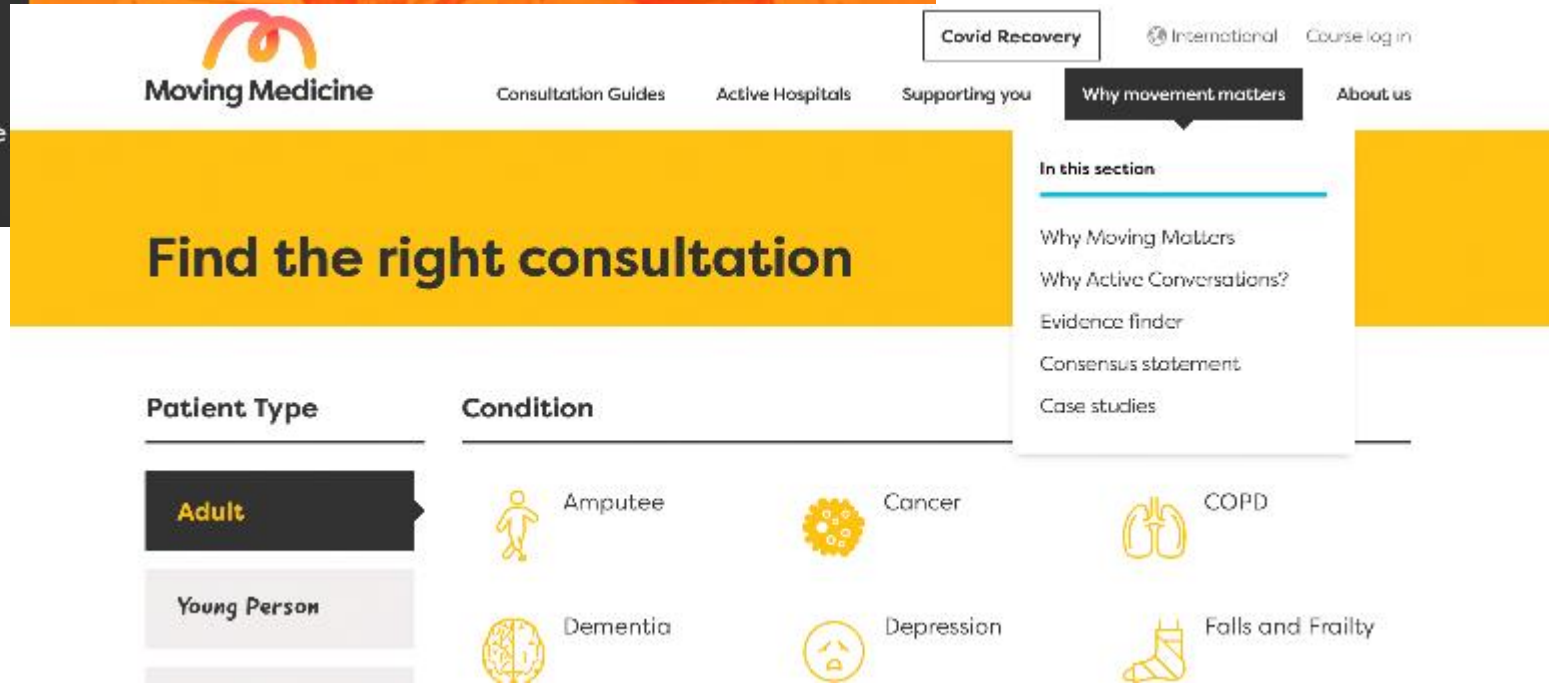


Figure 2: Dose-response curve of physical activity and health benefits. Adapted from (2)

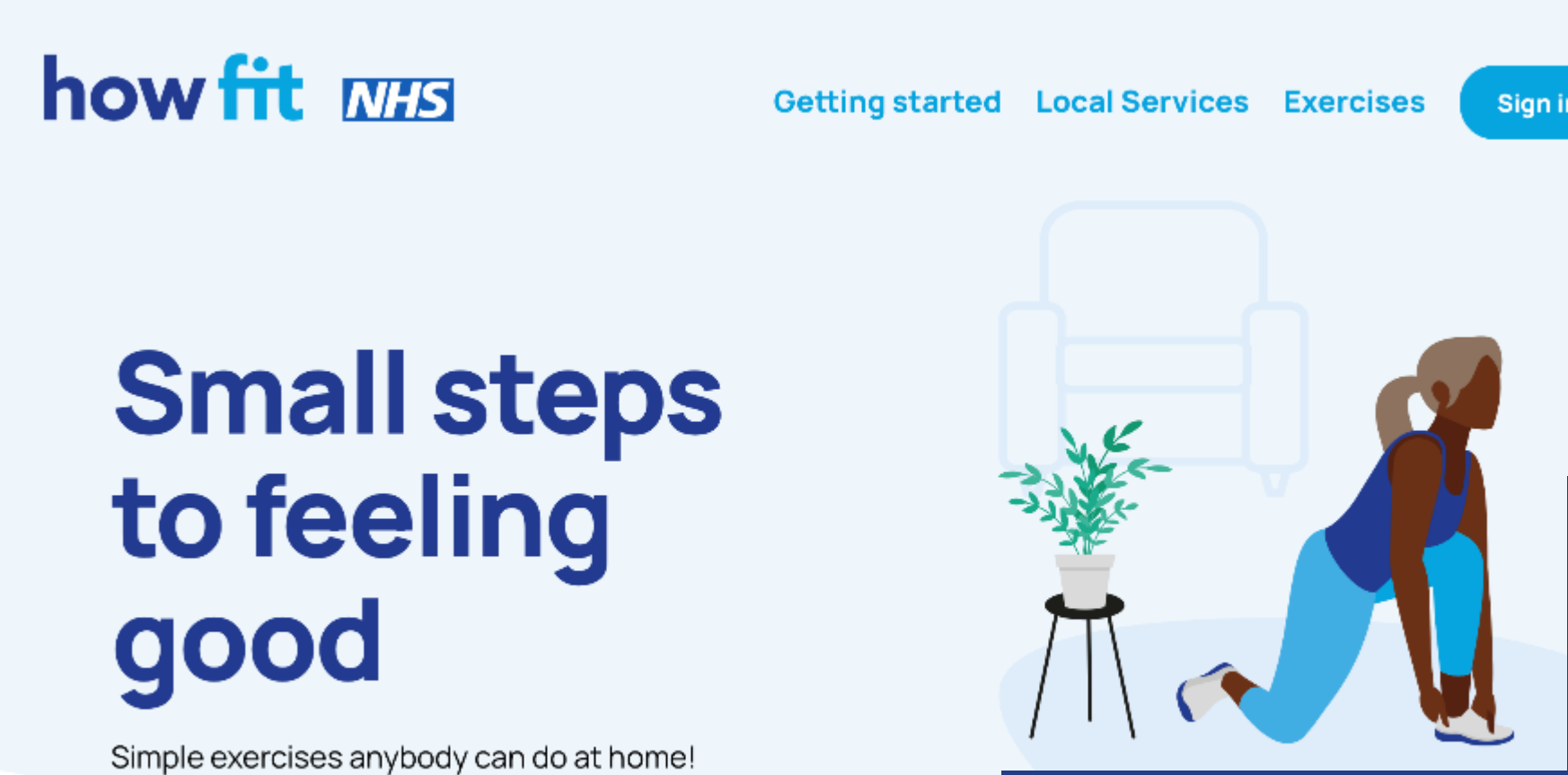


Reference Materials

[Moving Medicine Website]



Moving Medicine



Dr Steve Parry

Start with a cup of tea

Why no do 5-10 minutes of chair-based exercises before a cup of tea?

Use things around you:

- Can of beans as a weight

Exercises = bicep curls

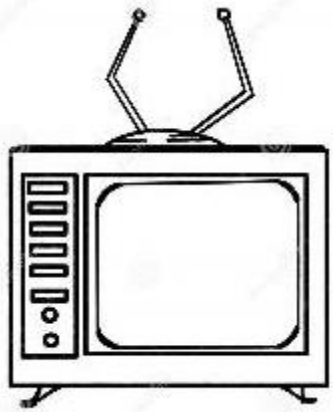
Lift up over the head

If it is too like why not fill a milk carton, you can increase the weight as it gets easier

Neck mobility impacts balance

Stand after a TV programme

Sitting forward in the chair
Activates the anti gravity muscles



Little changes for a cup of tea

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Seated toe-heel rocks

1. Sit upright with your feet flat and toes pointing forwards
2. Lift your heels, then lower to a flat foot position
3. Lift your toes, then lower to a flat foot position
4. Use momentum to rock between the two 10-15 times

X Marks the spot
Can also use a post-it or tape

Seated leg lift

1. Sit upright, away from the back of your seat throughout
2. Lift one leg straight out in front of you, do not lock your knee and be gentle with the knee joint
3. Squeeze your thigh muscles for 2-3 seconds then slowly lower your leg down
4. Complete 5-10 times on each leg

* Do not hold your breath throughout the exercise

Sit to stand using hands

1. Sit upright with your feet slightly behind your knees
2. Hold firmly onto the sides or arms of your chair
3. Shuffle your bum forward towards the end of the chair
4. Lean your chest forwards with your head up and looking forwards
5. Push through your feet and hands to help you stand up, squeezing your leg and bottom muscles to help you
6. To sit back down, make sure you feel the chair with the backs of your legs and keep your head up, then reach your hands back for the arm rests and gently sit down
7. Repeat 10-15 times

We do this everyday, from the toilet From the seat, from bed. But it is also a fantastic resistance exercise. Don't be afraid of it.

Impact of exercise

Strength & Balance activity

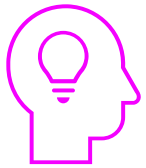
- 10% increase in strength & balance

=

- Reduction in falls by 9,339 for males and 9,506 for females.

Recommendations

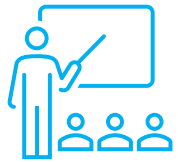
Share the video https://www.youtube.com/watch?v=MsZrhNsmLEQ



Begin with little changes to the daily routine

Be an activity champion and get everyone involved

Don’t delay and wait for physio to begin physical activity



Trust your training and knowledge to smart smart decisions

Take the leap!

Because if you risk nothing the patient risks losing everything …….

Keep Moving!

#MakeMovementCount

Courtesy of Chris Tuckett @HealthPhysio

Thanks


why
when
who
where
what
why
QUESTIONS
who
how
where
who
what
how
how
when

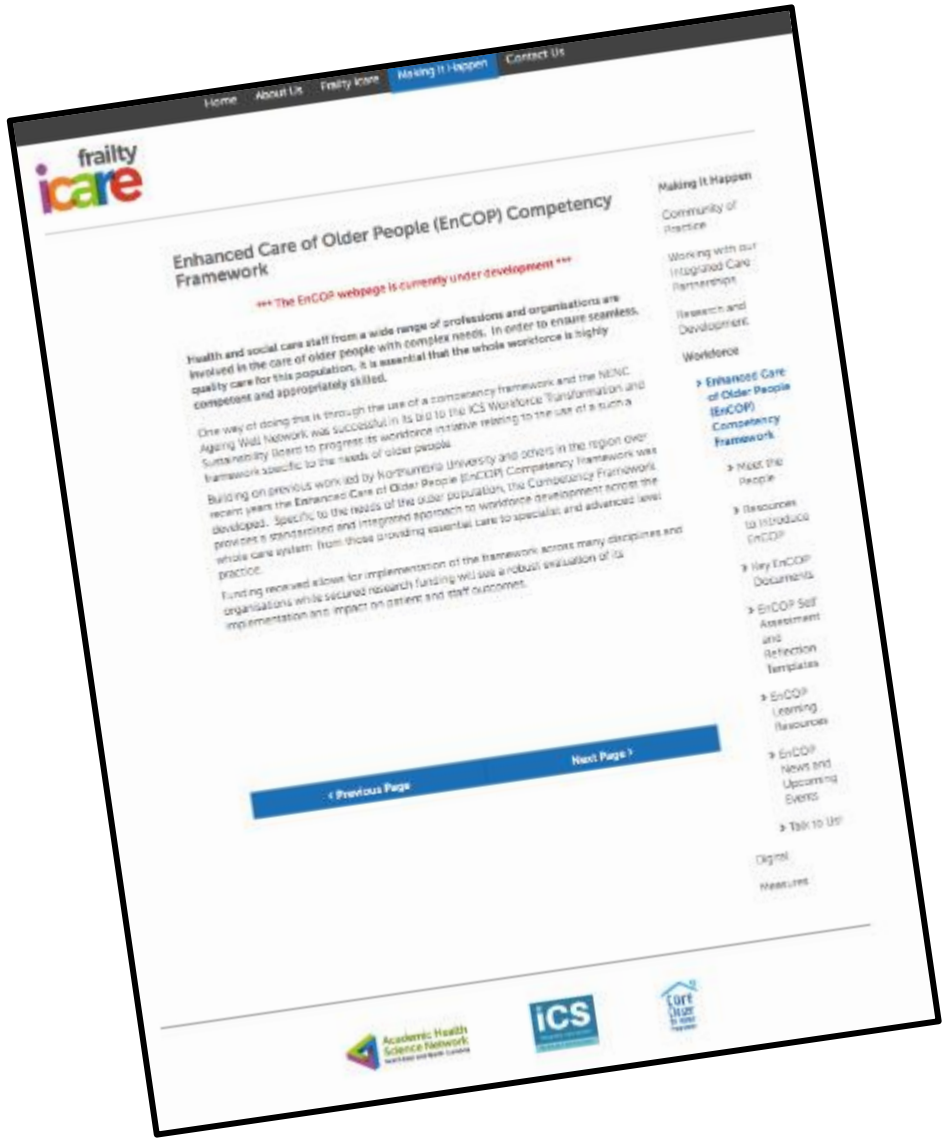
Ideas for Learning Consolidation & Competency Conclusion

Consolidating Learning:

Reflection on the session & considering application to practice & what this means 'your people'

- Think about this session in relation to your own role
- How much of this was revision?
- What have you learned today ?
- How will this help you in your role ?
- Think about your EnCOP self–assessment; consider which performance indicators this session may relate to and how this can be used as part of your own development / competency achievement.

Competency Domains:
A: Values, attitudes and ethics
B1: Interprofessional & Interorganisational Working & Communication
B2: Teaching, Learning & Supporting Competence Development
C2: Improving Care
D1: Communication with Older People, Families & Friends
D2.1: Frailty – Understanding, identification and recognition
D2.2: Assessing, planning, implementing and evaluating care
D2.3: Ageing well – promoting and supporting holistic health and wellbeing
D2.4:Ageing well- promoting and supporting independence and autonomy
D2.5:Management of physical health in frailty
D3:Management of dementia
D4:Management of mental health



More information can be found within the Frailty icare website

www.frailtyicare.org

Our EnCOP pages are located in the workforce section

EnCOP Library of Learning & Development Resources can be found at:

http://frailtyicare.org.uk/making-it-happen/workforce/enhanced-care-of-older-people-with-complex-needs-encop-competency-framework/encop-learning-resources/learning-resources/

Feedback about today's session and any future sessions you may like to see included in our webinar series….

All feedback welcomed; You may want to consider the following –

Was it easy to book onto the session?
Did you find the session went well in this online format ?
Was the content of the session relevant to your area of practice / job role?
Did you enjoy the session?

Thinking about future webinar's, which topics linked to older person's care would you be most interested in?
Please put any suggestions in the chat.

Please comment in the chat today or feel free to email us: ghnt.encop@nhs.net