



Public Health
England



Physical Activity for the Management and Prevention of Long Term Conditions

While we wait for the session to begin, please complete a short survey by **scanning the QR code** or visiting **ipsos.uk/PACC**.

Your survey responses will help us to understand your current experience of promoting physical activity to patients and to improve the training for other HCPs.





Public Health
England



Physical Activity for the Management and Prevention of Long Term Conditions

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Senior Psychological Therapist

Physical Activity Clinical Champion

Level 3 Personal Trainer

Physical Activity Clinical Champions 2020-21 LIVE WEBINAR

Webinar etiquette

1. Please keep microphone on mute.
2. Where possible have your video turned on.
3. Use the chat feature to ask a question or raise an issue. If your name is called unmute your mic.
4. If you are having technical issues, log out and try to rejoin.



Learning Outcomes

By the end of the session you will be able to:

- Demonstrate knowledge of the UK Chief Medical Officers' (CMOs) guidelines for physical activity;
- Describe population physical activity levels at national and local levels;
- Explain the benefits of physical activity for the management and prevention of long term conditions;
- Apply this knowledge in your clinical care of patients through routine brief advice on physical activity.

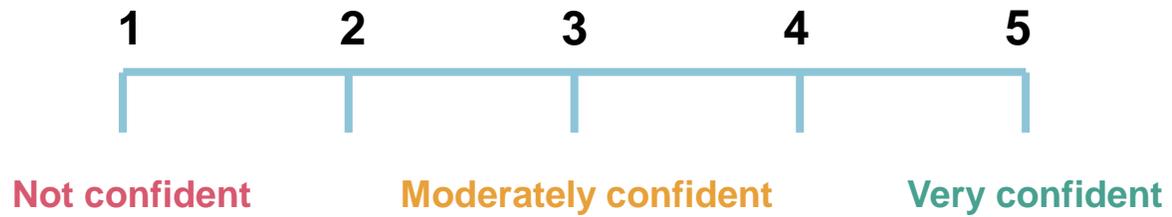


Introductions

- Cognitive Behavioural Psychotherapist and Clinical Coordinator working for the C&I IAPT service.
- Mental Health Clinical Champion for Physical Activity in London.
- Interest in mind-body connection and how this links to mental and physical health
- Qualified level 3 Personal Trainer.



How confident are you with giving physical activity advice?



Plan for the Session

1. Setting the scene
2. Key concepts in physical activity
3. Benefits of physical activity
4. Supporting people to become more active



Plan for the Session

1. **Setting the scene**
2. Key concepts in physical activity
3. Benefits of physical activity
4. Supporting people to become more active



Knowledge and skills of healthcare professionals

Research

Robin Chatterjee, Tim Chapman, Mike GT Brannan and Justin Varney

GPs' knowledge, use, and confidence in discussing physical activity and health guidelines

a questionnaire-based survey of general practice in England

GPs in England 'unconfident' discussing physical activity with patients - report

unconfident discussing activity
in line with national guidelines



...y don't have time or even energy to
discuss with patients.



- Survey of 1,000 GPs found **80% not familiar with national guidelines**
- Survey of 552 physiotherapists showed **only one in six (16%) knew all elements of guidelines**

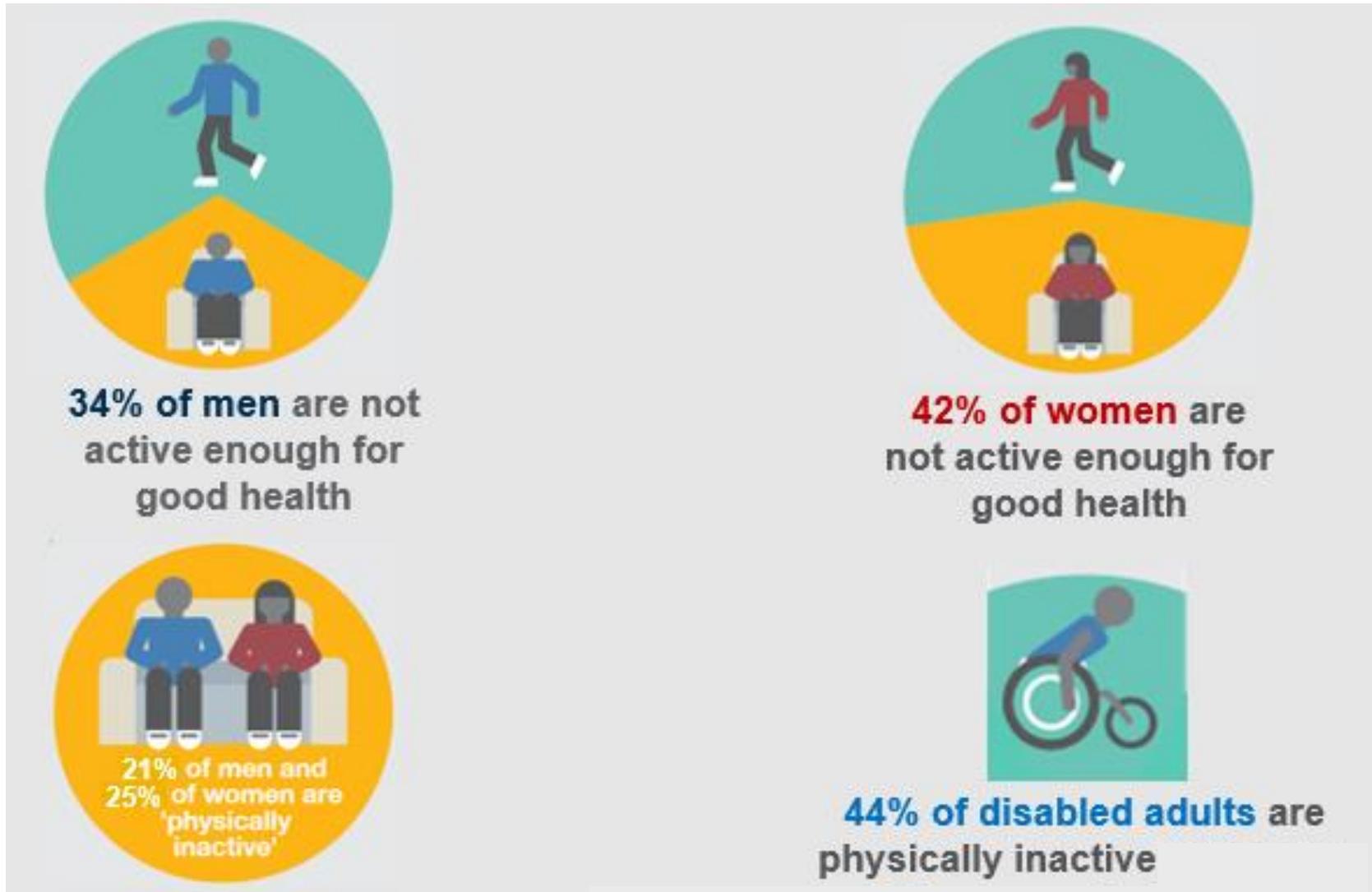
Open Access

BMJ Open
Sport &
Exercise
Medicine

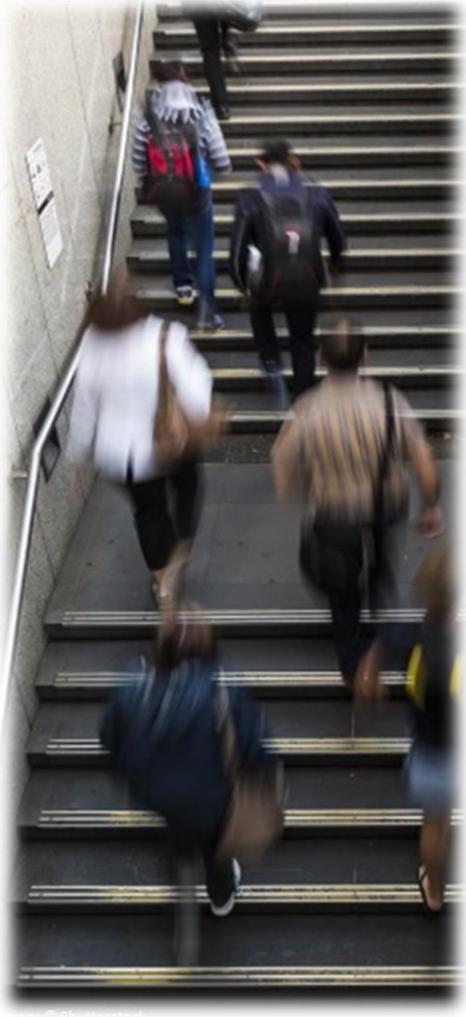
Physiotherapy and physiotherapists: a cross-sectional survey of physical activity promotion and physical activity guidelines knowledge and physical activity habits of physiotherapists

Anna Lowe, Chris Littlewood,¹ Siannadh McLearn,² Karen Kilner²

How active are we? In England...



Scale of the Problem



Decreasing activity levels

- Adults are at least 20% less active than in 1960s

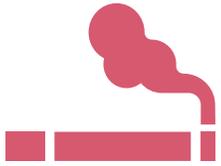
Physical activity contributes to the prevention of:

- 1 in 6 UK deaths
- 19% – 66% of many long-term conditions
- Reduced risk of functional limitation, including activities of daily living, by 50% in older adults

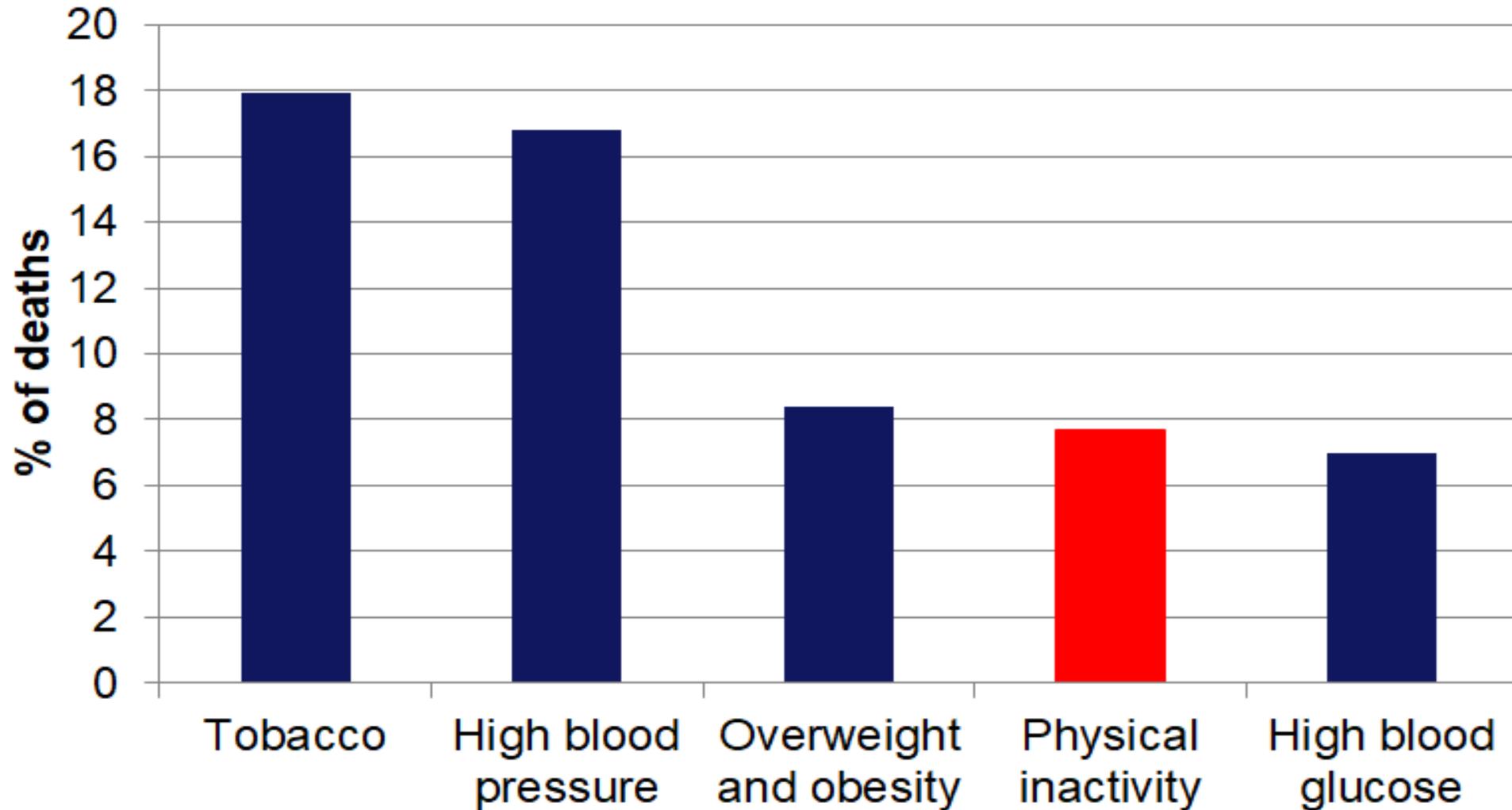
Estimated annual cost to UK.....£7.4 billion



What is the most common (in terms of % deaths) behavioural risk factor for mortality?



Top five behavioural risk factors for non-communicable diseases, high income countries



How does the UK's inactivity levels compare with the following countries:

Australia

Finland

France

Netherlands

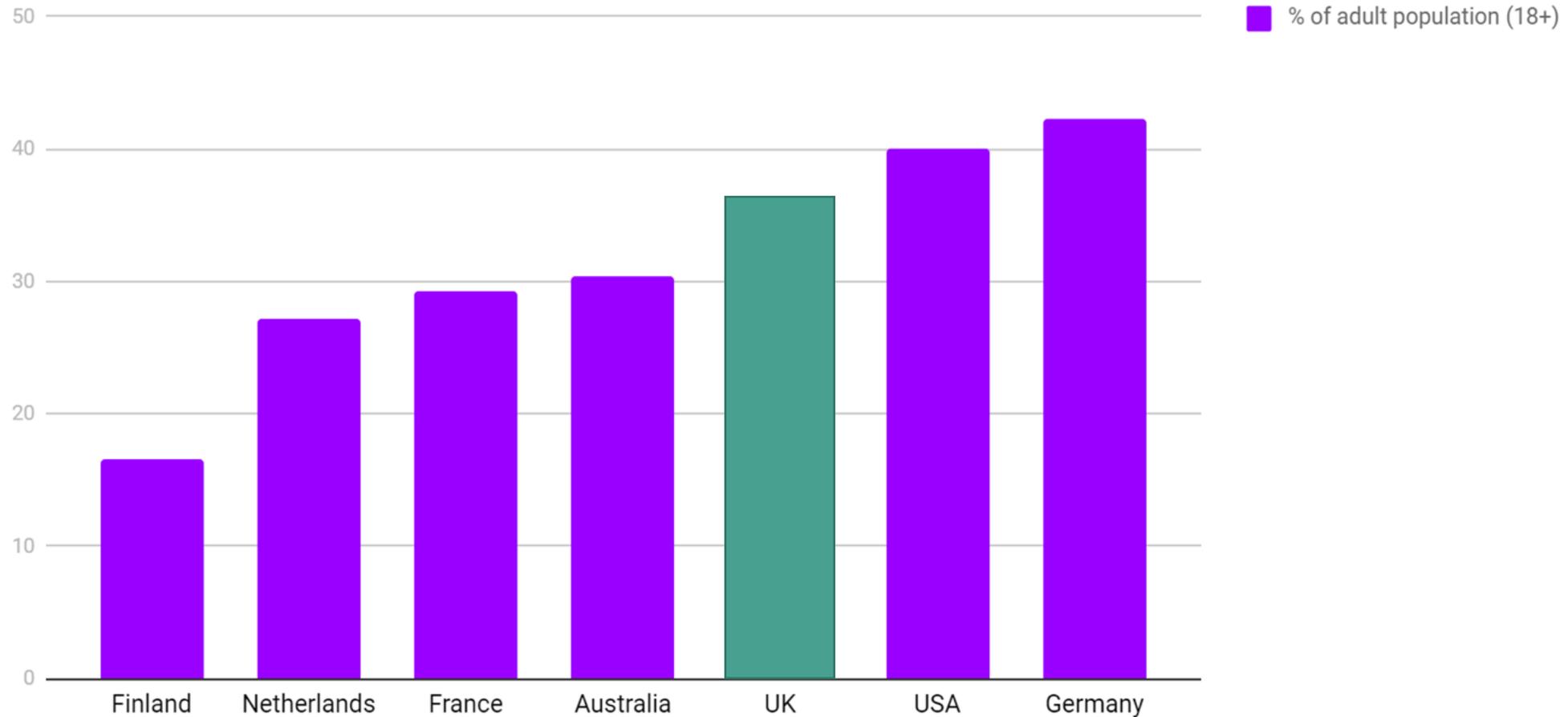
Germany

USA



How inactive are we? Globally....

Prevalence of Insufficient Physical Activity (age-standardized estimate)



Which areas of England are the most physically inactive?

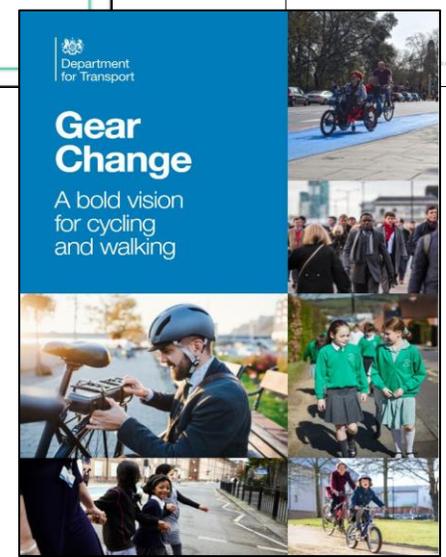
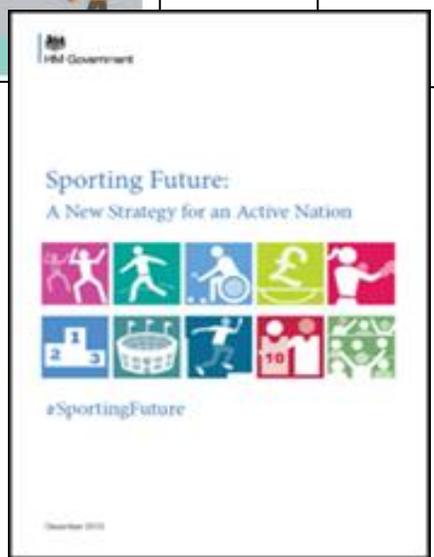
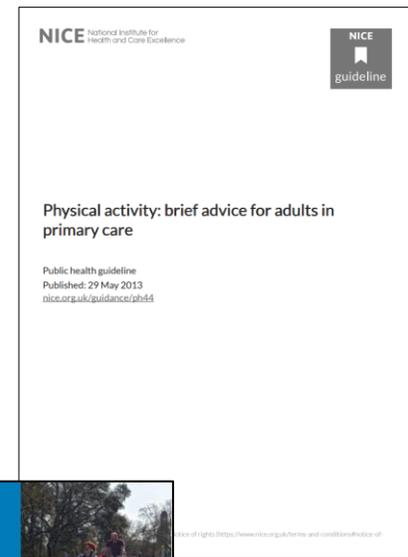
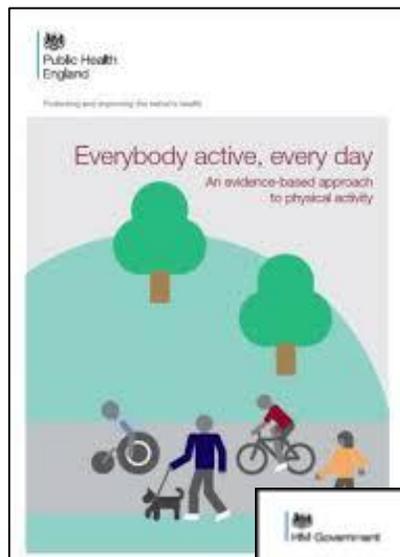


Regional Data

Region	Inactive (<30 mins per week)
West Midlands	24.2%
North East	23.8%
Yorkshire and the Humber	22.7%
North West	22.7%
East Midlands	22.1%
London	22.1%
East of England	21.0%
South East	18.7%
South West	17.5%



Physical activity across policies and guidance

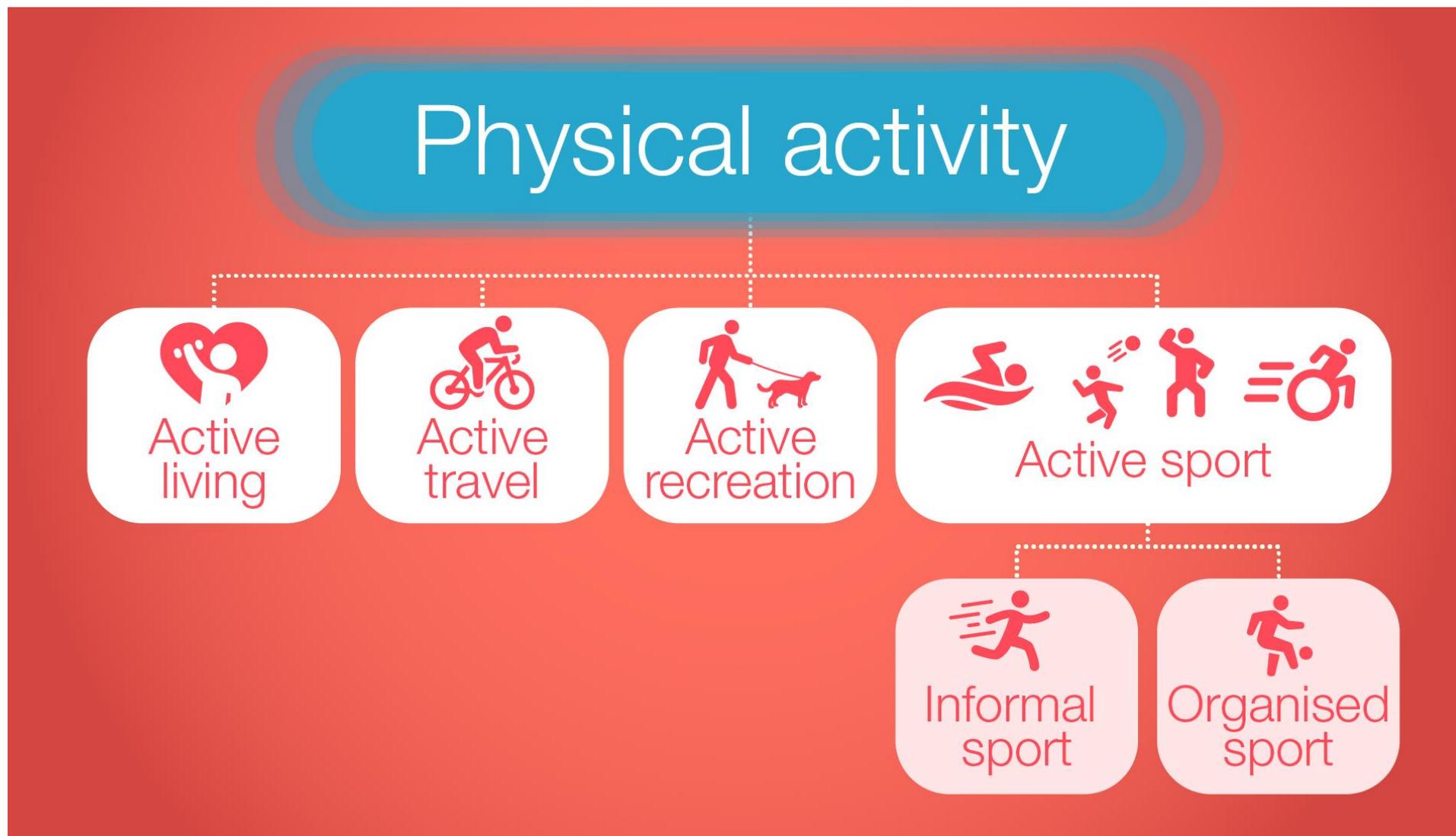


Plan for the Session

1. Setting the scene
2. **Key concepts in physical activity**
3. Benefits of physical activity
4. Supporting people to become more active



What is Physical Activity?



How many minutes of cardiovascular physical activity should an adult aim to undertake each week?

30

60

90

120

150



UK Chief Medical Officers' guidelines

Physical activity for adults and older adults

Benefits health	Type II Diabetes -40%
Improves sleep	Cardiovascular disease -35%
Maintains healthy weight	Falls, depression etc. -30%
Manages stress	Joint and back pain -25%
Improves quality of life	Cancers (colon and breast) -20%

Some is good, more is better | Make a start today: it's never too late | Every minute counts

Be active

at least **150** minutes moderate intensity per week
Increased breathing able to talk

OR

at least **75** minutes vigorous intensity per week
breathing fast difficulty talking

or a combination of both

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

Minimise sedentary time
Break up periods of inactivity

Improve balance
For older adults, to reduce the chance of frailty and falls
2 days a week

UK Chief Medical Officers' Physical Activity Guidelines 2019

- Muscle-strengthening activity on at least two days a week
- 150 minutes of moderate intensity activity
Or 75 minutes of vigorous intensity activity
Or a combination of both
- Minimise sedentary time and break up periods of inactivity
- For older adults (65+) - Balance and flexibility activities at least two days a week



**Every minute counts.
Some is good, more is better!**

Physical activity for pregnant women

- Helps to control weight gain
- Helps reduce high blood pressure problems
- Helps to prevent diabetes of pregnancy
- Improves fitness
- Improves sleep
- Improves mood

Not active? Start gradually

Already active? Keep going

Throughout pregnancy aim for at least **150 minutes** of moderate intensity activity every week

Home, Out and about, Leisure

Do muscle strengthening activities twice a week

No evidence of harm Listen to your body and adapt

UK Chief Medical Officers' Physical Activity

Physical activity for early years (birth - 5 years)

Active children are healthy, happy, school ready and sleep better

- BUILDS RELATIONSHIPS & SOCIAL SKILLS
- MAINTAINS HEALTH & WEIGHT
- CONTRIBUTES TO BRAIN DEVELOPMENT & LEARNING
- IMPROVES SLEEP
- DEVELOPS MUSCLES & BONES
- ENCOURAGES MOVEMENT & CO-ORDINATION

Every movement counts

Aim for at least **180 Minutes per day** for children 1-5 years

- PLAYGROUND
- JUMP
- CLIMB
- MESSY PLAY
- THROW/CATCH
- SKIP
- Under-1s at least 30 minutes across the day
- OBJECT PLAY
- DANCE
- GAMES
- TUMMY TIME
- SWIM
- WALK
- SCOOTER

Get Strong. Move More. Breathe Easier.

UK Chief Medical Officers' Physical Activity

Physical Activity for Disabled Adults

Make it a daily habit

- Improves mental health and quality of life
- Makes maintaining a healthy weight easier
- Makes daily tasks easier and increases independence
- Strengthens muscles and bones
- Improves fitness
- Improves mobility and balance
- Helps to prevent chronic disease
- Creates opportunities to meet new people and feel part of the community

Disabled adults

Physical activity makes you feel good

Being inactive is harmful to health

Don't be still for too long

Even a little movement is better than nothing

Give things a go and enjoy what you do

Do strength and balance activities on at least two days per week

For substantial health gains aim for at least 150 minutes each week of moderate intensity activity

Remember the talk test: Can talk, but not sing = moderate intensity activity. Difficultly talking without pausing = vigorous intensity activity

UK Chief Medical Officers' Physical Activity Guidelines, 2019

Physical activity for women after childbirth (birth to 12 months)

- Time for yourself - reduces worries and depression
- Helps to control weight and return to pre-pregnancy weight
- Improves tummy muscle tone and strength
- Improves fitness
- Improves mood
- Improves sleep

Not active? Start gradually

Active before? Restart gradually

Out and about, Home, Leisure

aim for at least **150 minutes** of moderate intensity activity every week

Start pelvic floor exercises as soon as you can and continue daily

Build back up to muscle strengthening activities twice a week

It's safe to be active. No evidence of harm for post partum women

Depending on your delivery listen to your body and start gently

You can be active while breast feeding

UK Chief Medical Officers' Physical Activity Guidelines, 2019

Physical activity for children and young people (5 - 18 Years)

- BUILDS CONFIDENCE & SOCIAL SKILLS
- DEVELOPS CO-ORDINATION
- IMPROVES CONCENTRATION & LEARNING
- STRENGTHENS MUSCLES & BONES
- IMPROVES HEALTH & FITNESS
- MAINTAINS HEALTH & WEIGHT
- IMPROVES SLEEP
- MAKES YOU FEEL GOOD

Be physically active

Spread activity throughout the day

Aim for an average of at least **60 minutes per day** across the week

All activities should make you breathe faster & feel warmer

- PLAY
- RUN/WALK
- BIKE
- ACTIVE TRAVEL
- SWIM
- SKATE
- SPORT
- PE
- SKIP
- CLIMB
- WORKOUT
- DANCE

Activities to develop movement skills, and muscle and bone strength **ACROSS WEEK**

Get strong (ACTIVITY)

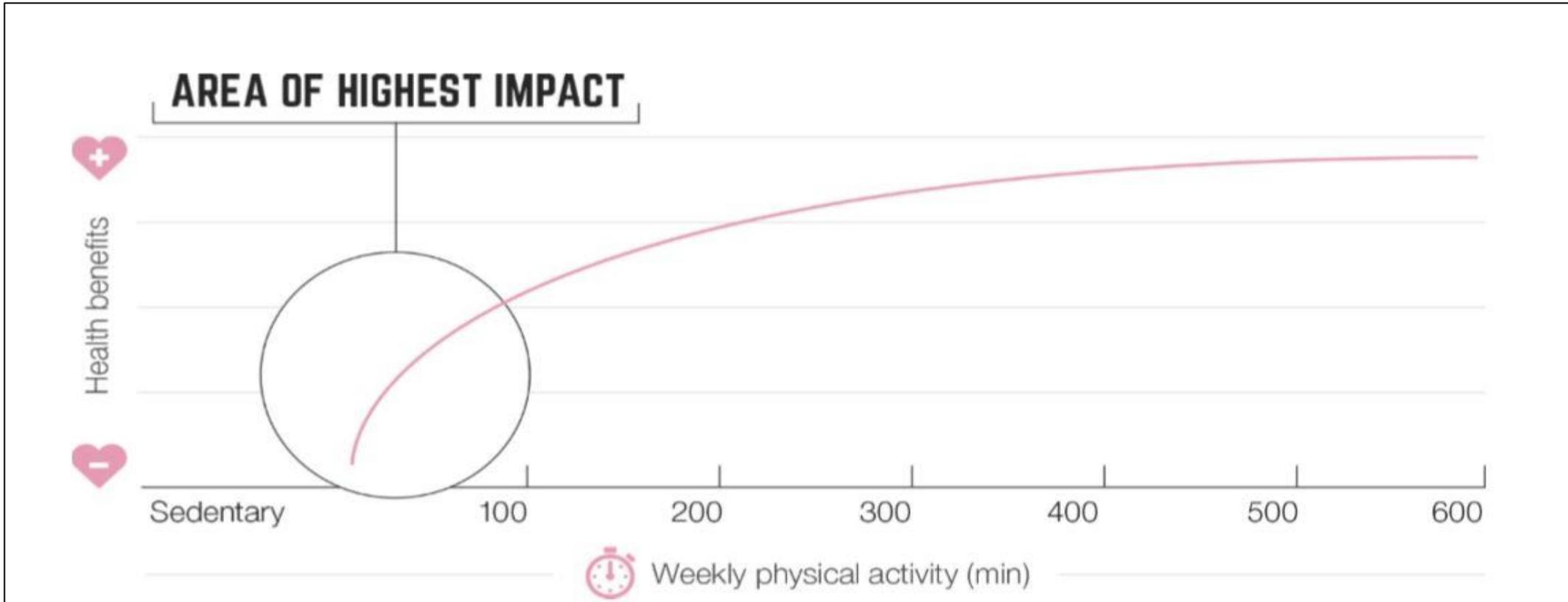
Move more (INACTIVITY)

Find ways to help all children and young people accumulate an average of at least 60 minutes physical activity per day across the week

UK Chief Medical Officers' Physical Activity Guidelines, 2019



Who gains the most?



Dose-response curve of physical activity and health benefits

Greatest gains are in those who go from doing nothing to doing something.



Guess the intensity of activity of the following activities:

Dancing

Walking

House Work

METs

1 Sitting

<3 Low

3-6 Moderate

6+ Vigorous



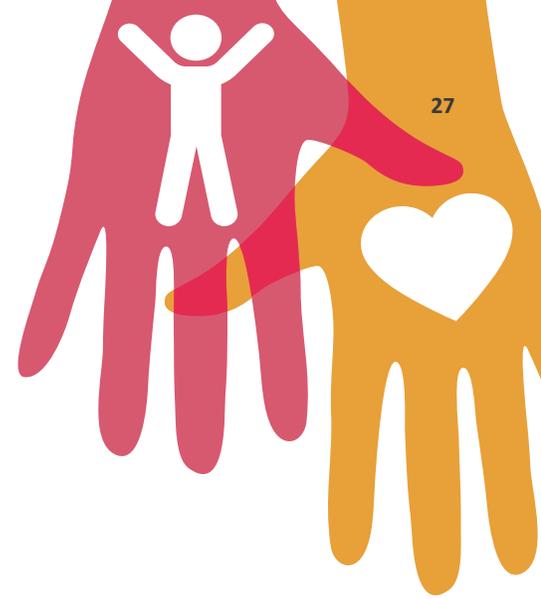
Intensity of physical activity

As the intensity increases, heart rate, respiratory rate and energy consumption do likewise



Plan for the Session

1. Setting the scene
2. Key concepts in physical activity
3. **Benefits of physical activity**
4. Supporting people to become more active



Breakout rooms: Benefits of physical activity

1. What are the health benefits and what conditions can it help prevent?



2. What are the physiological mechanisms at work?



Physical activity reduces the risk of which of the following conditions by at least 20%?

All-Cause Mortality

Breast Cancer

Depression

CHD and Stroke

Colorectal Cancer

Bone Fractures

Hypertension

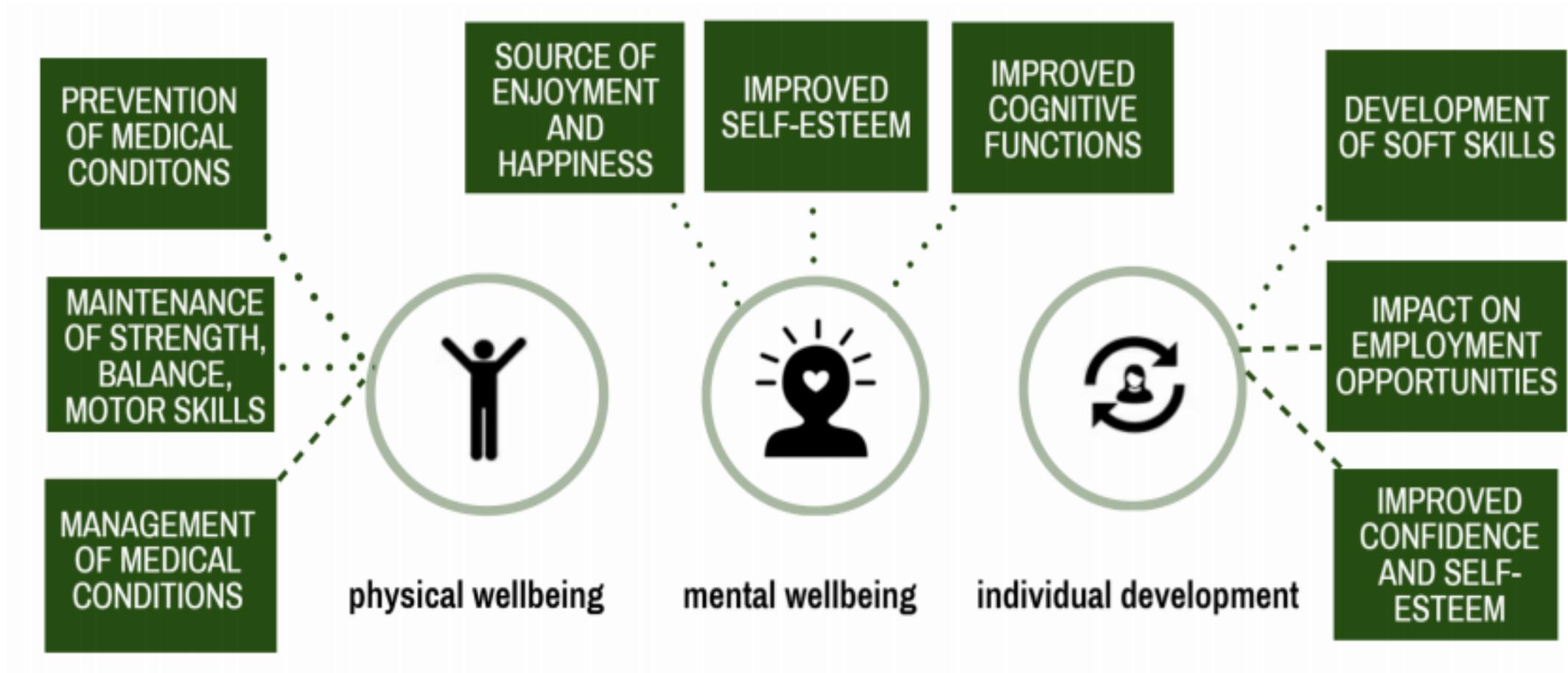
Reduction in cognitive function



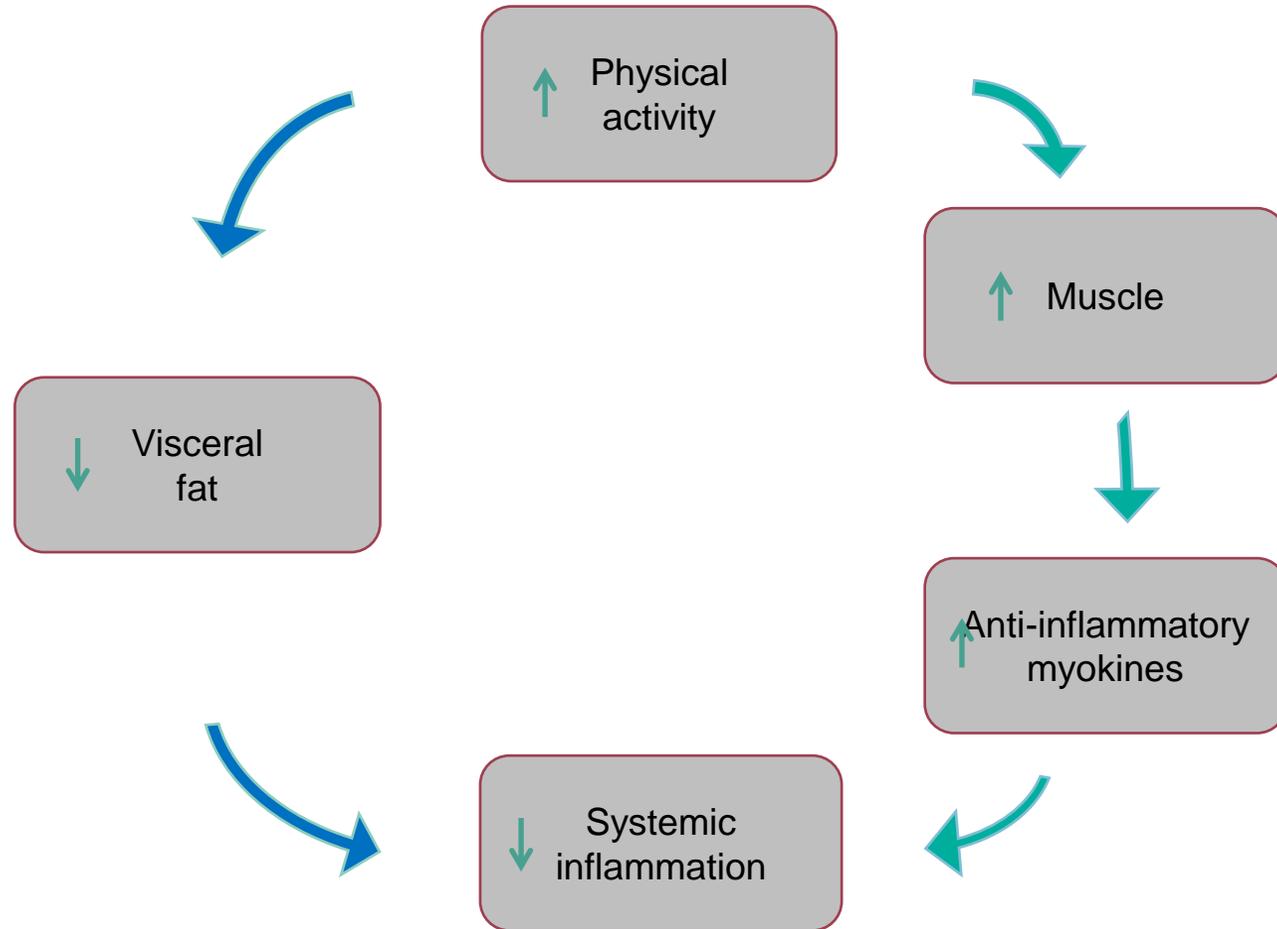
Physical activity reduces mortality and morbidity



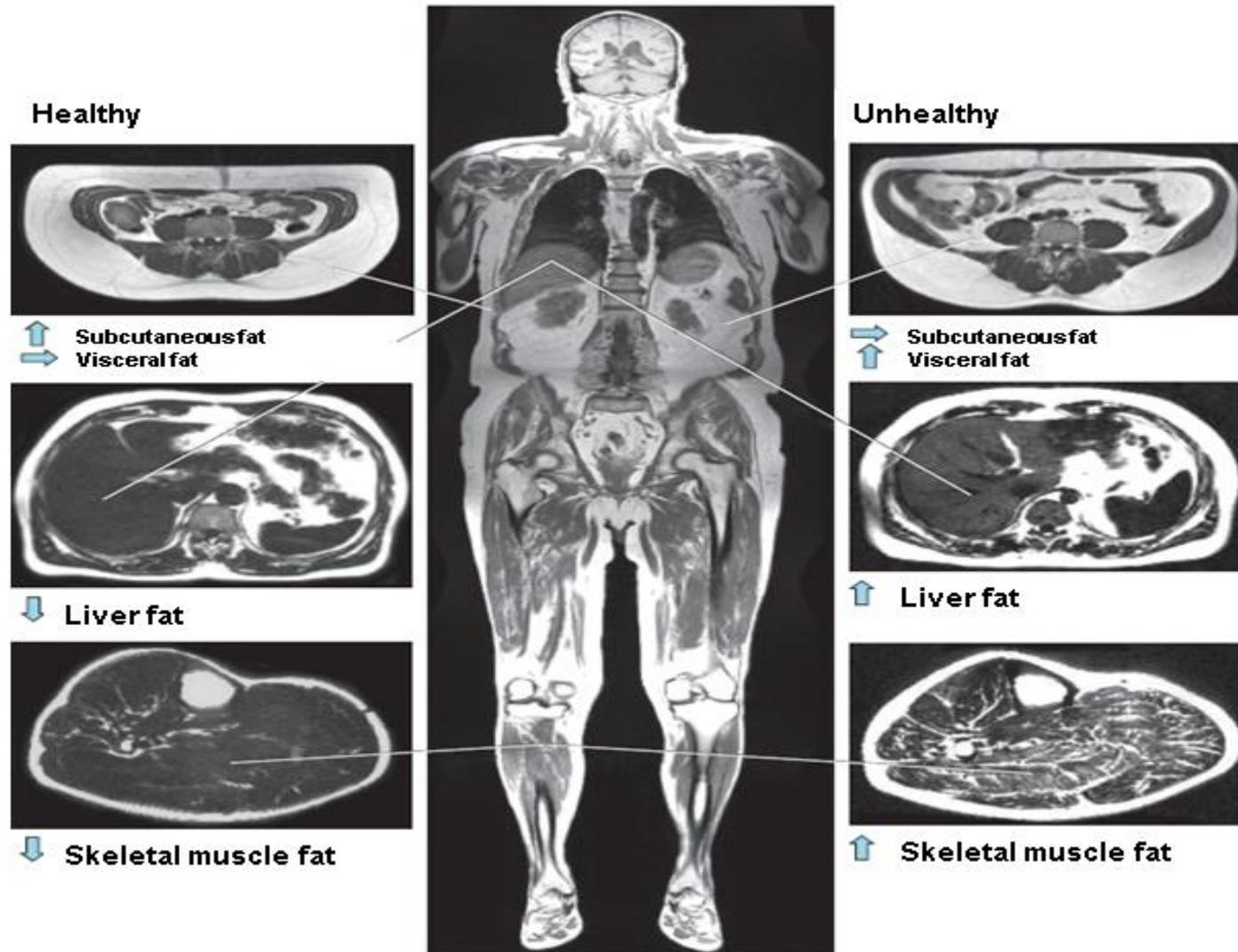
The wider well-being benefits of physical activity



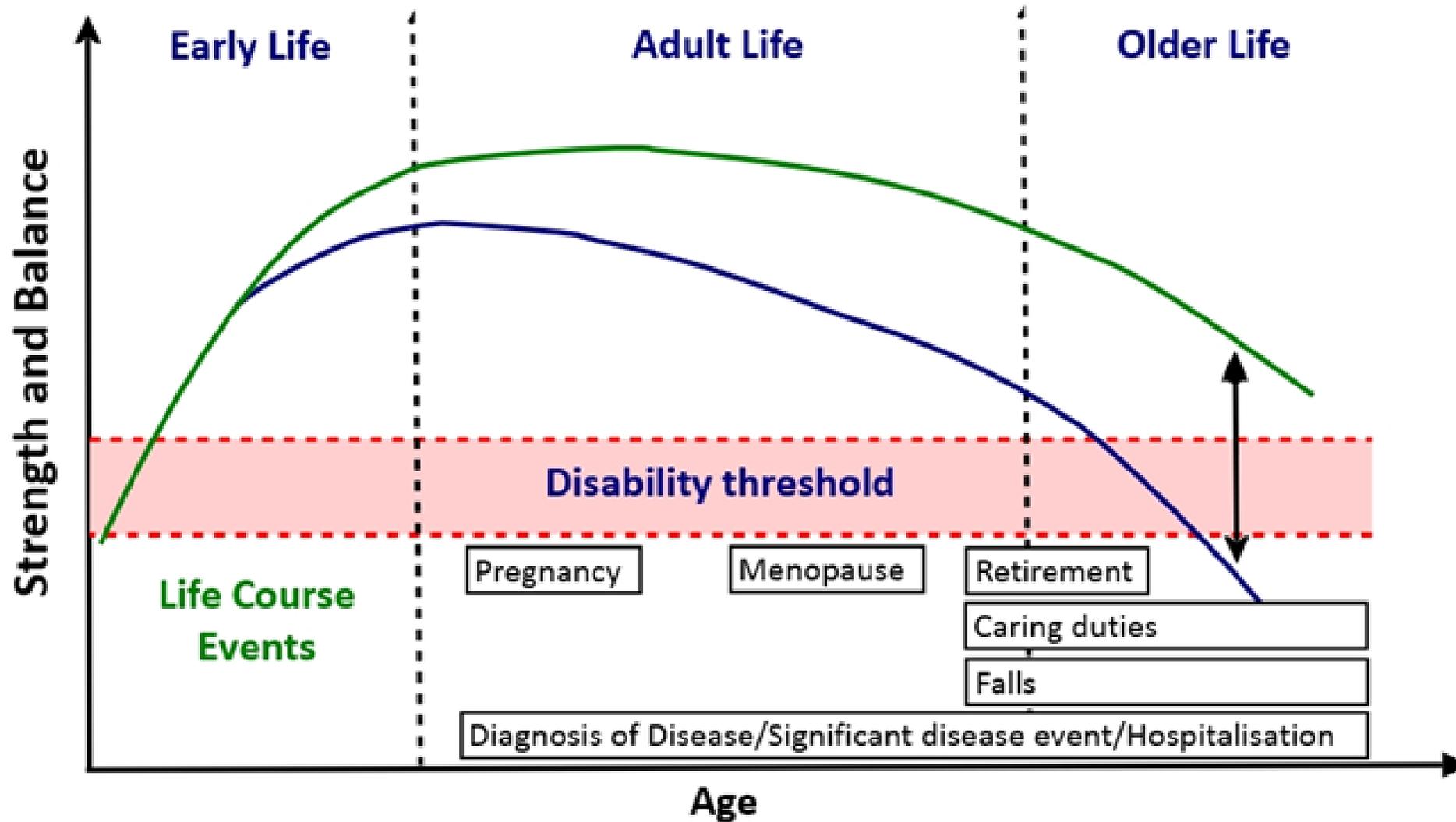
How is physical activity protective?



Visceral fat for the same BMI



Strength & Balance



- Successful ageing with good health and regular strength and balance activity
- Decline in strength and balance if not part of activity throughout lifespan

At what age do more women than men in England achieve the UK CMOs guidelines for cardiovascular and strengthening activity?

16-24

25-34

35-44

45-54

55-64

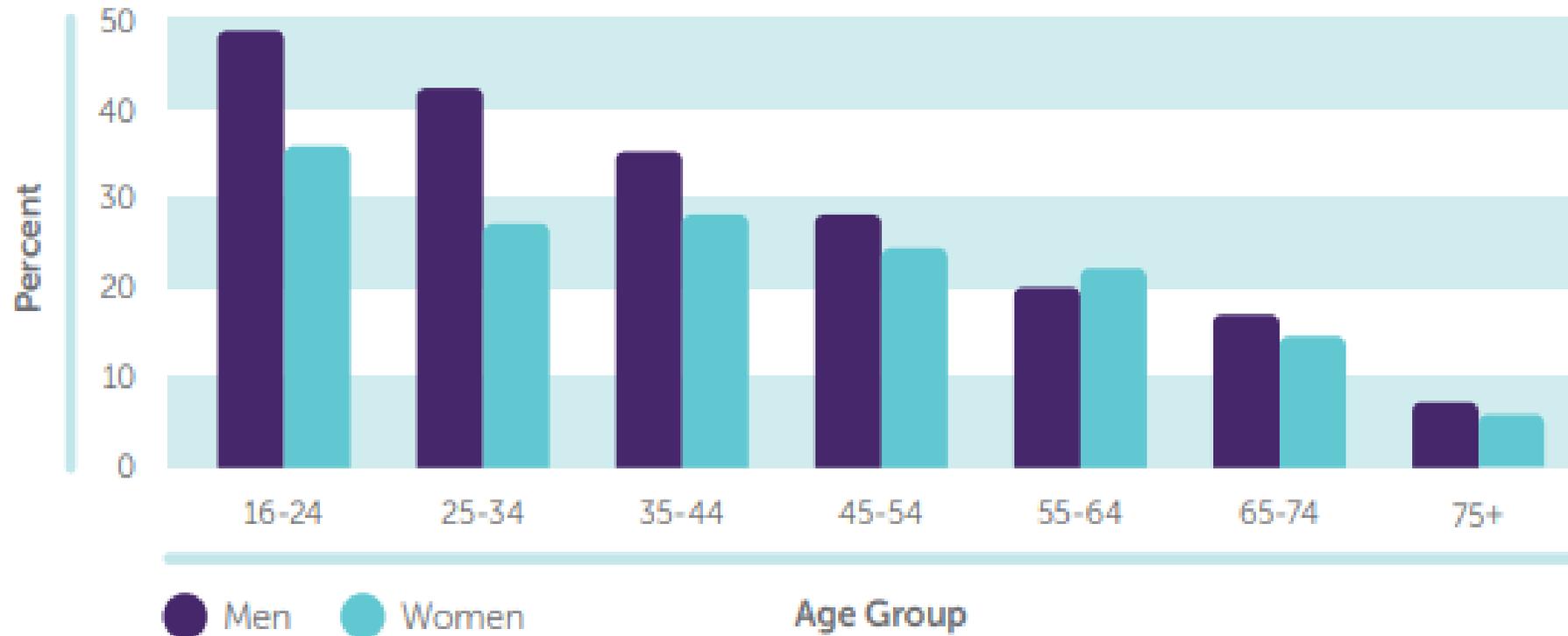
65-74

75+



Activity across the lifecycle

Proportion meeting both the aerobic and muscle-strengthening guidelines, by age and sex

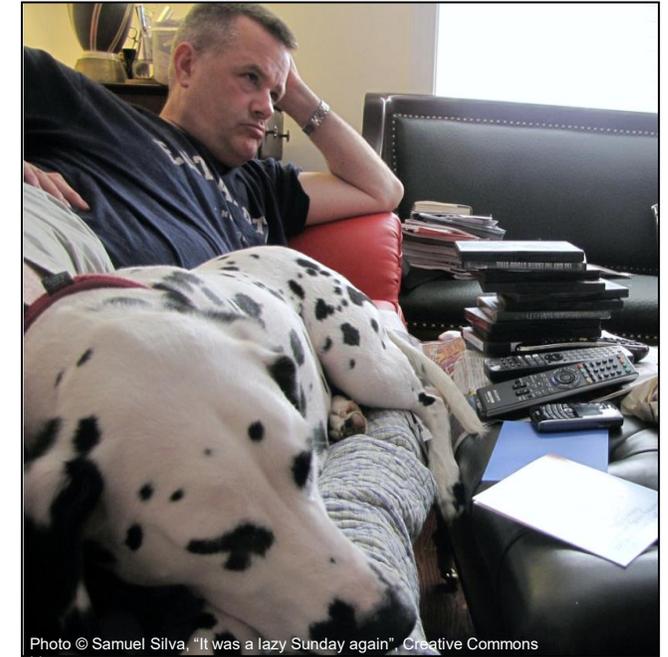


Sedentary behaviour

Sitting or lying awake is an **independent risk factor** for health by disrupting metabolism (muscle, lipid, glucose) and circulation

Many adults spend **>7 hours per day sedentary** (increasing with age or limiting illness)

Just two minutes walking has a physiological effect.



UK Chief Medical Officers' recommend:
Minimise time sedentary and where possible break up periods of inactivity.



In-patient settings

95% of hospital time spent in bed and associated with:

- De-conditioning / Risk of daily living disability
- Declines in muscle strength and cognition
- Higher risk of hospital re-admission

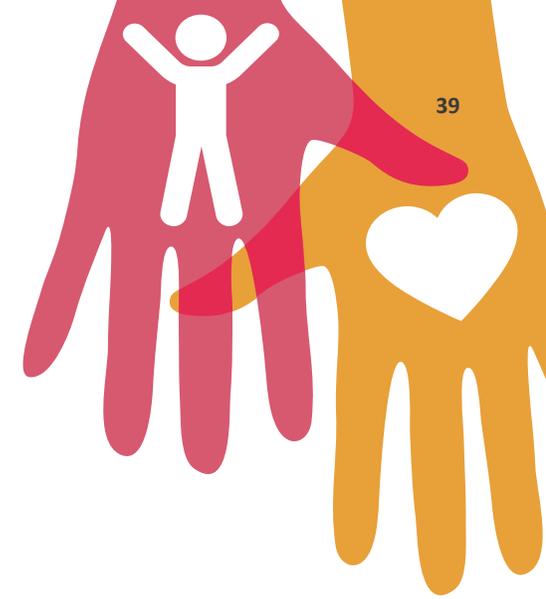
In-patient physical activity associated with:

- Decreased length of stay
- Improved fitness

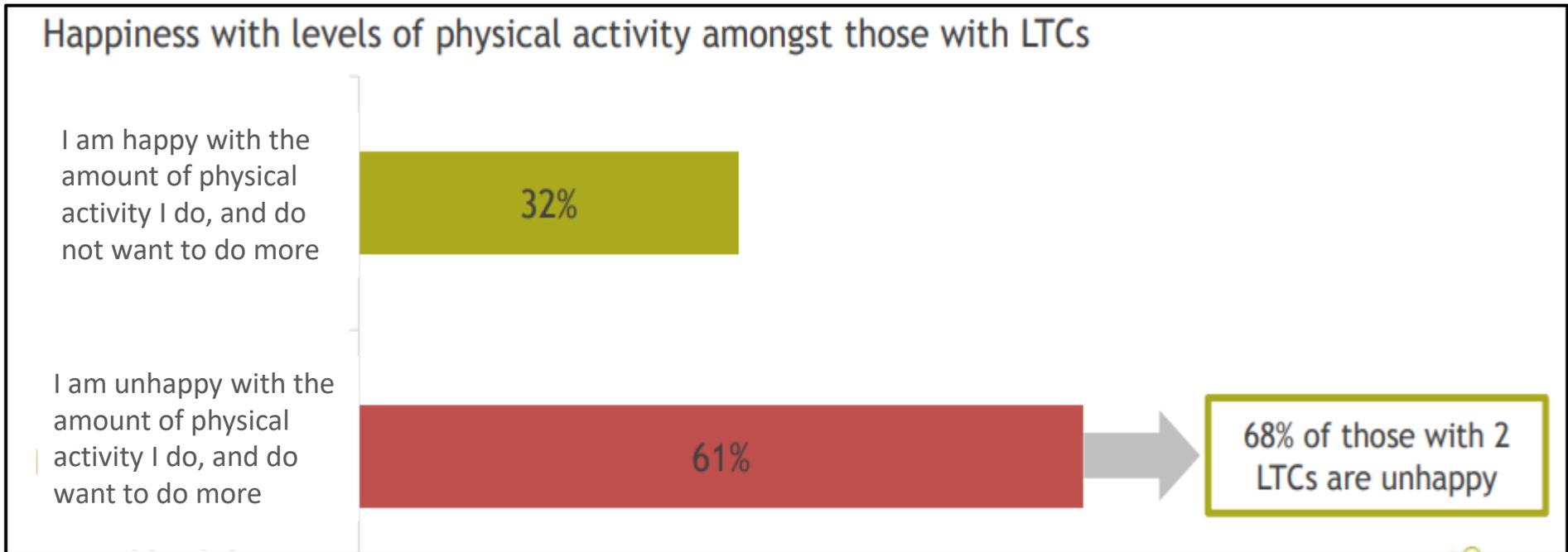


Plan for the Session

1. Setting the scene
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How much do people with a long-term health condition want to be active?



Richmond Group of Charities (2016)



What is the main barrier to physical activity for people with a long term condition?

Lack of motivation

Breathlessness before, during or after physical activity

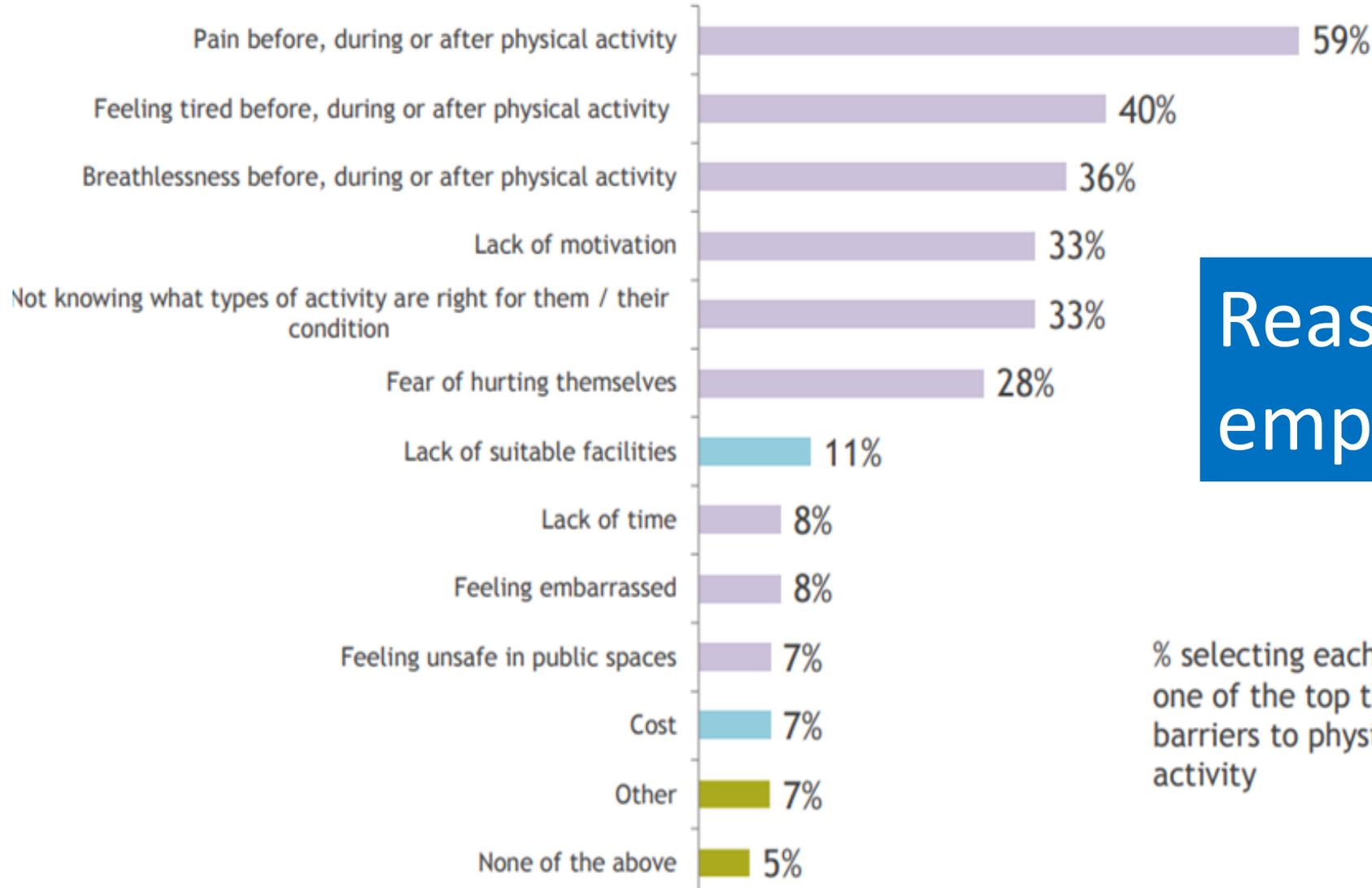
Pain before, during or after physical activity

Feeling embarrassed

Cost



What are the perceived barriers for people with LTCs



Reassure and empower!

% selecting each option as one of the top three barriers to physical activity



How many people need to receive brief advice on physical activity for one person to change from inactive to active?

5

12

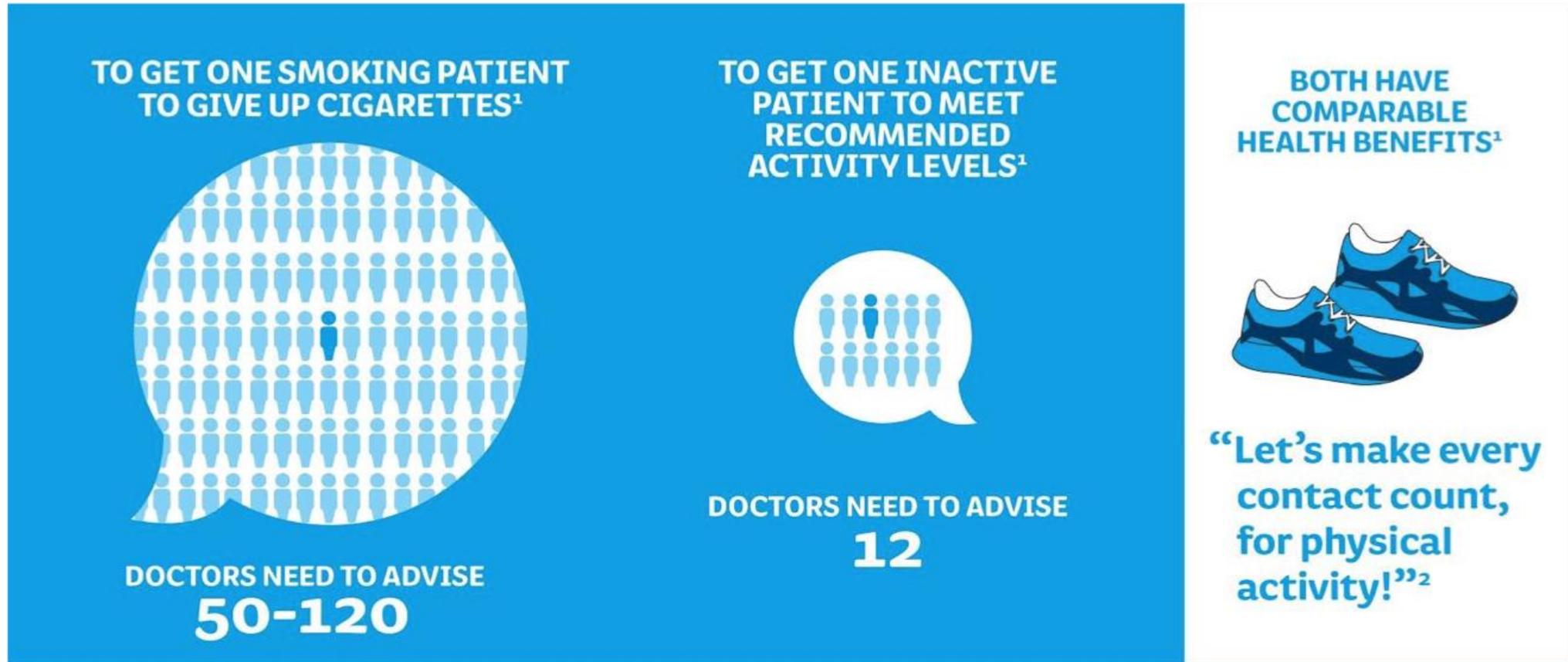
20

50

100



The power of healthcare professional advice



1. Thornton JS et al. Br J Sports Med 2016; doi:10.1136/bjsports-2016-096291.

2. Gates AB. Br J Sports Med 2016; 50(6): 322-3.



3 A's of brief advice

Ask

Identify activity levels

'One of the things we can do to stay and feel healthy is to be active. How physically active are you?'

'In the past week, how many days have you done a total of 30 minutes or more physical activity? Does this add up to 150 minutes?'

Assess

Discover your patients ideas and perspective

'What is your understanding of how physical activity can benefit you?'

'Are you interested in being more physically active?'

'How confident do you feel about increasing you physical activity level?'

Advise

Plan and set goals

'What goals would you like to set?'

'How will you monitor your progress?'

Consider specific suggestions applicable to your patients goals and situation.



Motivational Interviewing principles



Resist the urge to dictate the conversation

Understand the individual's reasons for change

Listen - the solutions lie within the individual

Empower the individual that they have ability to change



Clinical tips

Have physical activity conversations in consultations. ***Make every contact count!***

Very brief advice can be effective, especially related to long-term conditions.

‘Moderate intensity’ activity differs by individual – ***Make it achievable!***

Physical activity conversations **can be 1, 5 or more minutes**

An infographic with a blue background and three dark grey boxes. Each box contains a stopwatch icon with a number or symbol inside, and text below it. The first box has a '1' and says 'The 1 minute conversation'. The second box has a '5' and says 'The 5 minutes conversation'. The third box has a '+' and says 'The more minutes conversation'.

Duration	Description
1	The 1 minute conversation
5	The 5 minutes conversation
+	The more minutes conversation



Understanding risk

THE BIG CHANGE:

Most people
can exercise
without visiting
a doctor first.

Points to consider
before starting to
exercise or increasing
exercise intensity:

- 1 Current activity level
- 2 Signs/symptoms*
of certain diseases
- 3 Planned exercise intensity

EXERCISE
IS GREAT FOR
MOST
PEOPLE.



* Elevated level of risk for those symptomatic with cardiac, metabolic or renal disease

Local Opportunities



parkrun organise free, weekly, 5km timed runs around the world. They are open to everyone, free, and are safe and easy to take part in.

Walking for Health is England's largest network of health walks with over 360 active walking schemes



43 Active Partnerships across England, using the power of sport and physical activity to transform lives.



Key Resources

Guidance

[UK CMOs guidance and infographics](#)

[NICE guidance](#)

National public campaigns

[We are UndefeatABLE](#) 15 UK Health Charities

[Better Health](#) NHS

[Love Activity, Hate Exercise?](#) Chartered Society of Physiotherapy

[One You](#) / [Change4Life](#) / [Active 10](#) Public Health England

[Couch to 5K](#) NHS

Evidence-based resources

[E-learning for Health](#) Health Education England

[Moving Medicine](#) Prescribing movement

[All Our Health](#) Health Education England

Royal Colleges/Professional bodies

[RCGP Active Practice Charter](#)

[RCGP toolkit](#)

Moving Healthcare Professionals Info

[Sport England page on MHPP](#)



Spread the word

If you have enjoyed the session today, please tell your colleagues how to access their **FREE** online training course by following these easy steps:

1. Contact physicalactivity@phe.gov.uk and ask for your local Physical Activity Clinical Champion contact
2. Arrange a suitable time
3. Ensure your session will meet the minimum criteria
 - At least 1 hour in length
 - At least 12 - 15 healthcare professionals / trainees are able to attend





QUESTIONS? (use the chat)

- What opportunities do YOU have to promote PA in your own clinical setting?



Training certificate

- To access your training certificate, follow this link:
tinyurl.com/y6sbnl2l



Share good practice

- Keep in touch and let us know how this training has helped you and your patients





Public Health England

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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About Sport England

Sport England is a public body and invests up to £300 million National Lottery and government money each year in projects and programmes that help people get active and play sport.

It wants everyone in England, regardless of age, background, or level of ability, to feel able to engage in sport and physical activity. That's why a lot of its work is specifically focused on helping people who do no, or very little, physical activity and groups who are typically less active - like women, disabled people and people on lower incomes.

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With thanks to the National Centre for Sport and Exercise Medicine