

A novel approach in educating healthcare professionals and users on the benefits of exercise in children and young people - Moving Medicine UK

OXFORD
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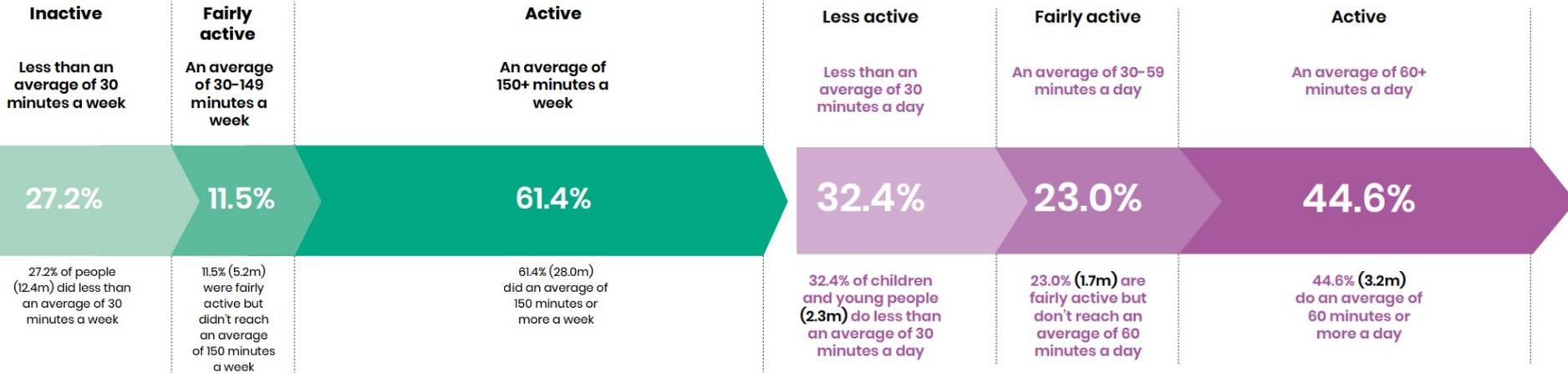


Physical activity levels in the UK



Adults

Children



(Sport England, 2022)



Increased risk of long-term health conditions and non-communicable diseases.



Physical inactivity is associated with 1 in 6 deaths in the UK



Physical inactivity is estimated to cost the UK £7.4 billion annually (including £0.9 billion to the NHS alone).

(UK Gov, 2022)

Physical activity levels in the UK

- Typically patients with a chronic disease undertake less physical activity than healthy individuals (Barker et al., 2019)
- Higher levels of post-diagnosis physical activity are associated with lower mortality rates in many non-communicable diseases (e.g. cancer, type 2 diabetes, ischemic heart disease, and COPD patients) (Geidl et al., 2020)
- The literature across adult and childhood long-term conditions points overwhelmingly to the benefit of physical activity over risk.

Healthcare settings consequently provide a unique opportunity to increase awareness, support and encourage greater engagement in physical activity amongst patients and families.

The role of healthcare professionals

Healthcare professionals are central to supporting patients, especially those with non-communicable diseases to change their physical activity behaviour



At present there is a lack of physical activity promotion and training at UK medical schools



Students received 4.2 hours of physical activity focused teaching time, within the 5 year undergraduate curricula (Weiler et al., 2012)



Pugh et al. (2020) reported that while 59% of medical students agreed that advising patients about physical activity is an important part of a doctor's job only 7% reported confidence in advising patients about physical activity



High inactivity levels

Promoting physical activity in clinical populations

Educational material for patients

Rehabilitation groups

Signposting

Active support groups

Online programmes/
support groups

Education for healthcare professionals

Digital health technologies

Exercise referral schemes

Brief intervention

Get strong to fight childhood cancer

An exercise intervention for children and adolescents undergoing anti-cancer treatment

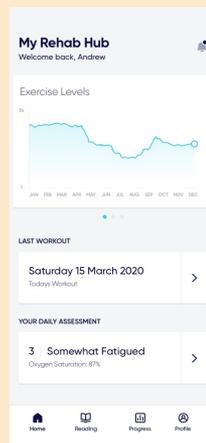
- Supplement in-hospital provisions
- Support patients to be more active at home
- Pixformance & AR app



Handheld Health

An exercise app with an inbuilt algorithm to support individuals with COPD

- Support patients to be more active at home
- Give patients autonomy over their own fitness with daily progress tracking



Care Project

A cancer rehabilitation app using AR technology through the use of Google HoloLens

- Support patients to be more active at home





Moving Medicine

An online resource to help healthcare professionals integrate physical activity conversations into routine clinical care



Prescribing Movement

Our award-winning, step-by-step guide to physical activity conversations in clinical practice.



Active Hospitals

The ultimate toolkit to help you change the physical activity culture within your hospital.



Evidence

Our resources are based on evidence, and you can read and find out more in this section.



Active Conversations

Find out more about our online physical activity training course, which is accredited with 16 CPD points from the FSEM (UK).

1

Pick an age group

There are resources for Adults, Young people and Children so select the appropriate age in the finder

[Visit resource finder](#)

2

Pick a condition

Select the condition relevant to the person you're talking to

3

Select available time

You can help make someone more likely to become and stay active by choosing the right words whether you have 1, 5 or more minutes available

4

Prescribe movement

Follow the consultation you've selected to find key clinical evidence presented in a behavioural change framework

5

Share further information

Signpost patient information, activity and support organisation finders for further resources

[Visit patient information finder](#)

A
D
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T

Find the right consultation

1. Age Adult Child Young Person

2. Condition
- | | | |
|--|--|---|
| <input type="radio"/> Amputee | <input checked="" type="radio"/> Cancer | <input type="radio"/> COPD |
| <input type="radio"/> Dementia | <input type="radio"/> Depression | <input type="radio"/> Falls and Frailty |
| <input type="radio"/> Hospital Associated Deconditioning | <input type="radio"/> Inflammatory Rheumatic Disease | <input type="radio"/> Ischaemic Heart Disease |
| <input type="radio"/> MSK Pain | <input type="radio"/> Parkinson's | <input type="radio"/> Perioperative care |
| <input type="radio"/> Postnatal | <input type="radio"/> Pregnancy | <input type="radio"/> Primary Prevention |
| <input type="radio"/> Stroke | <input type="radio"/> Type 2 Diabetes | |

In this section

- Find the right consultation
- For adults
- For children & young people
- How to use these resources
- Find support & local activities
- Evidence review
- Patient info finder



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Find the right consultation

1. Age Adult Child Young Person

2. Condition
- | | | |
|--------------------------------|---|--------------------------------|
| <input type="radio"/> Asthma | <input checked="" type="radio"/> Cancer | <input type="radio"/> Diabetes |
| <input type="radio"/> Epilepsy | <input type="radio"/> Mental Health | <input type="radio"/> Obesity |

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Cancer

We've squeezed all the important information into our step-by-step guides to help you have good quality conversations with children and their parents about physical activity. Just pick how much time you've got, we've done the rest.

1

The 1 minute conversation

5

The 5 minute conversation

+

The more minute conversation



- The UK has the shortest GP consultations in Europe, with patients spending an average of 9 minutes with their doctor (Irving et al., 2017).

4

Prescribe movement

Follow the consultation you've selected to find key clinical evidence presented in a behavioural change framework

Open the conversation



Today I was hoping we could spend a few minutes talking about how becoming active can help with your health and wellbeing, and get your thoughts about physical activity. Would that be OK with you?



Explore how they think activity may help



How do you think moving more might help you?



Arrange follow up



Would you like to come back and talk to someone a little more about this and tell us about all the fun things you have been getting up to?



Patient resources



Useful information about Cancer and physical activity



Remember

Exercise is safe for you during and after your cancer treatment.

How will it help me?

- It will help you become fit
- You'll get to spend time with friends
- It will make school work easier
- It will make you happier

Things that might make it harder

Doing stuff you don't enjoy

Keep trying different things 'til you find a form of physical activity, exercise or sport that's right for you.



Tiredness

You will have good and bad days - try to do a little more when you have good days



Doing too much too quickly

So start slowly and build up to more.



Things you need to talk to your doctor about

Central lines check with your team whether it's ok to swim or do contact sports.

Low blood counts Anaemia makes it harder to be active and low platelets increase your risk of bruising and bleeding. You will also be at increased risk of infection and may need to avoid crowded places.

Bone tumours If your cancer is affecting your bones, you'll need to get special advice from your doctors



Scan this code to read this

Daily checklist

Try to make sure you do at least 2 of these every day:

- Get outside for at least an hour
- Take the long route to somewhere
- Get out of breath at least once
- Sit upstairs on the bus
- Dance to your favourite track

Drink more

Make sure you keep well hydrated during activity



Don't worry if it hurts a bit

Muscle and joint pain are totally normal when you're getting fit.



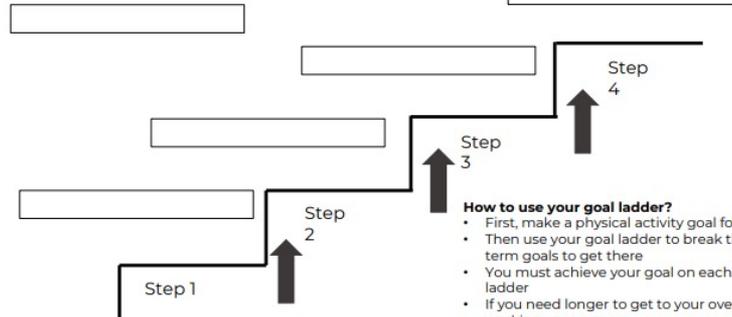
Sleep better

Physical activity improves your cancer-related tiredness and helps you sleep better.



Goal Ladder

What is your physical activity goal in 1-2 months time?



How to use your goal ladder?

- First, make a physical activity goal for 1-2 months time at the top
- Then use your goal ladder to break this down into smaller short-term goals to get there
- You must achieve your goal on each step to be able to go up the ladder
- If you need longer to get to your overall goal - that's okay - keep working your way up

Patient Type

Adult

Child

Young Person

Condition

Asthma

Cancer

Diabetes

Epilepsy

Mental Health

Obesity

Type

Being active with a disability

Conservation and volunteering

Cycling

Dance and fitness

Disadvantaged communities

Family

For schools

Home exercise

Jogging

Sport

Support

Activity / Organisation



Access Sport

[Visit](#)



British Paralympic Association

[Visit](#)



CLIC Sargent

[Visit](#)



Cancer Fit

[Visit](#)



Children's Cancer and Leukaemia Group

[Visit](#)



Cyclists Fighting Cancer

[Visit](#)



Ellen MacArthur Cancer Trust

[Visit](#)



Move Against Cancer

[Visit](#)

5

Share further information

Signpost patient information, activity and support organisation finders for further resources

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Acknowledgments



Moving Medicine



Faculty of Sport
and Exercise
Medicine UK

Moving Medicine is an initiative by the Faculty of Sport and Exercise Medicine.

- Moving Medicine has various strategic, academic and international partners, all of which can be found at www.movingmedicine.ac.uk/about-us/partners/
- Over 800 individuals have contributed to the Moving Medicine resources. More details can be found at www.movingmedicine.ac.uk/about-us/contributors/



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Oxford Brookes is one of the consortium partners of the project. More info can be found at www.fortee-project.eu/



**HandHeld
Health**

HandHeld Health is a start-up company from Oxford Brookes University. More information can be found at www.handheld-health.com/

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For more information please contact me via email hmarriott@brookes.ac.uk

References

- Barker, J., Smith Byrne, K., Doherty, A., Foster, C., Rahimi, K., Ramakrishnan, R., Woodward, M. and Dwyer, T., 2019. Physical activity of UK adults with chronic disease: cross-sectional analysis of accelerometer-measured physical activity in 96 706 UK Biobank participants. *International Journal of Epidemiology*.
- Geidl, W., Schlesinger, S., Mino, E., Miranda, L. and Pfeifer, K., 2020. Dose–response relationship between physical activity and mortality in adults with noncommunicable diseases: a systematic review and meta-analysis of prospective observational studies. *International Journal of Behavioral Nutrition and Physical Activity*, 17(1).
- GOV.UK. 2022. *Physical activity: applying All Our Health*. [online] Available at: <<https://www.gov.uk/government/publications/physical-activity-applying-all-our-health/physical-activity-applying-all-our-health> [Accessed 7 September 2022].
- Irving, G., Neves, A., Dambha-Miller, H., Oishi, A., Tagashira, H., Verho, A. and Holden, J., 2017. International variations in primary care physician consultation time: a systematic review of 67 countries. *BMJ Open*, 7(10), p.e017902.
- Public Health England & Sport England. *Embedding physical activity in the undergraduate curriculum. Moving healthcare professionals programme*. Authors on behalf of Exercise Gates AB & Ritchie IK, 2018.
- Pugh, G., O'Halloran, P., Blakey, L., Leaver, H. and Angioi, M., 2020. Integrating physical activity promotion into UK medical school curricula: testing the feasibility of an educational tool developed by the Faculty of Sports and Exercise Medicine. *BMJ Open Sport & Exercise Medicine*, 6(1)
- Weiler, R., Chew, S., Coombs, N., Hamer, M. and Stamatakis, E., 2012. Physical activity education in the undergraduate curricula of all UK medical schools. Are tomorrow's doctors equipped to follow clinical guidelines?. *British Journal of Sports Medicine*, 46(14), pp.1024-1026.