

Lets get moving!!!





Supporting physical activity and sedentary behaviour change after stroke



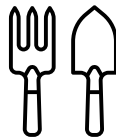
Dr. Sarah Moore
March 2023

@PARASroke
@SarahMoorePhys

Physical Activity

“...Any bodily movement produced by skeletal muscle that results in energy expenditure”
Caspersen *et al.*, (1984)

EVERYDAY ACTIVITY



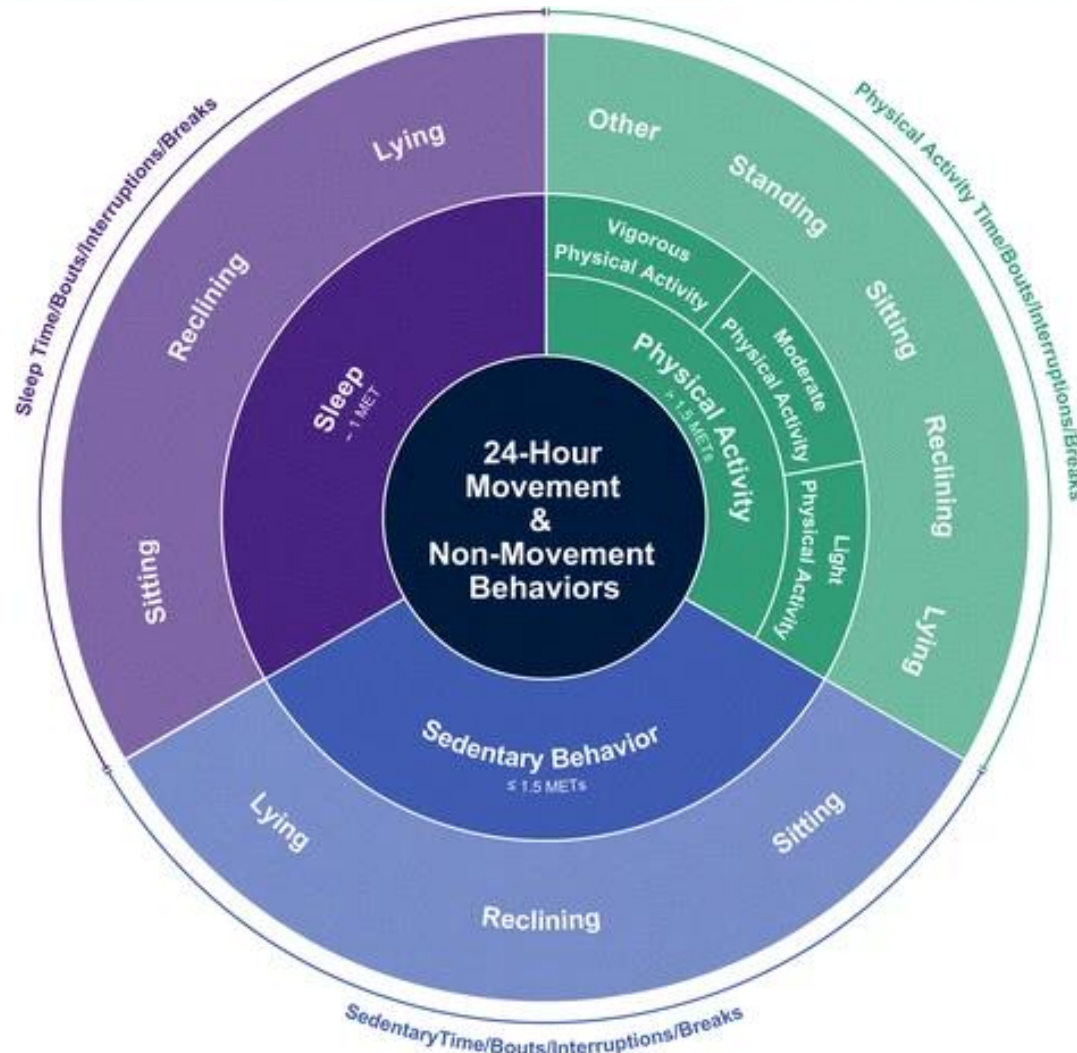
ACTIVE RECREATION



SPORT



Sedentary behaviour



“...waking behaviour characterised energy expenditure ≤ 1.5 metabolic equivalents (METs), while in a sitting, reclining or lying posture” Tremblay et al., (2017)

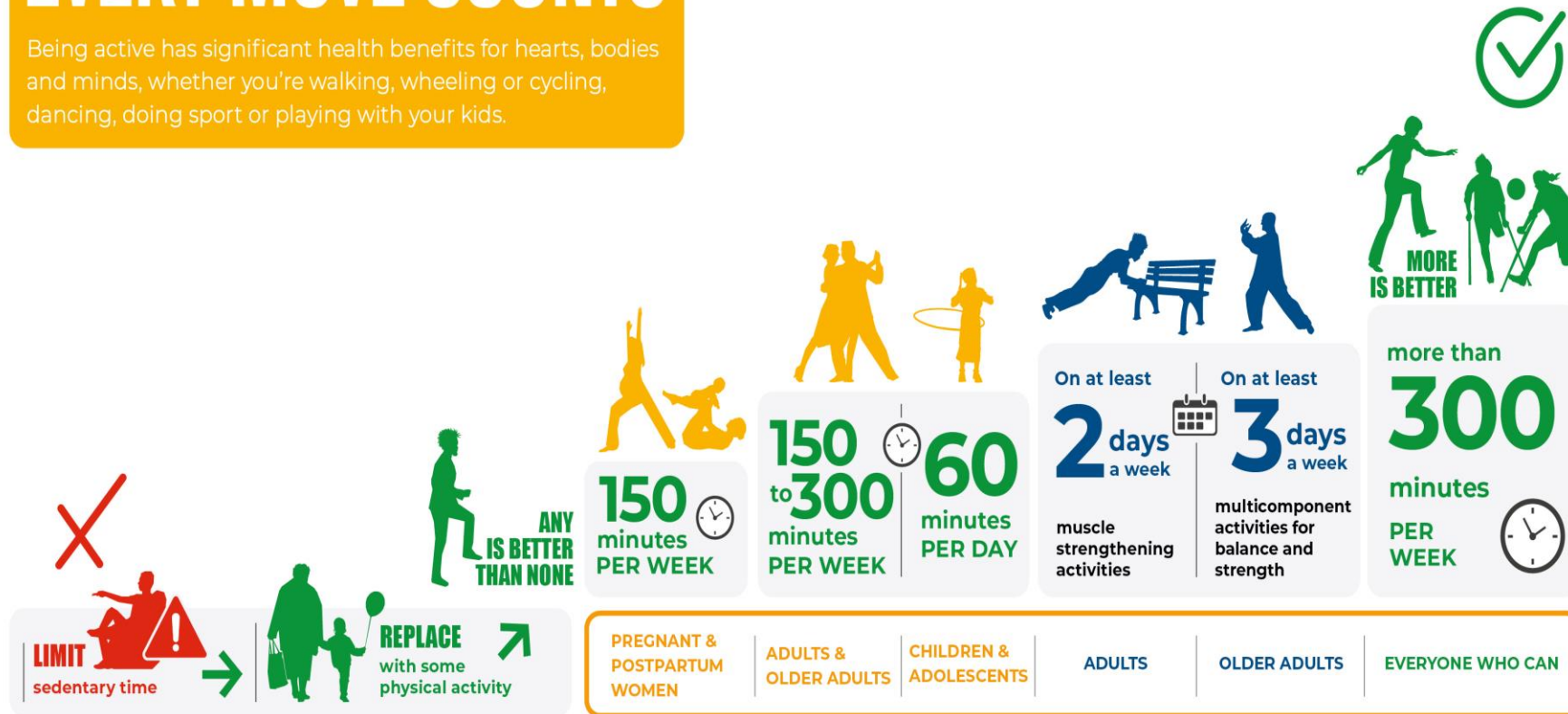
Tremblay *et al* (2017) IJBNPA

What are the health benefits of physical activity?



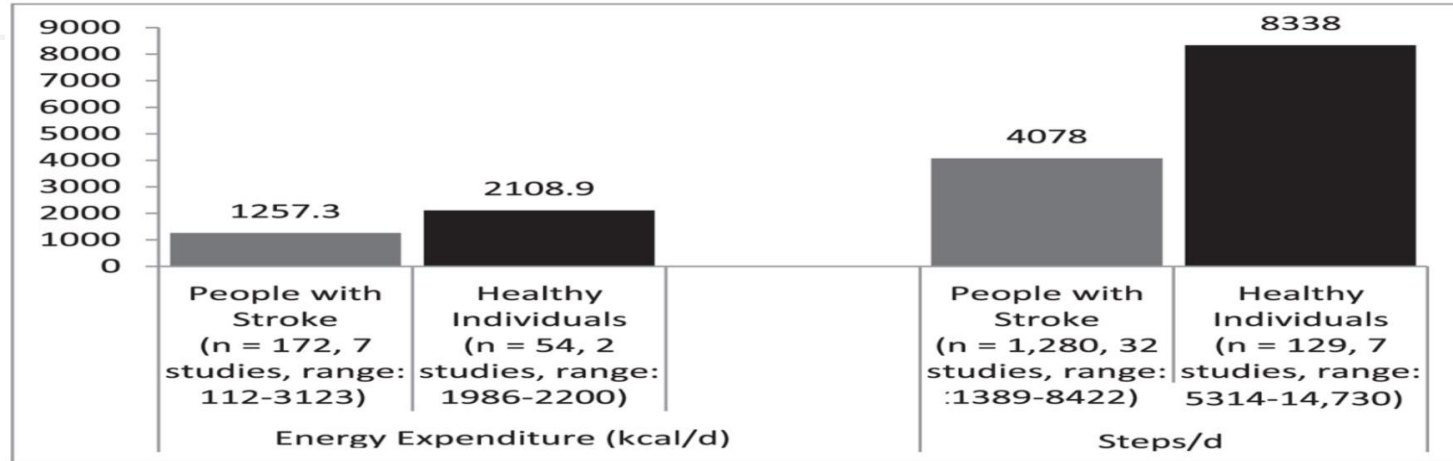
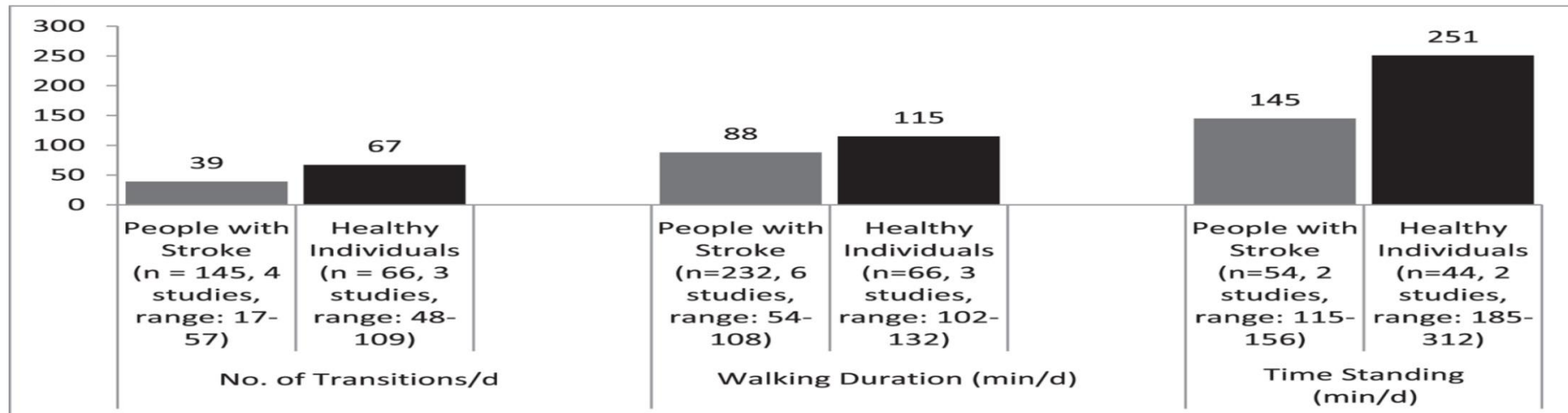
EVERY MOVE COUNTS

Being active has significant health benefits for hearts, bodies and minds, whether you're walking, wheeling or cycling, dancing, doing sport or playing with your kids.



WHO guidelines on physical activity and sedentary behaviour (2020).
 For more information, visit: www.who.int/health-topics/physical-activity



(A)**(B)**

From: How Physically Active Are People Following Stroke? Systematic Review and Quantitative Synthesis Fini (2017)

Exercise after stroke

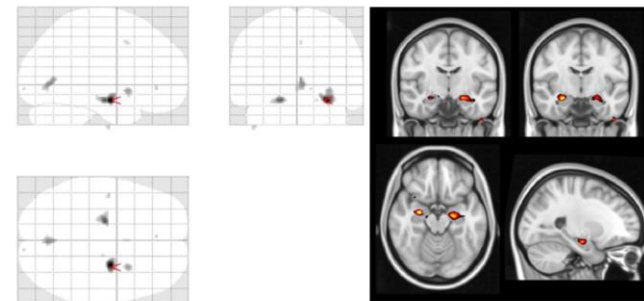


Cochrane Database of Systematic Reviews

Physical fitness training for stroke patients (Review)

Saunders DH, Sanderson M, Hayes S, Johnson L, Kramer S, Carter DD, Jarvis H, Brazzelli M, Mead GE

- Exercise is safe
- Improves fitness, balance and speed and walking capacity



Saunders DH, Sanderson M, Hayes S, Johnson L, Kramer S, Carter DD, Jarvis H, Brazzelli M, Mead GE.
Physical fitness training for stroke patients.
Cochrane Database of Systematic Reviews 2020, Issue 3. Art. No.: CD003316.
DOI: [10.1002/14651858.CD003316.pub7](https://doi.org/10.1002/14651858.CD003316.pub7).

Moore, S. A. (2014) Neural Rehab and Neural Repair

Barriers to exercise after stroke

Livewell FaST
Fitness after Stroke

FaST
FITNESS AFTER STROKE MANUAL
JANUARY 2013

The Fitness after Stroke programme is an adaptation of the Fit and Mobility Exercise Programme developed by James Eng 2P programme was developed based on research conducted Sarah Moore 2012.

Fitness after Stroke
10 week exercise programme
Designed for people with stroke
Held at Walker Activity Dome/Centre for Sport, Newcastle upon Tyne
Run by physiotherapists and fitness instructors

Livewell
The Newcastle upon Tyne Hospitals NHS Foundation Trust

Newcastle Community Stroke Team
Walkergate Health Centre
45 Seagrip Road
Newcastle upon Tyne
Phone: 0191 2826310
Email: shella.mckeown2@nuth.nhs.uk

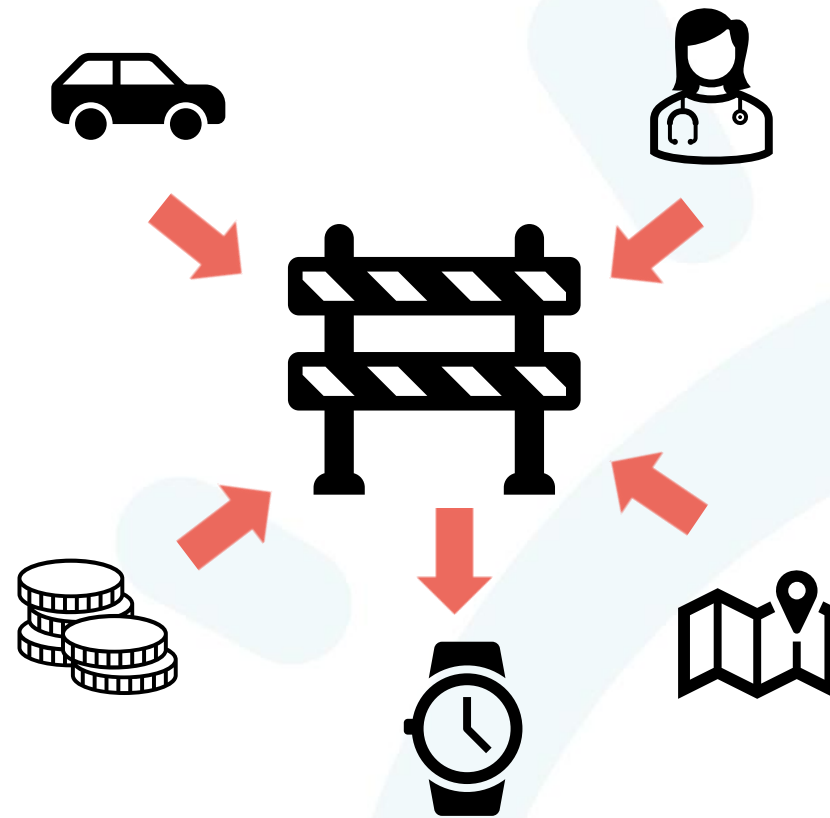
FaST
Fitness after Stroke

Exercise programme for people with stroke
Newcastle Community Stroke Team

Berg Balance Score (BBS)

| Time Point | Berg Balance Score (BBS) |
|------------|--------------------------|
| Baseline | ~45 |
| 10 weeks | ~55 (**) |

700 patients per year
@60 referrals
@36 completed



Pathway stroke physical activity

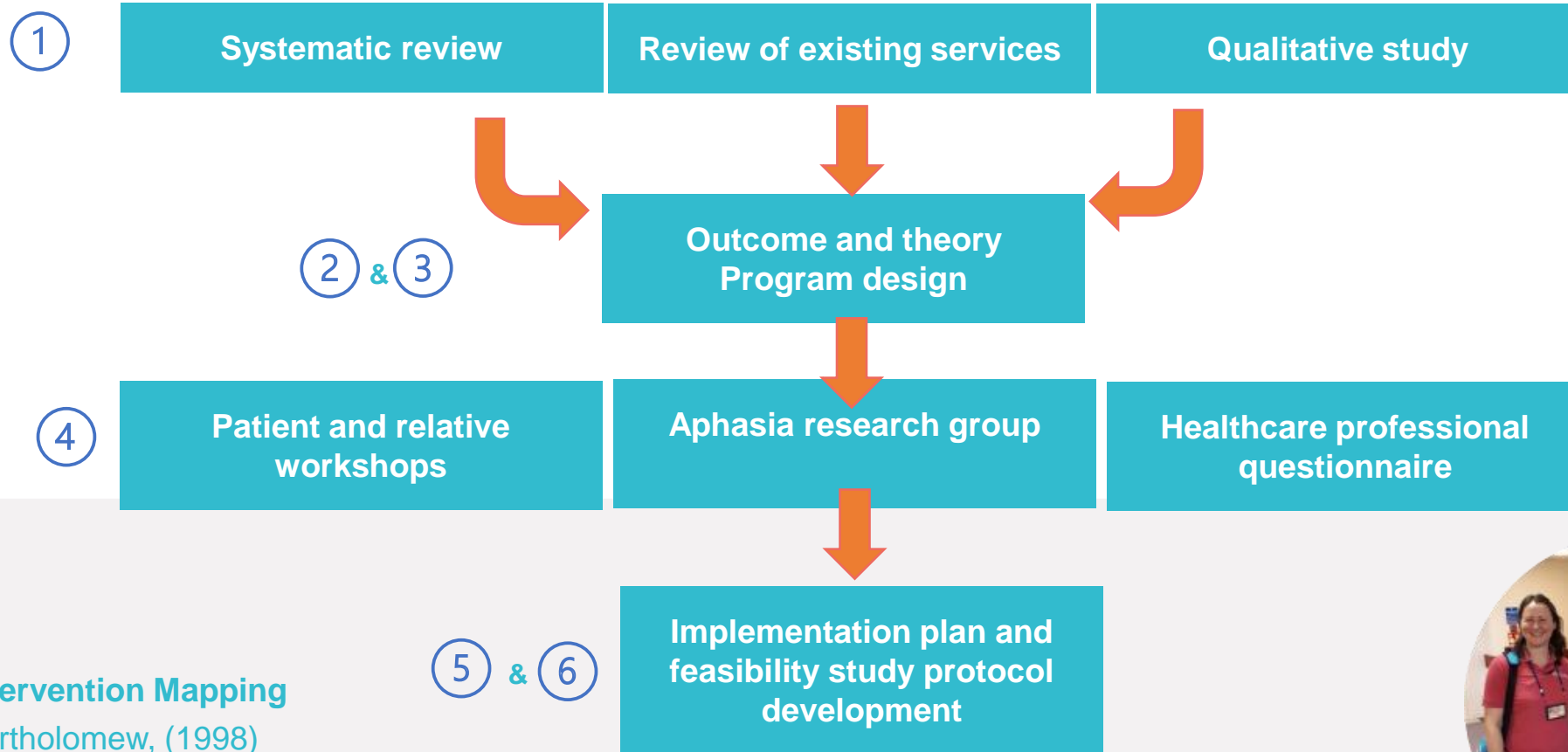
Current pathway of stroke physical activity support



Future pathway of stroke physical activity support



Intervention development

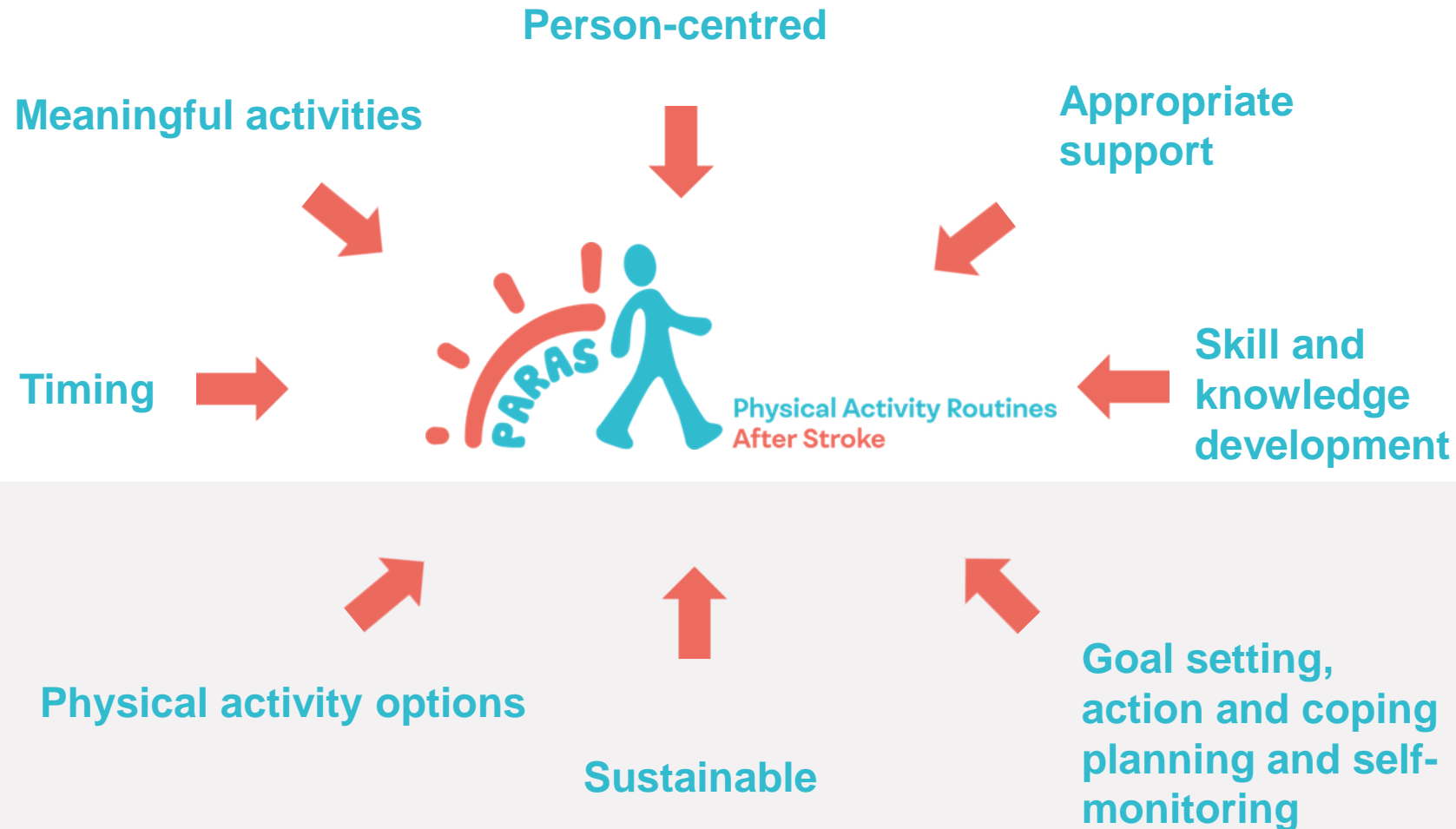


Intervention Mapping
Bartholomew, (1998)



Internal use

Physical Activity Routines After Stroke (PARAS)



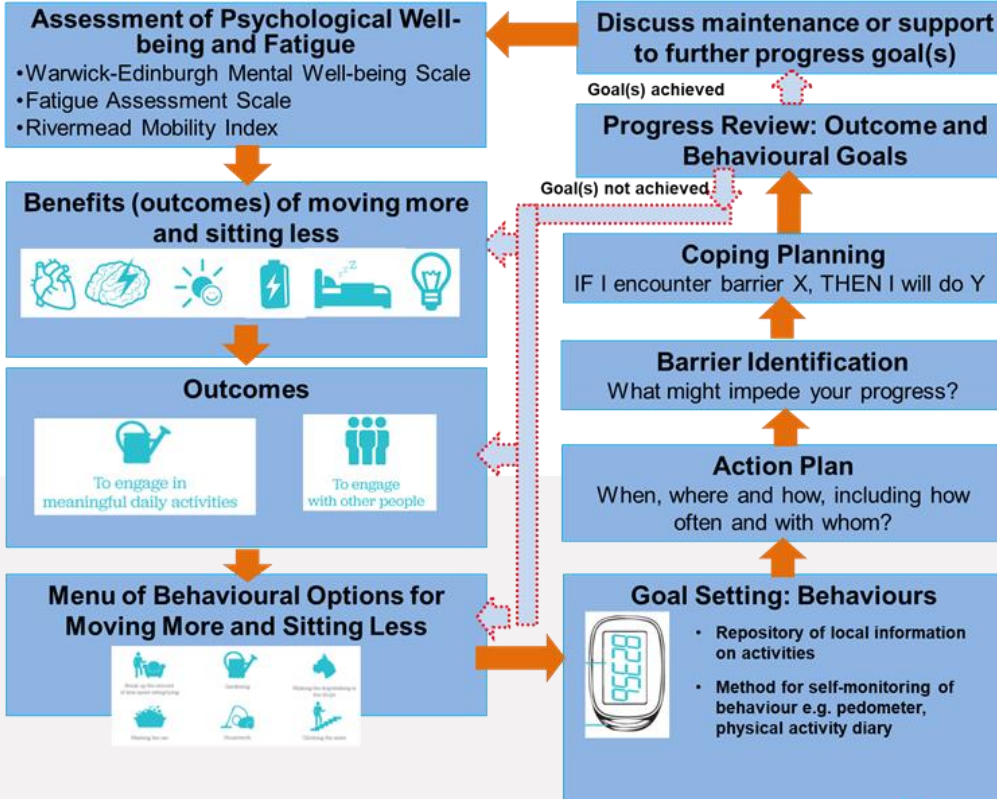
Physical Activity Routines After Stroke (PARAS)

Internal Use

Healthcare professional component
Target: HCP consultation behaviour



Stroke survivor component
Target: Stroke survivor physical activity and sedentary behaviour



OPEN QUESTIONS-AFFIRMATIONS-REFLECTIONS-SUMMARISING

Tools used to aid delivery



Results



- 11 Healthcare professionals, 19 stroke survivors @13 months post-stroke
- 17/19 completed intervention



- 108 mins (range 39-238)



- 50% selected walking. None on sedentary behaviour



- 33% Pedometer and diary



- 17/18 social support identified



- 100% face to face



- 82% (14/17) achieved goal



Feasibility and Acceptability

Recruitment

'...out of all of the patients that could be potentials, it would be the higher-level ones that I'd pick every time to engage with something like this'

PARAS is acceptable but modifications are required

'...I've had a load of trouble with pedometers, I've got one on my phone and it's not very accurate. So that's why I count.'

PARAS increased physical activity, mood and motivation and aided understanding of recovery

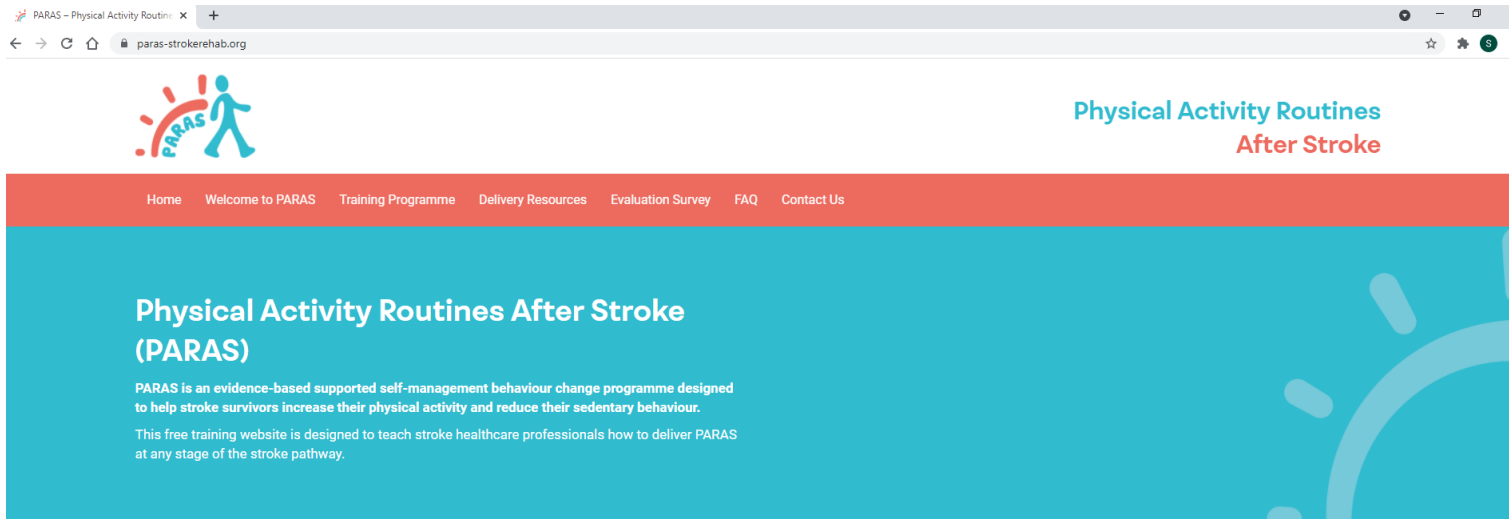
'...it's given me an incentive to do it and an ability to measure how you're getting on, I think that's important.'

Healthcare professional training was acceptable

'...I think we always think we should be doing something active. Sometimes it's identifying what's right.'



PARAS healthcare professional training website



<https://paras-strokerehab.org/>



@PARAStroke



Welcome to PARAS



Training Programme



Delivery Resources



FAQs



Evaluation Survey

Stroke Survivor Resources



Invite

[Click here to download](#)



Workbook

[Click here to download](#)



Physical Activity Diaries

[Click here to download](#)



Goal Summary Sheet

[Click here to download](#)





Acknowledgements

Patients & carers • Community stroke teams •
Prof Leah Avery • Prof Darren Flynn • Prof Michael Trenell • Prof Lynn Rochester • Prof Helen Rodgers •
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