



## Physical activity interventions and stroke. What do we know about terminology, mode, measurement, and the application across the stroke pathway?

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# Physical activity interventions and stroke. What do we know and not know?

## Introduction

Stroke physical activity (PA) interventions are not consistently implemented across the entire stroke pathway of care. Most published studies are being carried out as a subset of physical activity; for a specific purpose e.g., improving strength rather than a change in long term lifestyle. The lack of implementation and variation in both reporting of and the terminology used in this evidence warranted further investigation into the content of physical activity interventions.

## Objectives

A scoping review mapped out the existing systematic review evidence in relation to six objectives.

1. Describe the focus of the reviews (aims, objectives, research questions, physical activity terminology used and theoretical description of the intervention)
2. Identify the overall level of reporting
3. Describe the actor (provider of intervention)
4. Describe the action (intervention including definitions), action targets (population demographics) and dose (physical activity dimensions and domains) across the stroke pathway of care (setting)
5. Identify physical activity intervention outcome measures (how these interventions were evaluated)
6. Identify key emerging themes, gaps and recommendations informing future research and clinical implementation

## Methods

A scoping review was conducted to identify and describe available systematic review evidence on physical activity in the adult stroke population. Retrieval was limited to systematic reviews; within those reviews there were no restrictions on primary study design. Included reviews had been determined to be within the field of physical activity and included adults 18 years or older with a diagnosis of stroke. Language was limited to English. Reviews were not excluded based on population demographics such as severity of stroke, physical or cognitive impairment level, gender, variation of time since onset of stroke and settings.

## Results

Participants	<ul style="list-style-type: none"><li>• 33 of 36 reviews that reported ambulatory status were based on ambulant participants</li><li>• The average participant was 64 years old, marginally male (ratio 58:42), approximately 22 months post stroke, without cognitive impairment and more likely to be classified as chronic in the stroke pathway of care.</li></ul>
Intervention content	<ul style="list-style-type: none"><li>• Interventions are largely based on subsets of physical activity (n=31) where a measurement of physical activity is not consistent. In addition, a description of theories underpinning the interventions was lacking. A wide range of modes of physical activity (n =27) was described within reviews</li></ul>
Dimension of PA	<ul style="list-style-type: none"><li>• Frequency was the most reported dimension of physical activity (n = 42), time/ duration (n =37). The intensity was the least reported dimension of physical activity (n =15).</li></ul>

There is a lack of reporting and clarity in defining physical activity (n=11) and intervention dimensions and domains across the stroke pathway (including varying levels of physical capacities) and population demographics.

## Conclusions

Better reporting of physical activity interventions is required to improve implementation. Research should include physical activity outcome measures across the stroke pathway. Determining which physical activity modes and parameters of each intervention would be useful in determining the optimal intervention for stroke survivors with different physical activity capacity levels.

## References/Authors

Claire McFeeters, Katy Pedlow, Niamh Kennedy, Heather Colquhoun & Suzanne McDonough. A summary of the body of knowledge on physical activity for people following stroke: a scoping review. Phys Therapy reviews. 2022:

<https://www.tandfonline.com/doi/abs/10.1080/10833196.2022.2102748>