

## Background

As physiotherapists we want to encourage people to be as active and independent as possible, for as long as possible. An ever increasing part of our role is supporting self-management in individuals with a long term condition (**Improving the Health and Wellbeing of People with Long Term Conditions in Scotland: A National Action Plan**). This requires us to help individuals find an activity that they can enjoy taking part in, as well as an activity that is suitable for their level of mobility, fitness and health. Being part of a group activity can provide the added benefits of social interaction and peer support. We have found that adults with neurological conditions can face significant barriers when trying to access leisure activities because of factors such as reduced mobility, reduced cognitive ability and fatigue. As a result "adults with neurological conditions have low levels of participation in physical activities and have high rates of secondary complications from inactivity" as well as "perceiving themselves as isolated" (Elsworth et al 2010).

To address this need we set up a group for adults with neurological conditions in our area. It was hoped that a period of input, subsequent improvements and support to work on their goal(s) might encourage each individual to continue exercising in the longer term. Information around symptom management and health promotion was also available to further promote self-management.

## Results

Figure 1 shows that the 9 individuals completing the sessions had an improved Berg Balance score

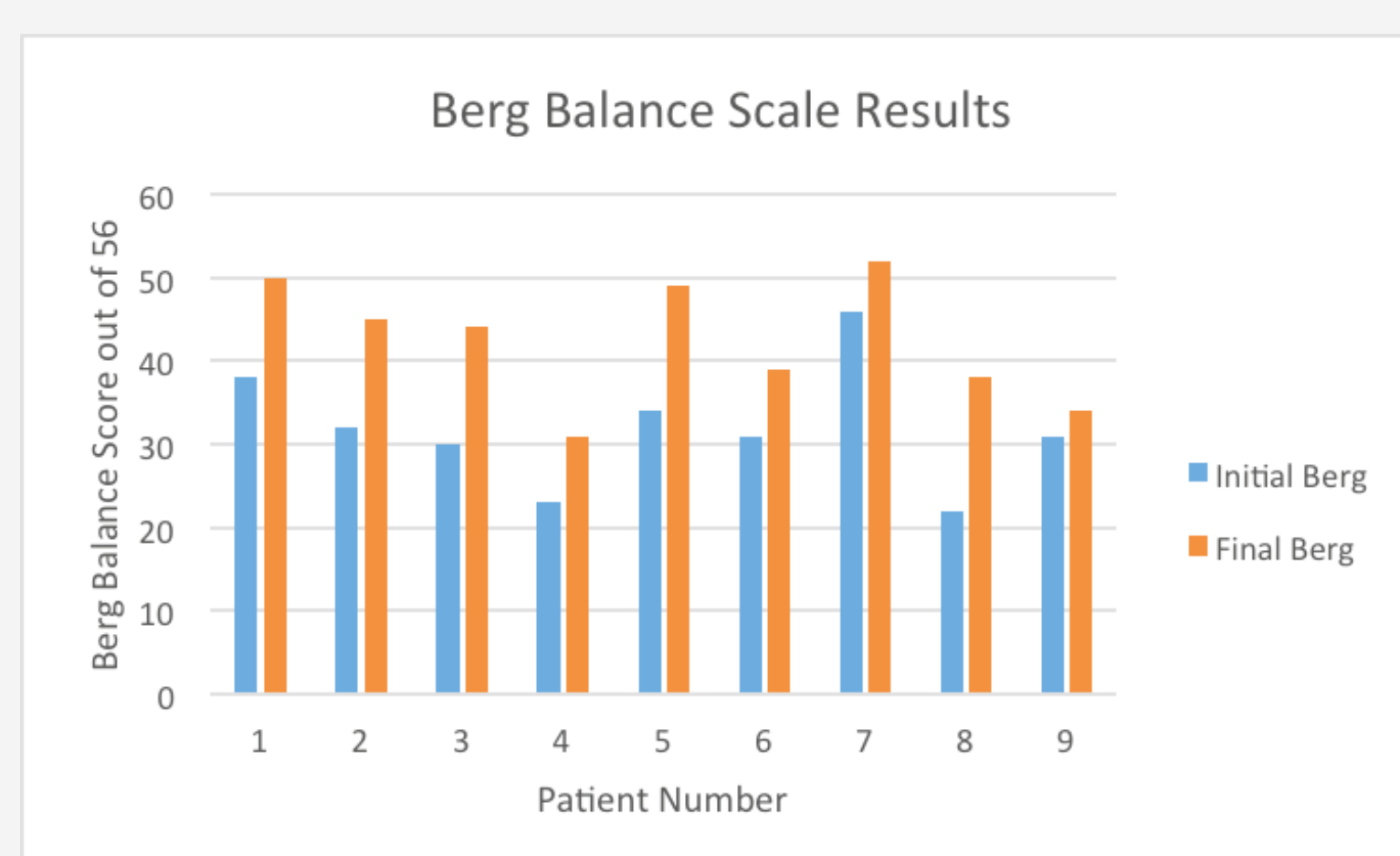


Figure 1

Figure 2 shows that 7 of the participants had a faster final 6m walk. It also shows that 1 participant covered the 6m more slowly but this related to the fact that she had progressed from using 2 crutches to walking without an aid. The 9th participant maintained his walking speed.

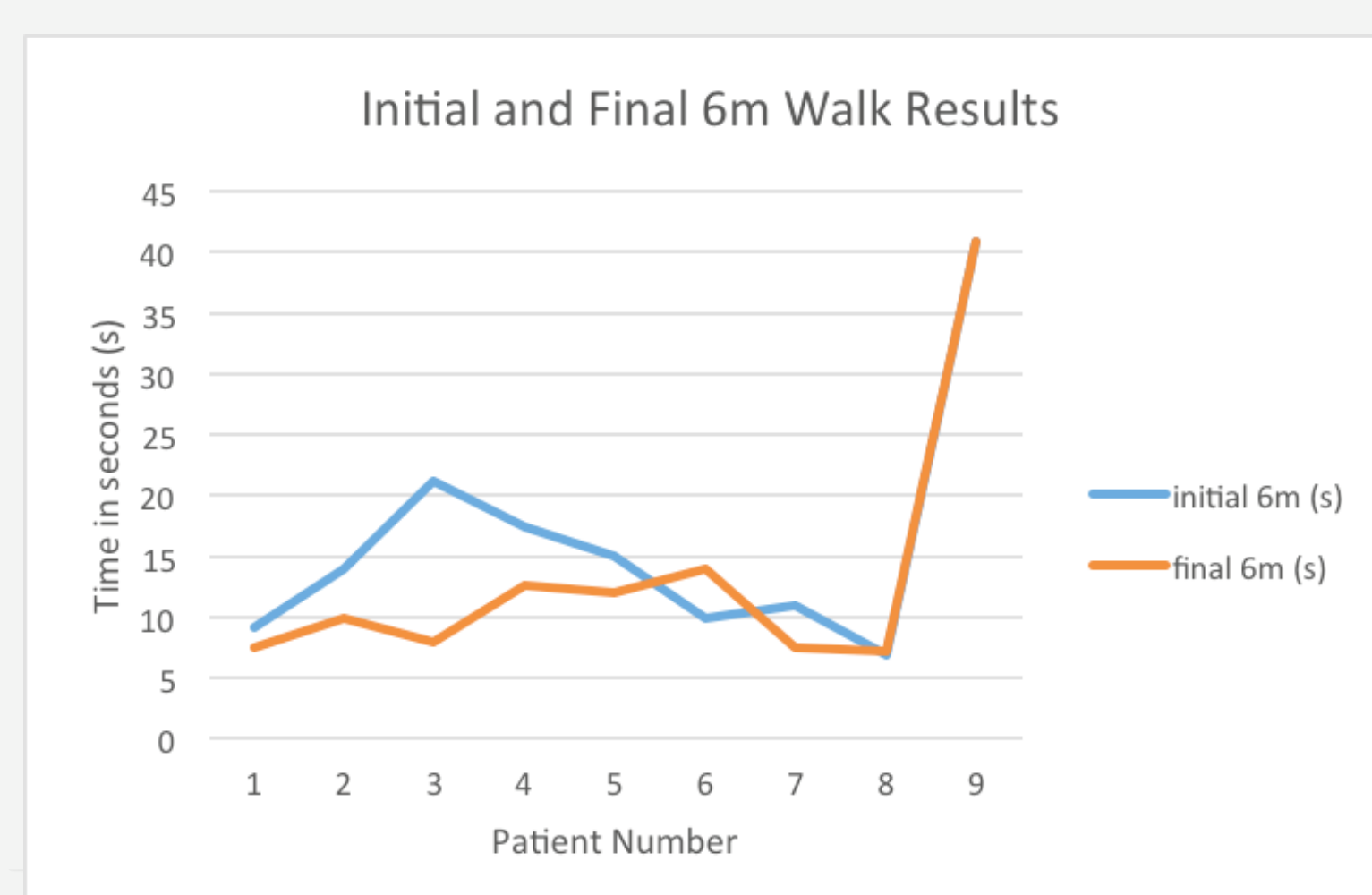


Figure 2

## Considerations going forward

- Provide more structure to our follow up to monitor if individuals are continuing to exercise and maintaining or making further gains.
- Continue to liaise with local leisure services around having suitable activities for our client group. Review the outcome measures we have used and consider if alternatives may be better.
- Look to develop similar groups across the region.
- Consider how to evaluate the effectiveness of having information available on different health topics.

## Feedback

"The camaraderie was most helpful"

"The sessions provided me with the incentive to keep going"

"The choice of exercises suited our ability"

"Good for body and mind. I feel less stressed after class"

## Aim of the project

To provide an opportunity for adults with a neurological condition to exercise and learn more about their condition in a supportive, group environment with specialist staff.

## What did we do?

We set eligibility criteria ( 1) Is the person medically stable? 2) Can they walk 5m with or without an aid?) and accepted referrals from staff who work with individuals with neurological conditions. Up to 6 patients attended each of the 3 groups that we ran in 2018. The groups met once a week for 8 weeks in the hospital gym with 1 physiotherapist and 1 physiotherapy assistant for 1 hour. The session consisted of a warm up, 7 exercise stations (see table 1) completed as a circuit, and then a cool down.

Table 1

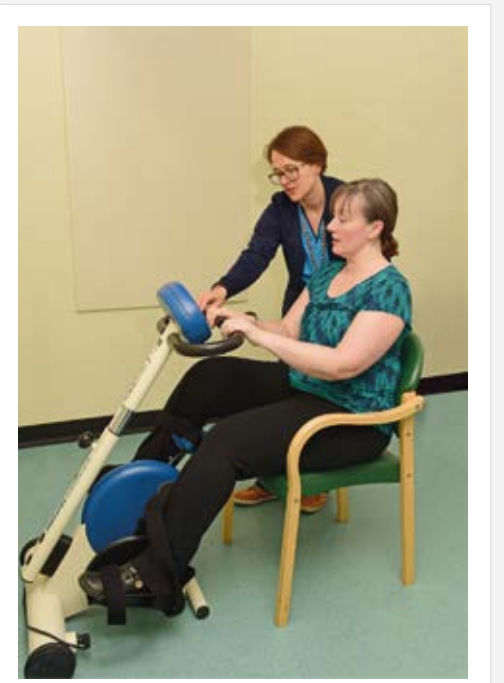
Exercises
1. Shuttle walk (6m)
2. Motomed cycling
3. Step ups
4. Pole lift
5. Wall press
6. Ball raises
7. Sit to stand



The exercises were evidence based (Mead et al. 2007) and tailored to each individual. There was also an opportunity to discuss and receive written information around certain aspects of their condition and on topics relating to health promotion. Outcome measures (see table 2) and a goal setting sheet ([www.selfhelp4stroke.org](http://www.selfhelp4stroke.org)) were completed prior to starting the sessions and then again at the end of the 8 week block. Participants were also asked to fill in a feedback form at the end of the block. A telephone call was then made 1 month after the group had finished to review how the person was getting on.

Table 2

Outcome Measure	Explanation
1. Berg Balance Scale	The Berg Balance Scale is used to objectively determine an individual's ability (or inability) to safely balance during a series of 14 predetermined tasks.
2. 6 metre (m) walk test	Timed walking over 6 metres, using an aid if necessary, to determine falls risk and measure balance and walking.



## Goal-setting

Participants set goals such as being able to take shoes off independently, walking with no walking stick, improving my mobility and balance and to dance without help. Five of the participants had met their goal by the end of the 8 weeks.

## Conclusions

- The group provided adults with neurological conditions the opportunity to participate in weekly exercise sessions for 8 weeks.
- Through exercising, improvements were gained in:
  - a) Balance
  - b) Mobility
  - c) Functional ability
  - d) Confidence to exercise and continue exercising



## References

Scottish Government, **Improving the Health and Wellbeing of People with Long Term Conditions in Scotland: A National Action Plan**, 2009.

Elsworth et al, Supported community exercise in people with long term neurological conditions: a phase II randomised controlled trial, *Clinical Rehabilitation*, 2011, 25(7), 588-598.

Mead et al, Stroke: a randomized trial of exercise or relaxation, *Journal of the American Geriatrics Society*, 2007, 55(6), 892-9.

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Berg et al, **Measuring balance in the elderly: Preliminary development of an instrument**, *Physiotherapy Canada*, 1989, 41, 304-311.

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