

Recreation Therapy Stroke Protocol Series

“There are more than 400,000 Canadians living with long-term disability from stroke, and this number will almost double in the next 20 years. The effects range from mild to severe disability, and can be obviously physical limitations or more subtle such as memory changes. Recovery can take months or years, even for milder strokes, and many people never fully recover.”

2017, Heart & Stroke¹

This first of its kind document is a result of the hard work of various Recreation Therapy and Stroke professionals including individuals from the Recreation Therapy Stroke Professionals Network of the Southwestern Ontario Stroke Network, Georgian College, St. Thomas Elgin General Hospital, Woodstock General Hospital, and the Chatham-Kent Health Alliance.

The need for evidence based recreation therapy has increased as the needs of our clients are becoming continually complex. Evidence based practice (EBP) across professions is known to improve quality of care, provide continuity of care, improve health outcomes, as well as, act as a cost savings measure. EBP provides an opportunity for Recreation Therapists to provide their clients with interventions that are rooted in research. These protocols should be used together with the therapeutic process, and our professional standards of practice.

This document is a compilation of student work from the Georgian College Therapeutic Recreation Post Graduate program which has been vetted by Faculty and professional Recreation Therapists currently working in the field. All of the program protocols were created by the student authors and include research evidence to justify their validity. As always, it is up to you as the Recreation Therapist to use these and other protocols as a tool to create positive change for your individual clients. These protocols, coupled with further research and your clinical judgment should align your clients well for success in their health goals.

This is a living document that will continue to grow and evolve. The committee plans to invite Recreation Therapists on an annual basis, to submit evidence based protocols for consideration for inclusion in this valuable resource. This invitation will occur every February to coincide with both Therapeutic Recreation Awareness Month and Heart and Stroke Month.

We encourage you provide us with feedback or suggestions for protocols for inclusion in future editions of this publication. Feedback can be emailing swosn@lhsc.on.ca .

¹Heart and Stroke. (2017). Stroke Report. Retrieved from <https://www.heartandstroke.ca>

Program Protocol – I Will Get Back Up Again

Created By: Jen Reid

Edited By: Amie Grace

Prepared By: Erin Manax

Reviewed & Revised: September 2023

Program Title: I Will Get Back Up Again

Statement of Purpose:

- To provide individuals who have had a stroke the opportunity to participate in a leisure education program in order to gain knowledge and practice skills to improve balance, flexibility and strength. Participants will gain confidence in a social setting to help their recovery and overall quality of life

Program Description:

- Participants will learn the importance of physical activity as part of the recovery process post-stroke. Through discussion and regular participation, the participants will also experience the positive effects of physical activity. By developing SMART goals, participants will identify what areas need improvement and how to go about targeting each of those areas. This program will assist individuals by increasing their physical, cognitive and social functioning.

Client Needs Program will Address:

- Assistance developing a routine exercise program
- Understanding of the positive effects of a physical exercise program
- Increase of physical strength, flexibility, balance and awareness of self needs
- Instilling confidence and reduce fear of independent activity
- Identify barriers associated with regular exercise

Selection/Referral Criteria:

- Participants must have suffered a stroke within the past 2 years
- Participants must be approved by physician to attend the program
- Participants must have the ability to transport themselves to and from the program
- Participants must provide an identified need as listed above

Contradicted Criteria:

- Participant complains of dizziness/vertigo when participating in activity
- Participant has a pre-existing condition that restricts certain movements (joint/bone/muscle)
- Participants no longer require assistance

Program Outcomes (goals):

- Participants will feel more confident and capable to engage in physical activity on their own
- Participants will feel comfortable using equipment in a safe manner

- Participants will create and successfully complete a short and long term SMART goal
- Increased strength and flexibility in participants
- Participants will meet other members in the community who they can relate to and create a network
- By the end of the 4-week program, participants will identify what areas of weakness need most attention and create a long-term SMART goal

Content and Process:

Content	Process
<p>Week #1</p> <ol style="list-style-type: none"> 1. Introduction to program 2. Benefits and barriers to exercise, go over handout 3. Explain and create individual SMART goals for 4 week program 	<p>Introduction/Ice-breaker activity</p> <ul style="list-style-type: none"> • Names • How long ago did you have a stroke? • Benefits and barriers to exercise • Importance of routine • Walking is exercise • Cardiovascular health • Create short term SMART goal
<p>Week #2</p> <ol style="list-style-type: none"> 1. Introduce topic 2. Explain benefits of stretching 3. Head to toe body stretch 4. ROM exercise 	<ul style="list-style-type: none"> • Overview of previous week • Discussion on day topic • Introductory video • Explanation of body position/glands/blood flow • Full head to toe body stretch • Talk about YOGA • ROM activity
<p>Week #3</p> <ol style="list-style-type: none"> 1. Introduce days topic 2. Explain post stroke balance recovery (impaired cognition) 3. Go through handout of balance exercises 	<ul style="list-style-type: none"> • Review previous week • Warm up balance activity • Initial balance test • Discussion about impaired cognition post stroke • Go through 12 balance activities on worksheet/handout • Post activity balance test: was there improvement?
<p>Week #4</p> <ol style="list-style-type: none"> 1. Introduce days topic 2. Explain benefits of resistance training 3. Review and assist with Theraband exercises 4. Program wrap-up 	<ul style="list-style-type: none"> • Review previous week • Warm up resistance activity • Explanation of intensity and intervals • Possible increase of intensity and intervals • Wrap-up/debrief of program • Hand out contact info and connect clients with extra resources if needed

Staff Requirements and Responsibilities:

- Recreation Therapist have handouts prepared for visual reference

- Week 4 requires additional assistance from supporting staff (assistants, volunteers, students, etc.) to help participants with resistance exercises
- All staff: first aid and CPR certified

Program Evaluation:

- Pre and post-test evaluations of personal progress
- Observation to ensure participation
- Completion of short term SMART goal by the end of 4 week program

Research:

Fletcher, G., Franklin, B. A., Roth, E. J., & Shephard, T. (2004). Physical activity and exercise recommendations for stroke survivors. *Stroke*, 35, 1230-1240.

- Noting the positive side effects of physical activity in the role of recovering from and preventing future strokes
- Preventing reoccurring strokes by living a healthy, active lifestyle
- Post-stroke, individuals suffer activity limitations down to activities of daily living
- Suggests that intolerance is due to bed-rest-induced deconditioning
- Rehabilitation from hospital to home usually ends with 3 months after discharge
- Problem is that individuals are left with no routine or support once they arrive back home
- Suggests that a minimum, survivors should engage in aerobic exercise routine 1 our per day, 3 days per week

Billinger, S. A., Arena, R., Bernhardt, J., Eng, J. J., Franklin, B. A., Johnson, C. M., ... & Shaughnessy, M. (2014). Physical activity and exercise recommendations for stroke survivors: a statement for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke*, 45(8), 2532-2553.

- Main idea is that doctors are not prescribing exercise as often as they should when it comes to treating stroke survivors
- Exercise improves depressive symptoms, cognitive function, memory and quality of life after stroke
- Stroke survivors must overcome several barriers to exercise – including severity of stroke, fatigue, depression, lack of social support, affordability and motivation
- Health care providers need to help patients develop skills and confidence they need to begin and maintain an exercise program that includes aerobic exercise and strength training as part of their stroke care
- Suggests exercise 3 days a week for 20-60 minutes (or whatever is tolerable)

RT Signature and Date:

Appendices:

Acknowledgements

This document was made possible through the generous contributions from the following members of the SWOSN Recreation Therapy Stroke Professional Network - Protocol Subgroup

Lyndsey Butler, Reg. OT Reg. (Ont.)
Regional Stroke Rehabilitation Coordinator
Southwestern Ontario Stroke Network, LHSC

Breanne Carr, Breanne Carr, BRLS Hon TR
Therapeutic Recreation Specialist
St Joseph's Health Care London

Nonnie Foster, (BPhEd, TR) R/TRO
Recreation Therapist, Rehabilitation
Woodstock General Hospital

Amie Grace, R/TRO
Recreation Therapist
St Thomas Elgin General Hospital

Sarah Harrison, RLS Dip., BRLS, R/TRO
Faculty, Recreation Therapy Post Graduate Program
Georgian College

Holly Graham, BA TR, R/TRO
Recreation Therapist
Huron Perth Healthcare Alliance

Vanessa McPhee, (BHSc, TR) R/TRO, Rec T
Recreation Therapist, Complex Continuing Care Unit
Woodstock General Hospital

Erin Manax
Recreation Therapist Intern
St Thomas Elgin General Hospital

Jean Morrow, RN MN CNCC(C)
Regional Stroke Education Coordinator
Southwestern Ontario Stroke Network, LHSC

Jeff Nissen, BHSc., TR
Recreation Therapist
Chatham Kent Health Alliance

