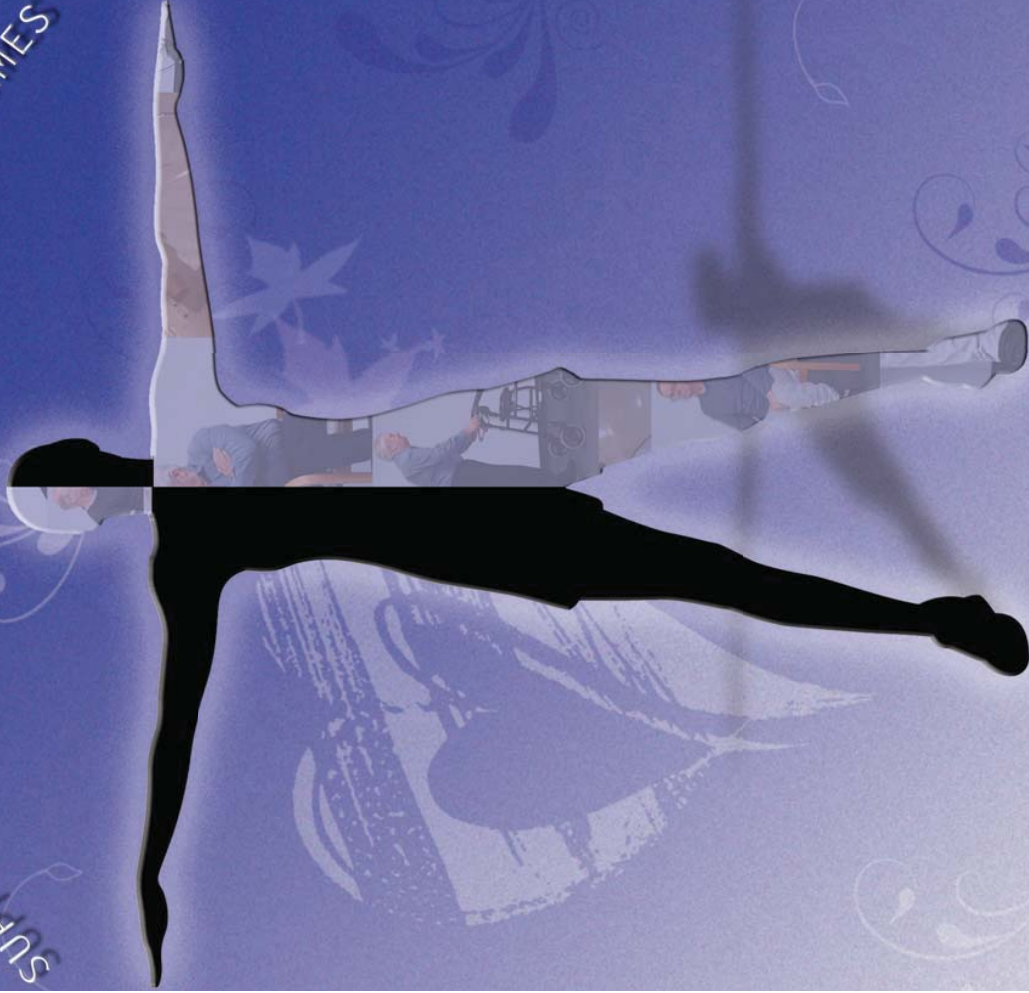


HEALTH CARE PROVIDER HANDBOOK

SUPPORTING COMMUNITY EXERCISE PROGRAMMES



FOR PEOPLE LIVING WITH STROKE

Training Programme User Agreement

1. This training programme (product) is intended for:
 - a. continuing professional development by individuals involved with, or interested in, fitness instruction
 - b. health care professionals associated with stroke rehabilitation or community reintegration
 - c. the instruction of a community-based stroke-specific exercise class
2. The product and the exercise programme have been designed to meet the ongoing needs of people living with stroke and are not intended to replace rehabilitation services already in place.
3. This product is intended for private use and is not to be copied, altered, or publicly exhibited.

This training programme has been developed based on current best practice evidence, and was evaluated by an expert panel review and clinical trial. Health knowledge is constantly changing. It is recommended that users of this material review the information regularly to ensure that the content is consistent with current clinical practice. It is the responsibility of the health care practitioner along with the exercise instructor to determine the appropriate activity level for each individual. The programme developers and supporting institutions shall not be liable for any damages, injuries, claims, liabilities, costs, or obligations arising from the use or misuse of this material.

Programme Background

Exercise programmes and physical activity counselling have been shown to be an integral part of self-management strategies for people living with chronic disease. However, the majority of community-based exercise programmes for people with stroke reported in the literature have been delivered by regulated health care providers such as physical or occupational therapists. Due to limitations in health human resources in many communities, the use of regulated health providers to directly teach an exercise programme may not be feasible or be the best use of scarce health care resources. The expertise of physiotherapists has been used to develop a training package to train fitness instructors to deliver a community exercise programme for people living with stroke. This approach provides improved access to stroke-specific exercise programmes and will better allow community-dwelling people with stroke to maintain function and mobility while more fully participating in their community.

The ultimate goal of this project is to build capacity in the health care system by providing a safe and effective community-based exercise programme accessible to people living with stroke. It is anticipated that participation in this exercise programme will improve health outcomes by addressing function (balance, mobility, endurance), health related quality of life, as well as providing an opportunity for community reintegration for people living with stroke. As well, this programme will fill an identified gap reported by health care practitioners and stroke survivors.

The production of an instructor training package in DVD format for a community-based exercise programme provides a standardized, competency-based approach to training and enables trained non-health care professionals to deliver a programme developed by physiotherapists and based on best practice to people living with stroke. This strategy is one way to utilize the expertise of physiotherapists, while more fully integrating community programmes into the continuum of stroke care. Furthermore, the implementation of this programme will create opportunities to facilitate the integration of services between the rehabilitation, community, and secondary prevention sectors in the continuum of stroke care.

Programme Overview

The exercise programme is intended to be offered twice a week for eight weeks and is approximately one hour in length. It has been designed for people living with chronic stroke who: reside in the community, can ambulate at least ten metres with or without a gait aid, are able to perform standing exercises while holding onto a support, have no significant cognitive impairment, and have the ability to self-monitor with respect to warning signs of over-exertion.

Participants will be screened by a physiotherapist (or other health care provider with experience in stroke) for inclusion in the exercise class and will require the consent of a physician or nurse practitioner to participate. Information will be provided to the instructor regarding restrictions or co-morbidities which may influence the participant's ability to exercise.

Proposed Format:

Total Staff to Participant Ratio: Maximum = 1:4

Supervision: 1 trained fitness facilitator, 2 volunteers

Participants: Maximum 12

Facility and Equipment:

Facility: Large, multi-purpose room at community fitness centre with accessible parking and washrooms, on-site first aid response team

Equipment:

- 16 chairs
- 4 steps (3 levels, as in step-aerobic classes)
- 2 laundry baskets with assorted items used in activities of daily living for “Stand, Walk and Carry” exercise
- masking tape
- styrofoam cup
- colour-coded targets for reaching tasks
- Borg Rating of Perceived Exertion chart

Exercise Class:

1. Warm Up (10 minutes)	3. Mobility and Balance 3 stations (20 minutes total; 6 minutes per station)
Sitting/standing posture	Stand, walk and carry (Station 1)
Controlled deep breathing	Forward tap-ups or step-ups (Station 2)
Upper extremity exercises	Side tap-ups or step-ups (Station 2)
Ankle mobility	Reaching and weight shifting (Station 3)
Marching on the spot	Activities to challenge balance (Station 3)
2. Task-Oriented Strengthening and Cardiovascular Conditioning (20 minutes)	4. Cool Down (10 minutes)
Walking	Controlled deep breathing
Sit to stand	Hamstring stretch
Heel raises	Trunk rotation stretch
	Calf and hip stretch

The exercise programme is designed to flow from one exercise or group of exercises to another, ensuring the smoothest transition possible. Exercises have been sequenced in a particular order to include the major muscle groups, to minimize transitional movements, and to minimize the chance of injury for the participants.

In the training programme, each exercise is broken down into a number of components:

- Instructions - step by step directions to teach the exercise
- Adaptations - addresses ways to make the exercise easier or safer
- Progressions and Variations - addresses ways to make the exercise different or more challenging
- Special Notes - includes points of concern that should be considered throughout the exercise
- Common Errors and Corrections - details some of the most common mistakes someone with stroke might make when trying to perform the exercise and how to coach to correct these mistakes
- Rationale - details the reasons for including this exercise in the class

It is strongly suggested that the Health Care Providers and Fitness Instructor(s) work within the framework of the exercise programme to creatively adapt or progress exercises without changing the structure of the programme itself. This exercise programme has been designed to cover multiple aspects of function and each exercise component was specifically chosen to address these aspects. Instructors and Health Care Providers are encouraged to use their creativity where needed to address participant needs in a safe and effective manner.

Please see the document entitled Exercise Cheat Sheet which provides an overview of each exercise included in the class. The Exercise Cheat Sheet and other documents referred to in this handbook (bold and italicized) are included in the documents section on the second DVD.

Fitness Instructor Training Programme

A standardized, competency-based approach to training has been used to create this training package for fitness instructors using a DVD format. The programme focuses on the knowledge, skills, and attitudes needed to deliver a safe and effective exercise programme for people living with stroke. The use of competencies helps to focus not only on “what you know” but also on “what you know how to do”.

Competency Background:

Competencies are the knowledge, skills, and attitudes needed to effectively perform a role or function. The following six competencies represent the key components of facilitating a community based exercise programme, and reflect the primary goal of delivering a safe and effective exercise programme in the community.

The six major competencies required to deliver a community based exercise programme for people living with stroke are:

- Good knowledge base
- Safe
- Good communication skills
- Aware of own limitations
- Empathetic/valuing
- Good practical skills

Degree of competence

Fitness Instructors will be provided with a specific set of knowledge, skills, and attitudes. Competency will be demonstrated by their ability to reproduce standard answers, skills, or behaviours that are associated with well-defined problems linked specifically to the exercise programme and participants living with stroke.

Knowledge is focused on the delivery of this exercise programme, gaining a basic level of understanding of stroke, and applying this knowledge specifically to participants living with stroke.

Mastery of skills is determined based on evidence that fundamental elements of the standardized programme are present and respected. The competencies required will assure the safe and effective delivery of the community-based exercise programme for people living with stroke.

Attitudes or behaviors about exercise and participants living with stroke will be presented throughout the training programme. These qualities will be assessed throughout the programme as well as through ongoing interaction with participants, facility and health care providers.

How to Evaluate Competencies:

Competencies are evaluated through a self-evaluation component, the submission of two forms to the Health Care Provider, and through the evaluation of an instructor's ability to deliver an exercise class.

Self – evaluation:

Thought provoking questions and self-quizzes are used throughout the training programme to ensure a basic level of understanding. A Competency Checklist will be used at the start of the training programme and again, once all the sections of the programme have been completed to help identify which components of the programme are understood and which require more study and practice.

Submission of forms:

Fitness Instructors will be required to submit a copy of the Facility Plan to ensure that details of programme management and facility organization have been attended to. This will help to ensure the safety of participants within each facility.

A Class Plan must also be submitted to demonstrate the ability to organize the flow and details of a class. This class plan will provide an outline for the observation and evaluation of the Fitness Instructor's trial exercise class.

Exercise Class Trial:

The evaluation of an instructor's ability to deliver the exercise programme will be assessed through the observation of a trial exercise class by the Health Care Provider. The ability to deliver the class in a fun, safe, and effective manner will be evaluated using the Class Assessment Checklist. This checklist has a major focus on safe and effective delivery of the exercises. There should be time set aside to allow opportunity for discussion and review to help determine which competencies require ongoing education or support.

Throughout the training programme the instructor will be given the opportunity to learn at their own pace, and to repeat knowledge sections and practical applications as needed.

Role of Health Care Provider

The Health Care Provider (a provider with experience with stroke), also referred to in the training programme as the Health Care Link, will liaise with the fitness instructors, exercise participants, volunteers, and the community facility administration in the following capacities:

With the Fitness Instructor:

- Provide fitness instructor with training programme DVD
- Organize training of fitness instructor and provide support as needed
- Review Class Plan and Facility Plan
- Assess performance of fitness instructor in trial exercise class using the Class Assessment Checklist
- Provide “hands on training” about class and individual supervision (see section below on Supervision and Key Points for Instructor Safety)
- Maintain ongoing communication and support of fitness instructor
- Encourage ongoing review of adaptations, progressions, and details of each exercise to ensure that participant needs are being met

With Exercise Participants:

- Provide and collect Physician Consent Form for each participant
- Screen exercise class participants (see section below on Screening Exercise Participants)
- Communicate relevant information to fitness instructor using the Participant Information Sheet
- Divide groups equally for circuit activities – ensure each group is made up of people with differing levels of ability so that appropriate supervision may be provided
- Attend first two visits of exercise class to ensure safe and effective delivery

With Volunteers:

- Ensure appropriate number of volunteers for each class
- Ensure appropriate assignment of volunteer duties in consultation with the instructor
- Provide volunteers with stroke resource material as required (www.heartandstroke.on.ca)
- Provide “hands on training” about individual participant supervision

With Community Facility Administration:

- Relationship between Health Care Provider, Fitness Instructor, and Community Facility will be community dependent with respect to:
 - Participant assessment processes (Par-Q or other facility forms)
 - Participant registration procedures
 - Recruitment and coordination of volunteers
 - Confidentiality procedures for fitness instructors and volunteers. A sample Confidentiality Form is available
 - Funding for instructor and class space
 - Liability/Insurance

Supervision

During the design and implementation of this class, it became apparent that both instructors and volunteers required instruction in how to supervise a class environment including individuals living with stroke. There are many aspects of supervision that Health Care Providers learn through experience. In your role as the Health Care Link to the community class, it is strongly suggested that you use your experience with chronic conditions and stroke in particular to ensure that appropriate class and individual supervision is occurring in your setting.

A few key points are summarized below:

Class supervision:

- Position yourself so that you can see everyone around you (in both the large and small groups)
- Discuss positioning of participants requiring increased supervision within the large group. For instance, each volunteer should be paired with a participant requiring increased supervision and should be seated beside one another in the large group. The instructor should be next to someone with increased supervision needs but be able to see the entire group.

One-on-one supervision:

- Stand no more than one arm's length away
- Stand on the participant's weaker side and slightly behind
- Watch for signs of fatigue and encourage breaks as needed

Key Points for Instructor Safety (from training DVD)

Fitness Instructor Responsibilities

- Ensure a safe environment
- Be aware of individual participant factors
- Provide safe exercise instruction

Through completion of the training programme instructors will have learned to identify:

- Signs of fatigue
- Warning signs to stop exercising
- Signs of stroke
- Level of activity or exertion

Screening Exercise Participants

The Health Care Provider will screen participants for inclusion in the exercise class and inform the participants that they will require the consent of a physician to participate. Information will be provided to the instructor regarding restrictions or co-morbidities which may influence the participant's ability to exercise. This class was developed for participants who: are residing in the community; are able to ambulate at least ten metres with or without a gait aid; are able to perform standing exercises while holding onto a support, have no significant cognitive impairment; and have the ability to self-monitor with respect to warning signs of over-exertion.

The following outcome measures are suggested as good clinical tools as well as potential programme evaluation measures:

- Timed Up and Go Test (TUG)
- Berg Balance Scale
- Timed 10 Meter Walk Test (gait speed)
- 6 Minute or 2 Minute Walk Test

Information relating to these outcome measures can be found at: <http://www.medicine.mcgill.ca/strokeengine-assess/index-en.html>

Objective data from these measures can be collected and used to evaluate the programme. In addition, the results can be used to determine the appropriate level of exercise difficulty for the individual. A description of the participant's evaluation (i.e. quality of movement, endurance, fatigue, safety) may also be valuable to communicate to the fitness instructor. It is also suggested that functional level be assessed by re-testing components of the Berg Balance Scale with the participant's gait aid (cane or walker) to assess supervision required during step ups and picking objects up off the floor, both components of the exercise class. The potential need for a chair riser (and size of the riser) can also be assessed with sit to stand activities during the screening session.

All of the relevant participant information should be communicated to the Fitness Instructor through the Participant Information Sheet. This information is necessary to assist in establishing the level of safety risk for each participant and the level of exercise for each participant (if adaptations or progressions are required). This information can also be used to determine the equal distribution of participants for the circuit activities. It is suggested that a copy of these sheets be maintained at the community facility for the instructors to review as needed. As this information is private and confidential, it should be kept in a secure location. This information should be reviewed during the first few classes for each new session.

Starting a New Session

The Health Care Provider is responsible for:

- Assigning volunteers and instructors to individuals for supervision
- Establishing level of participation for participants – exercises needing adaptation or progression (i.e. identifying need for chair riser, etc.)
- Reviewing small group distribution for supervision of circuit activities and adapting groups as needed
- Educating volunteers on how to provide supervision to participants and to act as a resource on an ongoing basis
- Initial review of health status and medication changes for participants
- Initial reviews to ensure participants have necessary medications (inhalers, nitroglycerine, juice, etc.)
- Reviewing and elaborating on the role of the Health Care Link for the exercise class

The expertise of physiotherapists has been used to develop this training package to train fitness instructors to deliver a community exercise programme to persons living with stroke. As the Health Care Provider, and link to the community class, your professional experience with stroke will provide you with the opportunity to address the specific needs of your community as well as the needs of the individual participants. Your presence and ongoing support of the instructors, community partners, volunteers, and participants, will help to ensure the success and sustainability of this community-based exercise programme for people with stroke.

Feedback related to the training programme or the community-based exercise class for people living with stroke may be provided to the:

Regional Stroke Rehabilitation Specialist
Northwestern Ontario Regional Stroke Network
201-984 Oliver Road
Thunder Bay, ON P7B 7C7
www.nwestroke.ca



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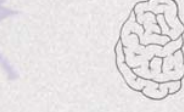
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