Stroke Recovery in Motion

2022

Community-Based Exercise Program Implementation Planner

A roadmap for starting and maintaining a community-based exercise program for people with stroke

MARCH OF DIMES CANADA | After Stroke

The Stroke Recovery in Motion Study

In 2016, the Heart and Stroke Foundation and the Canadian Partnership for Stroke Recovery convened its Knowledge Translation Advisory Committee to identify priority areas for **knowledge translation/mobilization**. The committee, consisting of stroke recovery experts, people with stroke, caregivers, health-care providers, policymakers, and knowledge translation/mobilization experts, identified **post-stroke** exercise as a high priority. They specifically identified the need to develop sustainable evidence-informed community-based exercise programs for people with stroke. Although a number of Canadian evidence-informed community-based exercise programs for people with stroke exist, the implementation of these and other exercise programs has been less than systematic or optimal. Recognizing that communities needed assistance understanding how to more effectively implement and sustain community programs, the authors of this document applied for a Brain Canada Foundation research grant (the Stroke Recovery in Motion Study 2018-2021) to develop and assess the acceptability and usefulness of a guide for planning and implementing community-based exercise programs for people with stroke.

The evaluation study [1] was comprised of three groups of participants who agreed to review the "Planner" and provide feedback: individuals involved in starting a program who agreed to use and field test the Planner, individuals with a declared interest but no previous experience or immediate plans to implement a stroke-specific community-based exercise program, and individuals with past experience implementing stroke-specific community-based exercise programs. The project also funded three Canadian sub-studies (two reviews of exercise program implementation and one focused on sustainability factors) and an update to the Canadian Stroke Community-Based Exercise Recommendations [2]. The data collected through surveys and interviews, the sub-studies, and the updated recommendations were used to inform and improve the content and structure of the Planner.

Suggested citation

Ian D Graham, Joan van den Hoek, Jessica Reszel, Tram Nguyen, Gayatri Aravind, Mark T Bayley, Marie-Louise Bird, Kate Edwards, Janice J Eng, Jennifer L Moore, Michelle LA Nelson, Michelle Ploughman, Julie Richardson, Nancy M Salbach, Ada Tang. Stroke Recovery in Motion: Community-Based Exercise Program Implementation Planner. Ottawa: Ottawa Hospital Research Institute; 2022. Available from: http://www.AfterStroke.ca/SRIM

Reviewer Comments

“It’s a wonderful document and I could see it being valuable to somebody like myself who has experience working in building community programming, but never necessarily had that roadmap to know how to go from the point where you have that idea or that passion for something, and seeing it come to fruition following all the necessary steps. I’ve been involved in various program planning groups and there has really been no map. Everybody just kind of gets together and starts throwing out ideas. And there’s no real structure for how to move forward. I think that’s why a lot of the times, everybody has the right intentions, but the program doesn’t develop in a way that’s sustainable."

– Program Manager

“Although the documentation is large, it is clear as to what the intent was and what was not covered in the Planner. I thought it was well designed and researched, the end result seems to be a realistic step by step approach to implement a program with a high degree of success. I know I would definitely use it as a resource and the tools provided.”

– Fitness Instructor and Program Coordinator

“At first, I’ll be very honest, it was very intimidating. I’m like oh my gosh, this is bonkers, there’s no way, like this is so much information. It was a little bit overwhelming. But once you get over the size of it, I can’t stress enough what a great resource tool it is. I’m going to use it for other programming that has nothing to do with fitness. It has taught me a lot. ...A lot of people think they know the right way to plan something and I’m not knocking them for not knowing. It’s just when you see something laid out from start to finish it makes a real big difference.”

– Program Coordinator

“In my experience since I’ve been [at this organization] we ‘build it as we fly.’ That’s a culture or a way of operating that we seem to be caught up in that doesn’t allow for sufficient planning prior to program implementation. It’s like here you go, and you’re off and running and then trying to put these things in place after the fact. Whereas if we allowed sufficient time to do it, we would be more successful. So, having this (planning) process is amazing.”

– Project Lead

“The depth and breadth of the content is impressive. The wealth of information in the Planner provides the knowledge and resources required to assess needs, discern capacity, and implement a program. It cannot guarantee success but greatly enhances the chances that your program will be successful and sustainable.”

– Provincial Stroke Coordinator

“I thought it was really interesting to understand, but put in layman’s terms, like it wasn’t overly technical or complicated. I hate reading academic articles - oh my goodness, I’m getting so sick of them. So, it was more of an enjoyable read for me because everything academically as you know is like a sentence, reference, sentence, reference, sentence reference, sentence reference, reference, reference. Like okay I don’t care who said what, just tell me the story, right? So, I think for somebody who’s really passionate about pursuing it, it is a really good tool.”

– Rehabilitation Specialist

“(All) those examples were perfect because it just made it easier to put yourself in that context and not read this as a theoretical framework.”

– Physiotherapist

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Welcome

Dear Reader,

Health experts highly recommend continued exercise for regaining and maintaining a healthy lifestyle after stroke. Although great strides have been made in the acute treatment and **rehabilitation** of **stroke, survivors** often lack access to specially adapted exercise programs once they return to their community. This Planner was developed to facilitate the planning of community-based exercise programs for people living with the effects of stroke.

The planning model and resources presented in this Planner are grounded in research about effective **implementation planning**. The Planner (or Implementation Planning Roadmap) is comprised of a guide and host of planning tools and has been assessed and field-tested in an international study. What we learned helped improve the content, design, and usability of the Planner.

For those less familiar with planning for implementation, we recognize that the Planner may initially seem very detailed and the process daunting.

Very few study participants wanted anything removed from the Planner as they thought all the steps and tools could be helpful. Study participants also noted some repetition in the content of the guide and, while it does add pages, the approach is deliberate. Repetition supports learning and capacity building, especially for those new to planning [3–5]. For example, although evaluating program outcomes and issues related to sustainability are described in Phase 2, planning decisions in Phase 1 and at every step can influence the long-term success of your program. While assessment and evaluation measures are activated in Phase 3, your measurement strategy needs to be developed before you launch the program and enrol participants. Readers will inevitably skip sections and not every planning team member will engage in every task. However, by continuously building upon the information gathered and reviewing the rationale for each decision as it contributes to the larger plan, your initiative will have a greater chance of success.

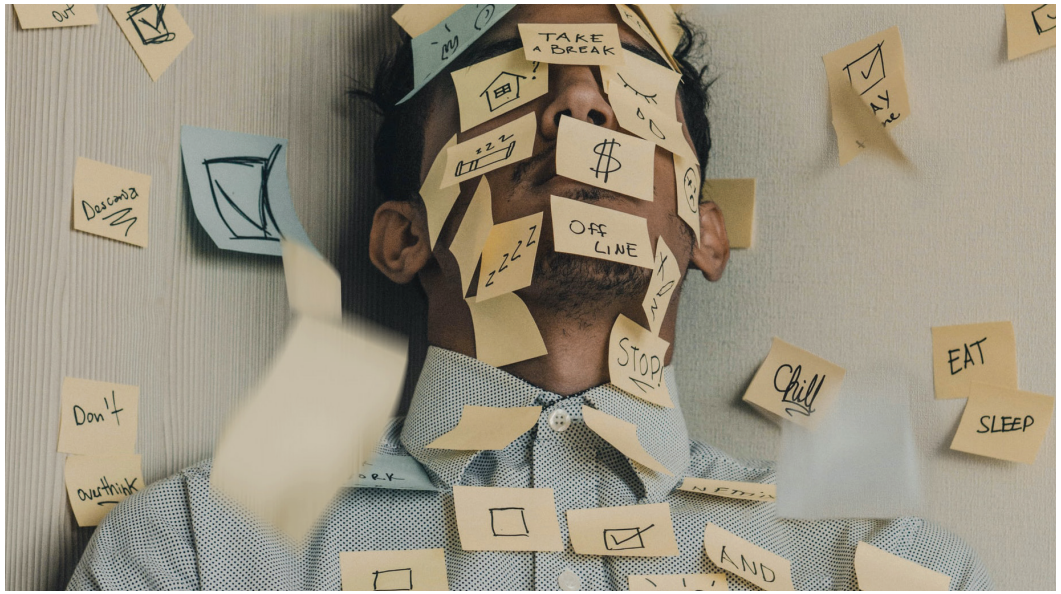

Photo by Luis Villasmil on Unsplash

Planning for the safe, successful, and sustained implementation of a quality exercise program that meets the expectations of people with stroke does require a fair bit of work, but the work doesn't have to be done alone. Study participants emphasized the need for a program champion, someone with strong leadership skills and, importantly, dedicated time to invest in planning. A capable leader can direct the planning process and level of participation.

Remember that each member of your planning committee will bring specific experience, skills, and perspectives to the planning process and will share the workload. Study participants also highlighted the importance of an integrated planning team in which those planning at an organizational level ensured they consulted with those responsible for actually delivering the exercise program, as well as those who would be participating in the classes. Working together enables the creation of a much stronger plan and better, more sustainable program **outcomes**. Small committees can comfortably and confidently use the same planning process as larger, possibly better resourced teams (and sometimes can proceed with greater speed and flexibility we were told by study participants!). The key is to identify the expertise needed and reach out to **community** partners to engage the necessary help when and where it is appropriate. See Phase 1 Step 1 for guidance on forming an effective working group.

Field-testers often asked, "Who should do what, and where do we start?" There is no one-size-fits-all approach; the Planner does not prescribe a single path. Each community has unique access to expertise and resources, and each community may start the implementation planning journey at a different phase or step in the process. While the Planner presents a holistic evidence-informed implementation planning process that applies across contexts (i.e. public and private sectors) and jurisdictions, our advice to readers is to review the material and decide which Steps, Activities and Tasks are most relevant to your particular context. A good place to start reading is the section, 'How to use the Planner'. Although the Planner was primarily designed for use in Canada, the evidence-informed planning process is relevant to and can be adapted for use elsewhere.

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Another commonly asked question was “How long should this take?” You may be surprised to hear that study participants responded anywhere from 3 months to 3 years! It depends on many factors including degree of community interest, program objectives, access to resources, engagement and support of partners, your level of experience and the decisions you make as a planning team. You should also anticipate there may be a learning curve when using the Planner for the first time. Practice does make perfect.

Finally, you will notice in the Planner that we use the metaphor of a roadmap to refer to the planning and implementation process. We conceptualize planning and implementation as a journey and the Planner as the map that facilitates navigating the way. As with all journeys, there may be alternative paths to your implementation destination; some roads are more straightforward; others are more scenic; and sometimes there are detours that must be negotiated and potholes to be avoided. Our study revealed that those who reviewed the Implementation Planning Roadmap universally viewed it as helpful. While the course of planning rarely follows a straight line, the basic steps are defined and there’s a logical progression of activity.

Several Canadian **evidence-based** exercise programs for people with stroke are introduced in the Planner; however, the implementation planning principles and 3-Phase, 8-Step approach can be applied to any program.

We wish you every success in planning for and delivering exercise programs for the people with stroke in your community. The Planner is a free, publicly available resource. March of Dimes Canada has agreed to be the custodian of the Planner, update the materials when necessary, support use of the Planner, and share the experiences of those using the Planner. In the meantime, if you’re ready to consider the possibilities, turn the page – and let your planning journey begin!

- The Stroke Recovery in Motion study team

Introduction

One in four people worldwide will experience a stroke in their lifetime [6], about 13.7 million people every year [7]. In Canada, the incidence is one stroke every 10 minutes [8]. A third of people with stroke will have physical challenges that make it difficult to take part in typical daily activities and interactions. In the last 20 years, advances in health care have resulted in far fewer people dying from stroke but also led to more people living with long term **disability**.

Studies show that exercise improves **mobility** and quality of life for people with stroke. **Aerobic** exercise is recommended to improve walking ability and **cardiovascular** fitness. New evidence also suggests that exercise can improve or maintain mental function after stroke and even help to prevent a future stroke. However, for most people with stroke, exercise programs that support their needs are not available within their communities. People with stroke may find it challenging to participate in programs designed for the general public because of their degree of disability, limited personal experience with exercise, fear of injury, lack of transportation, program costs, or lack of attendant or caregiver support. Furthermore, existing exercise programs in the community may not be suitable for people with stroke or staff may not have experience or be comfortable working with people with stroke.

Purpose and use of the Planner

Although the trajectory of stroke care will be unique for each person and vary within health systems and regions across Canada, Figure 1 describes a common recovery experience [9,10].

Figure 1: Stroke Recovery

Treatment/therapy → **Self care**

1-3 weeks	2-12 weeks	2-6 months	4-6 months post-stroke and forward
A person has a stroke and becomes a "patient"	The stroke "patient" begins recovery	The "client" may continue to receive some therapy/care in the community	The person living with the effects of stroke manages their (new) normal life
Hospital	Integrated Stroke Unit or Rehabilitation Centre	Home or possibly Long Term Care or Assisted Living facility	Home/The Community
Acute care period with focus on treatment	Rehabilitation period with focus on therapy	Variety of home care services/supports and/or continued 1:1 rehabilitation therapy including outreach programs, physiotherapy, occupational or speech therapy, etc.	**Community-based exercise classes designed for people with stroke** To help maintain or regain function; manage daily activities optimally; socialize; stay healthy, prevent recurrence

The Stroke Recovery in Motion Planner addresses planning for exercise programs designed for people living with stroke who have completed available post-stroke therapies and/or are seeking additional community-based opportunities to support self-care. The Planner presents an evidence-informed, planning method to help organizations within the community implement and maintain quality community-based exercise classes for this group. The guide and tools are designed to help:

- build a planning team and workplan
- identify local needs and demands for an exercise program
- review available knowledge about exercise programs for people with stroke
- select an exercise program that is appropriate and workable for the local setting
- prepare a business case and endorse the selected program
- assess **barriers** and supporting factors (drivers) to the implementation of a program
- develop community solutions for identified challenges to program implementation
- prepare for program launch and delivery
- track the delivery and use of the program
- assess the impact of the program, including participant outcomes
- maintain program use and the integrity of the program as it was designed

Who should use the Planner?

The Planner and tools are intended for a variety of community members and organizations, including:

- regional **health authority** services and program coordinators
- municipal Parks and Recreation programming managers
- fitness professionals
- municipal leaders
- health professionals (e.g. family physicians, physiotherapists, rehabilitation specialist)
- patient/client advisory groups and stroke networks
- people with stroke and their family members, caregivers, and volunteers

What are the benefits of using this planning process?

- provides more consistent, evidence-informed delivery of community-based exercise programs
- builds sustainable programs that meet community needs
- increases community ownership of program issues and solutions
- makes communications clear, offers transparency and builds trust among stakeholders, improves the likelihood of buy-in
- strengthens community partnerships, team functioning and interdisciplinary collaboration
- enhances capacity for planning team members (builds new planning and implementation skills)
- improves satisfaction for the planners and participants

The Planning Model

To develop the Planner, the study team reviewed effective planning practices and consulted with experts who study and run community-based exercise programs for people with stroke. The planning model is based on a well-established Knowledge to Action (KTA) planning cycle used to help bring the results of health-care research into effective changes in practice [11]. It builds upon the CAN-IMPLEMENT processes [12,13] and the Implementation Roadmap [14], both evidence-informed approaches for implementing best practices. The framework for decision-making encourages the participation of all community **stakeholders** (exercise participants, participant families/ caregivers, program provider agencies, health partners) and relies on the use of local evidence to inform each step. Further information on the KTA cycle is provided in the Appendix.

Read More in the Appendix

C. Knowledge Translation/Mobilization: The Knowledge to Action Cycle

Implementation Planning Roadmap Guiding Principles and Assumptions

There are several important principles or values underpinning the Roadmap. The planning approach is:

- intended for exercise programs situated within the community and provided by organizations with a mandate for community service (vs. provision of individual therapeutic care)
- **participant-centred** [15] (putting people with stroke and caregivers at the centre of decisions and seeing them as experts, working alongside service providers to achieve the best outcomes)*
- participatory and **inclusive** (people with stroke and other relevant stakeholders, including health-care partners involved in co-creating the implementation plan)
- evidence-informed (uses effective approaches to planning and implementation and incorporates the use of local data in making decisions)
- aimed at strengthening participant health outcomes
- focused on sustaining successful programs

Assumptions underlying the Roadmap include:

- planning is required to achieve successful implementation that is sustained
- leadership and facilitation drives and nurtures implementation
- the engagement of stakeholders and partners in the planning process ensures the implemented programs are participant- and community-centred and have community buy-in
- the planning approach is generic; guidance can be applied to any exercise program under consideration in your community
- planning and implementation efforts should be pragmatic while striving to optimize benefit and impact

*In the Planner we use the term "**participants**" to refer to people with stroke enrolled in community-based exercise programs. Health professionals commonly refer to those in their care as "clients" or "patients", especially those receiving therapy on a 1:1 basis. Our study participants advised against "medicalizing" the community-based experience, and instead encourage participants to consider exercise as part of an ongoing healthy lifestyle.

The Implementation Planning Roadmap (preview below) outlines three phases. Planning activities within these phases are organized into 8 steps.

Phase 1 **Understanding our needs, population, and resources**

1. Call to Action
2. Conduct a Community Scan
3. Select Program and Initiate Implementation Planning

Phase 2 **Building solutions that work for us**

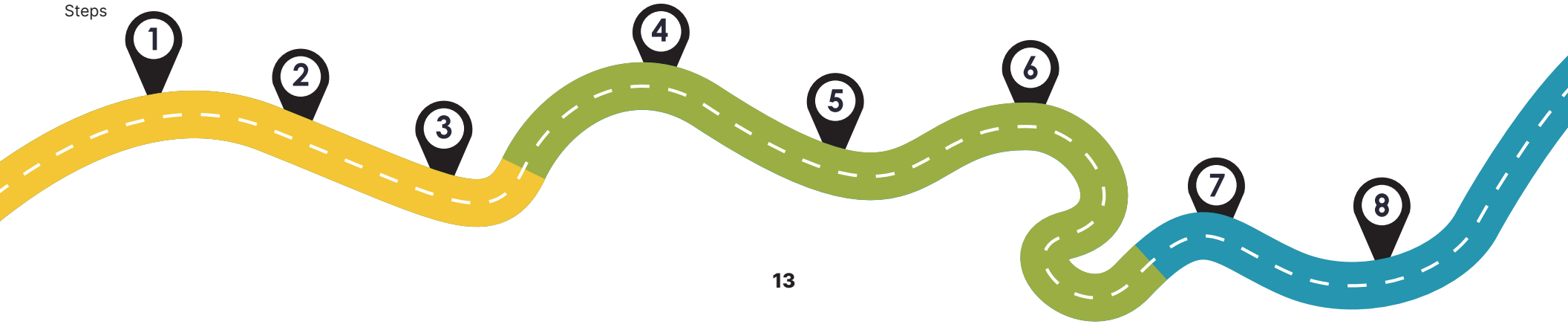
4. Identify Barriers and Drivers to Program Implementation
5. Develop Solutions Tailored to Specific Implementation Barriers
6. Plan for Evaluation

Phase 3 **Implementing, monitoring, and maintaining our program**

7. Implement the Exercise Program
8. Evaluate, Adjust, Sustain

What's in the Planner?

- The **Planning Guide** describes each phase, step, and activity in the planning process; it includes many examples of actual program planner and exercise participant experiences. At the end of each phase **Travel Tips** and **Potholes**, a **Progress Checklist** and a list of **Tools and Resources** help users complete planning activities.
- A **Glossary of terms** defines 'clinical and technical' language marked in the text. When a new term is mentioned for the first time in the Planner, it is highlighted in blue (with no underline, like **this**), and links directly to its definition in the glossary.
- All references can be found in the **Bibliography**, which provides links to a large library of supporting literature and research.
- Additional information about planning concepts and exercise programs for people with stroke is included in the **Appendix**. For example, the Planner refers to three Canadian evidence-based programs developed by the co-authors of this Planner: **FAME** [16], **Fit for Function** [17] and **TIME™** [18], as well as programs designated as **Heart Wise Exercise** (HWE) by the University of Ottawa Heart Institute [19].
- The **Planning Tools and Resources** include checklists, templates, worksheets, and program samples designed to help you achieve each step in the planning process. In addition to the static tools found within this booklet, many of these files are available online as individually downloadable, editable files at **AfterStroke.ca/SRIM**



Navigation

Basic planning principles and activities are presented in each phase with expanded content and additional resources provided in the Appendix. Select the guidance and use the tools that you think will help you make the most informed decisions.

While planning activities are presented in a logical sequence, the process is fluid and the work is not meant to be carried out in a rigid or lockstep manner. Several tasks may be started at the same time and, as a team gathers information, it is common to reconsider early assumptions or decisions and to make changes to the plan.

Key messages and planning principles are highlighted with this icon.

External Links connect to useful online resources and organizations.

Field Notes illustrate examples of planning challenges and solutions experienced by exercise program planners in Canada.

Planning Tools and Resources are noted as they are introduced within the guide. A list of relevant tools is given at the end of each planning phase, and a complete set of tools is bundled together and provided separately.

Read More: Additional information for a topic is provided in the Appendix.

Navigation tip: This document features many internal links, including appendices, tools, and a bibliography. Where possible, links are provided on these destination pages to help readers return to their previous position within the planner.

If viewing in Adobe Acrobat, to return to a previous page readers may input Alt + left arrow (PC) or Command + left arrow (Mac). This feature works much like the back button in a web browser.

What's not in the Planner?

- **A systematic review** of evidence about the effectiveness of exercise for stroke.
- **Stroke education**. While it is important for community planners to be well informed about the condition of stroke, stroke care, and stroke recovery, the Planner was not designed to provide detailed stroke education. However, program planning implications are identified and multiple references and links to relevant resources are noted, e.g. strokengine.ca is an excellent source of information. Some of the exercise programs referred to in the Planner include educational material.
- **A complete exercise regimen and specific guidance on participant supervision and safety**. This resource is focused on the planning process and does not outline or recommend any one exercise program. The Planner does describe core program elements and nationally established **guidelines** for the safe delivery of exercise programs developed for people with stroke [2]. Several evidence-based programs designed for people with stroke are in use across Canada. Planners are encouraged to consult exercise program developers and health partners about safety provisions.
- **A single, ideal approach**. The Planner does not prescribe for example, the most appropriate membership for a local planning team, a mandatory exercise equipment list, or the best evaluation measure for program and participant outcomes. Community planning contexts are diverse, exercise programs vary, and a gold standard for outcome measures has not yet been established in the research. You are encouraged to base your decisions on a systematic examination of your own community's unique interests, needs, capacities, and the program options available to you. Multiple examples are provided.

Where do we start?

The answer will be unique for each reader and each planning team and depends on many factors, e.g.

- What skills and experience do you/your team have in program planning?
- What do you/your team know about exercise programs adapted for people with stroke?
- Who will lead this initiative in your community; and what is your role on the planning team?
- What is your biggest concern about introducing this type of program to the community?
- Do the necessary resources (e.g. facilities, funding, trained staff, expert help) already exist to support this type of program or are you starting with nothing in place?
- Do you have good information about the stroke population in your community and their level of interest in participating in such a program?
- Do you already have a particular program in mind?

The extent to which you have access to resources and expertise and the size and complexity of your local context (e.g. a small, rural population across a large geographic area vs. a large urban centre with potentially more access to services) will also influence your planning approach.

While there is no one ideal planning strategy and no gold standard exercise program that will satisfy every circumstance, this guide presents a systematic approach to planning that can be used in every case to help you make the most informed decisions in support of your community's program goals.

In the user evaluation of the Planner, committee leaders and program managers told us they benefitted from understanding the full process before deciding which elements were most critical to their local context. Individual planning team members expressed different interests. For example, fitness professionals often focused on training requirements and the delivery aspects of the exercise programs, the adaptability of the regimens, and safety issues. Administrators focused on responsibilities for funding, staffing, enrolment, and program sustainability. People with stroke wanted a voice on the planning team to ensure their personal goals and needs were heard and supported. We also heard about the benefits of including all team members in planning discussions regardless of whether their roles were exclusively about planning or exclusively on the delivery side. Study participants said it was important that planners and implementers learn about each other's roles and the issues important to each of them.

Photo by Daniel Gonzalez on Unsplash

There is a wealth of material in this resource. You may not require all the information, or need to complete every activity, or use every tool. To find your way forward, consider the following three questions:

1. What is your main planning goal at this time?

Scenario A	Scenario B	Scenario C
You are responding to some level of local interest in an exercise program for people with stroke. You have never offered a program like this and need to organize yourselves and your approach to planning. You'd like to know more about these types of exercise programs and determine what would be the most feasible, applicable, and acceptable solution for your community.	Your mandate and infrastructure are in place to deliver **adaptive exercise** programs and you are considering the addition of a new program designed for people with stroke. You are interested in a turnkey solution designed by health experts. You would like to launch within the next six months.	You have previous experience implementing this type of program and are considering whether to renew/ continue to offer this class.
Start at Phase 1, Step 1 ... to investigate the 'Call to Action', assemble an effective planning team, conduct community assessments, become familiar with exercise program options and best practices, determine necessary resources, develop a business case and implementation plan.	**Follow Phase 2, Step 4 ...** to systematically identify barriers and drivers to program implementation. Examine factors related to i) the selected program, ii) program users, and iii) organizational setting and develop solutions to ensure the successful implementation and maintenance of the selected program.	**Review the guidance provided on program evaluation in Phase 2, Step 6 and Phase 3, Step 8 ...** to consider what information or evidence is available on program and participant outcomes that would justify a decision either way. What do you need to do to ensure program sustainability?

2. Exactly what has your team achieved in your planning process to date?

While many communities begin by conducting a preliminary assessment of regional demand for a program, some may be in the enviable position of being funded and poised to launch an already agreed-upon program. To optimize your planning process, have a look at the Progress Checklists at the end of each Phase. Your responses to these questions will help you determine where you are on the Implementation Planning Roadmap and what work still needs to be done. If you have addressed the issues outlined in the checklist for Phase 1, proceed to Phase 2. Be aware that it is very common to revisit tasks and decisions until they can be fully resolved. If you are unsure or unable to answer key questions, consider whether you need to gather more data to make better-informed decisions before taking the next step. Review sections in the guide and the tools for any steps you might have missed.

3. What knowledge and skills will you require on your planning team?

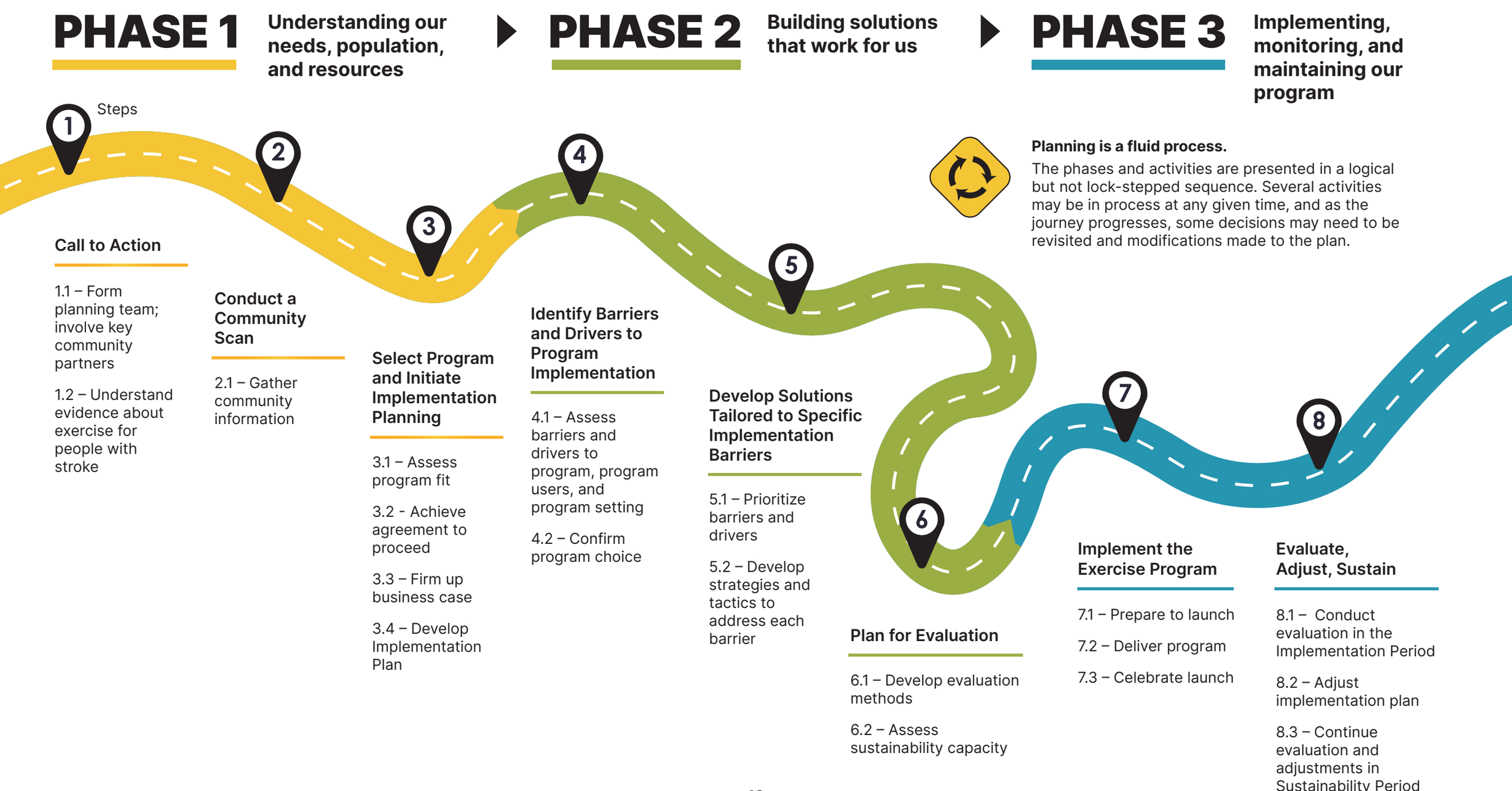
Consider your personal experience and the range of talent you may need to assemble on your team. Strong teams value the individual knowledge, skills, and contributions of a diverse set of stakeholders (see Phase 1, Step 1). The coordination and delegation of planning activities requires dedicated leadership and good communication skills. Productive teams share the workload – a team leader can assign specific tasks to individual planning team members according to their unique expertise and interests. Don't underestimate the value of spending a little time together as a planning team to develop working terms of reference that everyone understands and shares. Keep in mind there is value in providing opportunities to build planning capacity by helping team members develop new skills and learn more about program implementation.

Once you've determined your starting position in the planning process, use the Implementation Planning Roadmap as a quick reference to stay on course.

"I think the most critical thing is getting all the partners into the discussions about how the program will run. Who will be responsible for which aspects of the program, and how do we ensure that everybody is working together on a common goal to achieve the aims of whatever we're trying to deliver? That was one of the areas where I think we ran into a little challenge at times particularly in our relationship with the local health system."

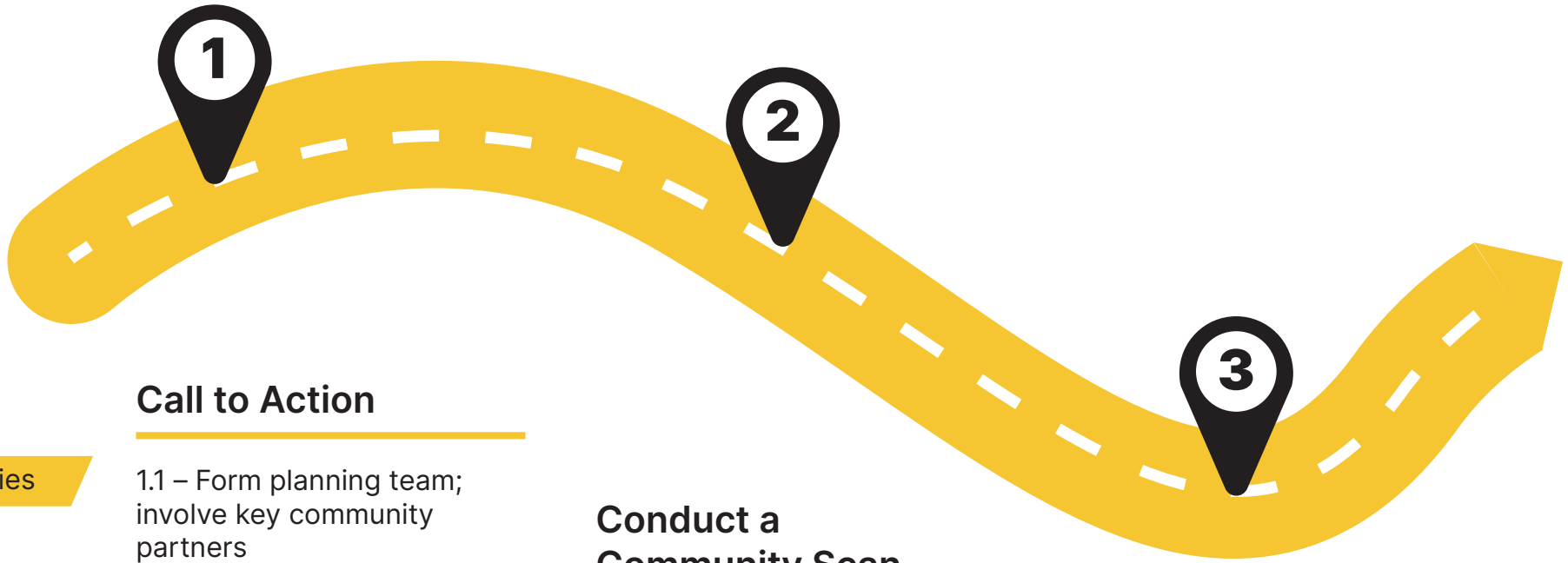
- Program Manager

Figure 2: Implementation Planning Roadmap



PHASE 1 Understanding our needs, population, and resources

Steps



Activities

Call to Action

1.1 – Form planning team; involve key community partners

1.2 – Understand evidence about exercise for people with stroke

Conduct a Community Scan

2.1 – Gather community information

Select program and initiate implementation planning

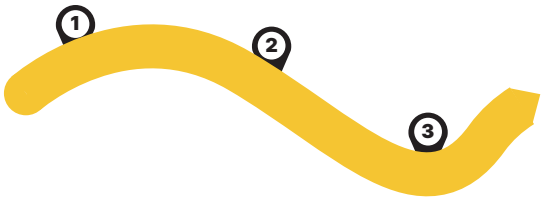
3.1 – Assess program fit

3.2 – Achieve agreement to proceed

3.3 – Firm up business case

3.4 – Develop implementation plan

PHASE 1 Understanding our needs, population, and resources



Phase 1 is about forming the planning team, obtaining agreement on the approach to planning, and examining the local need and level of interest in an exercise program for people with stroke.

The team ensures they are familiar with the requirements of exercise programs designed for people with stroke and gathers the necessary evidence to address the feasibility, applicability acceptability, equity, and affordability of offering a program in the community.

This is an active period of organization and consultation that may proceed quickly or require several months depending on the local circumstances.

Guiding questions

Organizations faced with the prospect of introducing a new program will face many questions, e.g.

- What is the local demand for this program and where is it coming from? Would the enrolment number be adequate to make the program viable?
- Who is eligible? Would an exercise program respond to a specific service gap in our community?
- What information is available or can be collected about the local population and community to help with decision-making?
- What are the organizational and financial implications of providing an exercise program? How will it be funded, e.g. start-up costs, ongoing sponsorship, or member fees?
- Do alternative exercise programs exist in this community? Is there an issue of under or overuse of existing exercise programs or exercise management options?
- Have all potential users and 'stakeholders' (program participants, participant families/caregivers, health professionals, community agencies) been considered and included in decision-making?
- Do these stakeholders agree on the priority, urgency, and need for an exercise program for people with stroke?
- Who will lead or co-lead the team? And who will assume responsibility for owning, maintaining, and updating the program?
- What equipment, service delivery or organizational factors will require further exploration, e.g. transportation for participants? need for participant attendants or caregivers? safety, training, supervision, insurance, or liability issues? building accessibility (parking, ramps, washrooms, doors)?

The Stroke Recovery in Motion planning process will help your planning team address each concern.

1 Define the Call to Action

Effective planning requires a sense of a common purpose and an integrated, informed planning team that follows an organized, systematic approach to planning and makes decisions that are supported by local evidence.

Why is community engagement important?

Understanding your community's experiences, views, expectations, and concerns will be critical to co-developing a responsive, effective, and sustainable program. By working together to build a program that responds to the community's needs and meets their goals and expectations, it is more likely to be used.

Activity 1.1

Form the planning team; involve the community, identify key partners

The benefits of an exercise program designed for people with stroke is understood as your first priority and primary objective, however, your organization might also consider collateral benefits in introducing such a program. Study participants suggested an adaptive program could also act as a gateway for participants to transition to other mainstream program options. And by raising awareness of your organization's commitment to community needs, it may be possible to increase enrolment and, in turn, improve program sustainability.

The motivation for introducing an exercise program may be sparked by a broad range of individuals or organizations within your community. It is important at the outset to identify who will become key partners and how these relationships will inform and contribute to the implementation of a successful program.

> "Including stroke survivors/caregivers is an absolute must! Unless you have been through it, you have no way of knowing what survivors/ caregivers need in terms of an exercise program and how it might look. Once the program is developed, other stroke survivors will know that participants who have had a stroke were involved and would be comforted by that."
>
> **- Person with stroke**

> "Meeting with the stakeholders helped the different organizations to feel included and part of the process, rather than 'OK, you are doing your thing; We are going to run this program; and We will let you know about it'. Instead they were actually part of the figuring it out stage, which I think they really appreciated."
>
> **- Physiotherapist**

> "I think the first criteria I would be looking for are people who believe in what we're trying to do and who are genuinely willing to work with a group of people to ensure its success."
>
> **- Program Manager**

Consider how the following members of your community can contribute to the success of your implementation plan

i) Invite those impacted by stroke, specifically the people living with stroke, their family, caregivers, and support systems to be planning partners or members of an advisory committee

- Individuals with stroke who wish to gain or maintain recovery and remain active in their lives within the community may be eager to share their experience and concerns. There will also be people with stroke in your community who are less motivated to include exercise in their recovery. Consider how you might identify and encourage their participation too.
- Caregivers, families, and friends play an important role in support and can provide valuable insights into making a program accessible and successful.
- The volunteer community: in addition to family, friends and caregivers, volunteers are often relied upon for transportation or companionship and can provide important input to planning.
- A stroke **advocacy group** or foundation eager to champion support efforts on behalf of their clients may prove to be an important resource.

Remember, the purpose of engagement is to elicit peoples' experiences and not for any one individual to broadly represent the population of people living with stroke.

We asked people with stroke to comment on their role in contributing to the planning of community-based exercise programs. While most indicated they were unlikely to individually lead the development of a program, they uniformly stressed how important it was to be involved in the planning process. People with stroke want to have their needs, goals and expectations heard, understood, and respected.

Several organizations in Canada are dedicated to supporting people with stroke and/or **acquired brain injury**. Consider contacting your local health authority and explore national and regional connections with stroke networks, patient advocacy groups, peer support groups, hospital patient engagement committees, and volunteer networks, e.g.:

- heartandstroke.ca/what-we-do/our-impact/transforming-recovery
- braininjurycanada.ca
- www.afterstroke.ca
- strokengine.ca/en/resources/for-patients-and-families/

Skip to Tool 1.1: Engaging Stroke/Caregiver Partners on Your Planning Team

An invitation template for stroke/caregiver planning partners, sample questions to facilitate your conversation about individual needs and interests, and TIPS from people with stroke about how they would like to be engaged are provided in the package of Tools.

Study participants recommended taking some time to explore with stroke planning partners their sense of the purpose of the exercise program, in particular the issue of shifting from being a "patient" in the health-care system to being a "participant" in a community-based program. They may have questions such as: will this be a continuation of therapy or is it different from therapy; is it safe; is the program supported by my health-care provider?

Level of engagement

People living with the effects of stroke, their families and caregivers cautioned against taking on a planning role that is too demanding. People with stroke may experience limits on how much they are able to participate because physical and **cognitive** challenges can persist long into one's recovery. It's important that you discuss the various opportunities for engagement to enable planning partners or advisory members to be involved at a level they are comfortable with given their individual situation and concerns, e.g., mobility, fatigue, or memory issues.

Our study stroke advisors offered practical tips for partnering with people with stroke such as ensuring materials are accessible (i.e., large font size, minimal jargon) and available in advance of meetings, keeping meeting times brief or connecting afterwards on 1:1 basis, and ensuring everyone feels welcome.

"An added bonus of re-integrating into community programs is the level of confidence and normalcy a client feels. A program can be offered through hospitals or public health centres, but there, they are still a 'patient'. Registering and participating in a 'fitness class' makes them 'participants' and helps their mental wellbeing."

- Fitness Program Coordinator, Seniors Recreation Centre

"What's most relevant is their experience, how their needs are taken into consideration, how they are supported, how easily they are able to find these programs and connect to others … a really great program can be created, but if people are not aware of it, it won't be sustained."

- Caregiver of person with stroke

"In a regular program, stroke patients may find it embarrassing when they cannot keep up with others, self-conscious, etc. I certainly felt this way in the beginning when going to a gym for the first time."

- Person with stroke

"I have thought of it in the past, many times, and quickly gave up because of my limited physical and cognitive energies that are required for day-to-day living, navigating the systems, and with what is left, trying to have a normal life."

- Person with stroke

ii) Identify potential municipal partners

- Therapeutic recreation coordinators working within seniors' or assisted living residences
- Recreation centre managers with a mandate to deliver accessible, inclusive programming
- Private gym trainers or managers wanting to better serve this group of clients
- Fitness professionals delivering recreation centre programs
- Other community organizations or venues with a vested interest in programs for people with stroke

iii) Include members of the health-care system

- Health-care professionals involved in discharge planning from hospital or rehabilitation facilities
- Researchers engaged in public health promotion
- Primary care physicians, community-based physiotherapists, family health clinics, community health centres, private physiotherapy clinics, or long-term care facilities, who may be a source of referrals
- Regional health authority care coordinator/navigators responding to calls from clients seeking appropriate and affordable community-based support and resources

Business photo created by freepik.com

> "I'm concerned about family caregiver burnout. Sometimes, by placing their loved one in a good program a few times a week, they can have a little respite, run a few errands, maybe do their own workout while waiting at the centre!"
>
> **- Manager, inclusive programming, City Parks and Recreation**

> "A lot of times when it comes to priority setting, the fitness instructors are our frontline, so they get a lot of feedback from participants or hear things in the community. Most don't just teach for us; they teach at other facilities. They teach at other organizations doing different things and so they hear a lot and tend to help us identify where there might be a gap and how we can go about working together to offer more services."
>
> **- Program Coordinator**

> "One advantage of a community-based group program over 'in-home' care is the opportunity for the client to get out and socialize. They can become very isolated and depressed at home."
>
> **- Health Authority Navigator**

iv) Consider integrating the education sector

- University and college programs in rehabilitation science, sports medicine, recreation therapy, etc. may be interested in a partnership that creates opportunities for the students (e.g. internships, research) and provides much needed assistance for program delivery

> "There is a [university] rehabilitation and fitness program that I participated in several years ago. An individual exercise program is developed, and a participant is assisted by one of the students from the kinesiology program. Classes are 2 days a week, for 2 hours, and when I was there, classes were held in the morning, afternoon and evening. The students get credits in their program."
>
> **- Person with stroke**

Co-developing a planning partnership

It is important to create a safe and respectful planning environment where all participants on your planning team feel welcome and able to meaningfully contribute. Community partners may have an integral role on your planning team or act in an advisory capacity at key points during your planning process.

Guiding questions*

- Does our planning team reflect the diversity of the population we serve (i.e., the age, genders, ethnicity, and social aspects of the population we hope to reach in the program)?
- What will be our ground rules for working together, e.g. how will we show mutual respect and encourage trust?
- Do planning partners have any special skills/expertise (e.g., advocacy, communications, fundraising, administration)?
- Do **planning partners** require any orientation or training to enable them to participate on the planning team?
- Are there any cultural or historical issues to consider?
- Are there any language issues that may prevent a planning partner from participating fully?
- How will we recognize the contributions of planning partners?
- What measures can we put in place to create an environment where all planning partners are valued?

Read More in the Appendix

D. Developing a Planning Partnership

* Some questions adapted from the PEIR work book [20]

Table 1: Collective knowledge and skills required for planning

KNOWLEDGE & SKILLS	VALUE OF CONTRIBUTION
Personal and family/caregiver experience living with stroke	to ensure that issues related to participant needs, goals and concerns are discussed, and that outcomes such as quality of life are considered; to provide input on the logistics of the program and how realistic and feasible it is for people with stroke and their caregivers
Clinical knowledge of stroke and stroke exercise programs	to address issues related to benefits of exercise; to have knowledge of **best practice** guidelines and recommendations and ability to interpret current views and latest research; to consult re: participant pre-screening, eligibility, special needs, flexibility or **adaptation** of exercise regimen, evaluation of individual progress, e.g. a physiotherapist, kinesiologist, clinical exercise physiologist, or physician working with patients who've had a stroke
Experience in delivering and managing community exercise programs	to safely deliver programs as they were designed; including the training of fitness professionals and monitoring of program and participant outcomes; program marketing and recruitment
Engagement of regional health authority, health partners and care providers, patient advocacy groups	to provide community/population health information, to provide access to referral networks, and knowledge of local care/service practices, opportunities, and challenges; to understand the local population, e.g. cultural aspects
Administrative expertise	to address agency/organizational and facility operating requirements, client accessibility, safety, and medico-legal issues
Engagement of municipality	to consider community service mandates, priorities, funding requirements; to consult re: challenges, e.g. client transportation
Project management skills	to develop and execute implementation, evaluation, and sustainability plans; to manage timelines, budget, meetings/conference calls; ensure that decisions are recorded, documents prepared and circulated as needed
Leadership and facilitation skills	to encourage constructive debate, manage group process and decision-making, maintain motivation and direction (champion the initiative), and ensure all members contribute to and achieve aims of the initiative

Activity 1.1a

Define the team's terms of reference and create a project charter

Creating a project charter is a common project management practice that helps the team determine:

- The names of the planning committee chair and team members: It is important to identify a chair or leader (or co-chairs and co-leaders) to lead the work and keep the project on track. You will also want to consider how your planning team membership will be determined (see potential pool of planning partners, section 1.1)
- The objectives and scope of the work to be completed
- The roles and responsibilities for members, including signing authorities, communications, management of project documentation and meeting notes
- Strategies to ensure equality of members and to minimize differences in power (e.g., we are all members of the working team; can we agree to address each other by first name?)
- How decisions will be made, how consensus will be achieved, and how decisions are reported
- Disclosures: Disclosures refer to anything that might be perceived to influence decision-making of the team. They can be potential conflicts of interest or other things such as possible relationships with agencies or corporations whose products or services are related to the proposed program including issues of competitive advantage, financial interests or relationships, ownership, employment, contractual, creditor or consultative relationships
- Location, method, and frequency of meetings; availability and commitment of members to meet and/or to review findings or reports
- Funding source(s) and management of meeting costs (e.g. travel, accommodation, parking, supplies, out of pocket expenses); potential compensation (e.g. advisory committee honorariums, training, administrative or consulting fees); costs associated with production, distribution, or translation of program materials)

Why dedicate time and effort to creating a project charter?

Building a successful, sustained community-based exercise program requires good leadership, effective community partnerships, and terms of reference that everyone understands and shares. A **project charter** is a working agreement that helps team members stay focused on goals, clarifies commitments, roles, responsibilities, and assists the team to make and document critical planning decisions.

Skip to Tool 1.1a: BudgetWorksheet_PlanningTeamExpenses

Skip to Tool 1.1b: Project Charter Template

Skip to Tool 1.1b: Disclosure Form

Activity 1.1b

Determine decision-making approach

Your planning team may choose from among several decision-making methods depending on the scope and priority of planning concerns, including:

Voting	a decision is reached based on achieving an agreed portion of votes from the group. Consider designation of majority, super majority (60%, two-thirds), or highest number of votes, and establishing a minimum number of votes
Consensus	a majority agrees, and no one objects
Unanimous	all agree
Consultation with a principle decision-maker, executive	the group/project team is consulted for information and advice, but one person consolidates and makes the final choice

If you begin planning with a very small team, you may decide to forego the drafting of a formal charter and assume that team member disclosures are not necessary or that your decision-making approach will not present an issue. However, as the initiative develops and participation expands to include greater representation from your community (e.g. partner organizations, private or public funding or sponsorship, health professional consultants, and stroke advisory members) it may become increasingly important that everyone is clear on the expectations and operation of the planning committee.

> "The Planner talks about the whole idea around decision-making and consensus building from the start. If some of that would have been established from the very beginning we may have had a better opportunity to keep the program going into the future having that direct connection with the partner as opposed to somebody in the middle kind of playing point for both groups."
>
> **- Program Manager**

Why is it important to formally establish your approach to decision-making?

Best project management practices recommend ensuring a shared understanding of how planning decisions will be made. The difference between a decision made by unilateral executive authority vs. achieving group consensus could impact the success of your program. Consider your organizational processes, your planning team's composition, and your planning partner's roles and expectations about their contributions to the plan. It is also helpful to document critical decisions should you later need to explain the process or justify key decisions made over the course of planning.

Read More in the Appendix

E. Decision-Making Methods

Activity 1.2

Understand the evidence supporting exercise for people with stroke

In this task, your planning team works to achieve a shared understanding of the aims, strengths, and benefits of exercise for people with stroke. They become familiar with best practices, **core or critical exercise activities**, and how to ensure effective exercise program delivery.

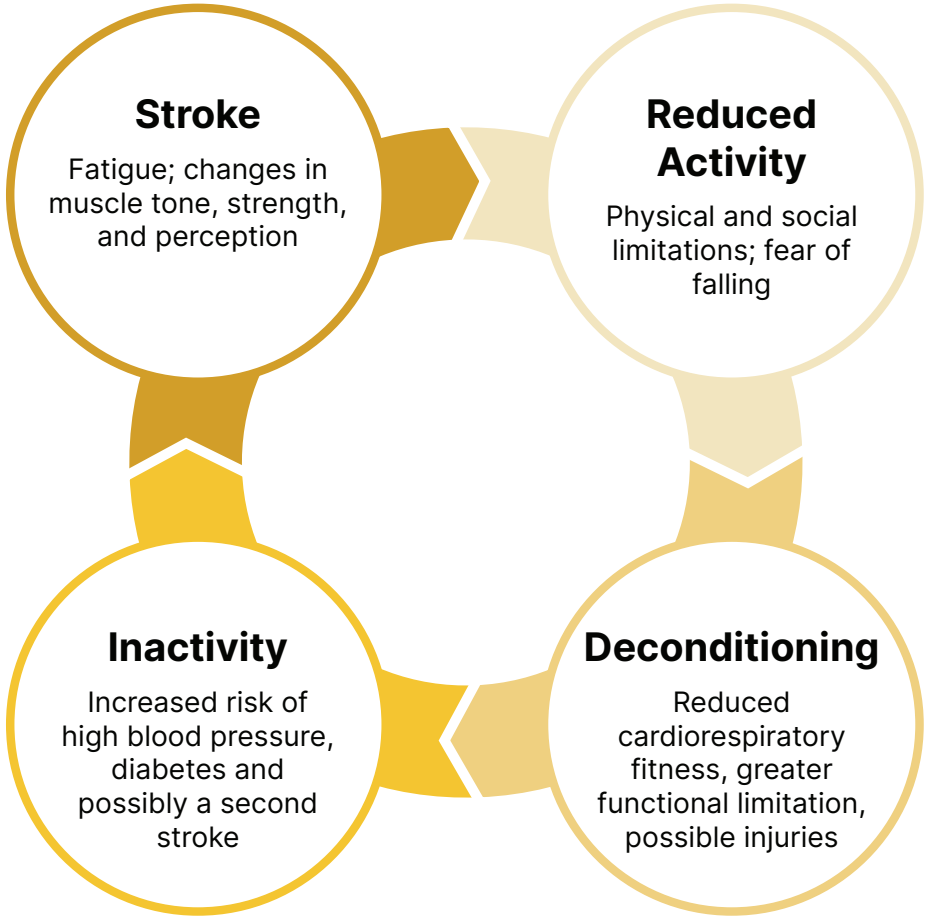
Why is it important to understand the evidence for the benefits of exercise for people after stroke?

Community recreation centres can be challenged to find and dedicate the necessary program resources. Your planning team may need to make a convincing case for the value of launching a safe, quality exercise program for people with stroke. Community partners who understand and acknowledge the value of exercise after stroke are likely to be more supportive.

Stroke and deconditioning

Lack of physical activity is a known contributor to cardiovascular disease, including stroke. People who have sustained a stroke frequently reduce their physical activity levels even further. They may face multiple challenges including fatigue, altered sensation, changes in muscle tone, muscle strength and control of movement. These changes can affect posture and balance. Changes to **gait** and movement patterns resulting from the stroke may over time contribute to other musculoskeletal injuries or lower back, knee, or hip pain. People with stroke can quickly become physically deconditioned and experience low **cardiorespiratory** fitness. This low level of physical fitness is associated with increased functional limitation and disability [21]. Inactivity and **sedentary behaviour** also place individuals at further risk of high blood pressure, diabetes mellitus, and possibly a second stroke.

Figure 3: Deconditioning cycle after stroke



The good news – exercise:

- **Improves motor recovery:** Exercise breaks the cycle of physical inactivity and negative health consequences. Aerobic exercise (physical activity that strengthens heart and lungs and uses large muscle groups at a moderate intensity, maintained continuously for 5-10 minutes) has been shown to improve motor recovery and quality of life for those living with stroke [22–25]. Research evidence shows that exercise after stroke has been helpful in controlling blood pressure [26,27]. An estimated 60% of people with stroke experience some challenge to their thinking processes and this is associated with poorer recovery and decreased ability to manage daily functions; however, new evidence suggests that exercise can improve or maintain **cognitive** function after stroke [28–30].
- **Improves mood:** Exercise program managers have noted that for many participants, simply being able to get out of the house and attend a class with new friends is a shared experience that helps boost mood and self-esteem; it can help reduce the depression that often occurs when people become increasingly socially isolated.
- **Is safe:** Evidence also indicates physical activity, including moderate aerobic exercise, is safe during stroke recovery [22]. When delivered by trained fitness professionals according to established guidelines for best practice, including a pre-exercise screening and risk assessment and an appropriate participant-to-instructor ratio, such programs offer a safe environment for physical activity.

"My balance and coordination have really improved. And, I've met other people in the same situation as me, so I don't feel like I'm going through this alone."

- Person with Stroke, Exercise Program Participant

"Having the opportunity to access community-based programs that are close to home is important to so many. Being able to come to a place like the YMCA, where people can make friends and be connected to others, is so important for life after stroke."

- Senior Regional Manager of Health, Fitness and Aquatics, YMCA

Exercise programs designed for people with stroke

Standards for exercise after stroke have been developed over time by expert teams who have reviewed the available research literature and carefully evaluated and summarized the results of multiple studies. The resulting recommendations reflect their agreement on what an exercise regimen should include and how to ensure safe delivery and optimal participant outcomes [2,31,32]. The Canadian Stroke Community-based Exercise Recommendations for participant eligibility, safety and supervision, nature of exercise activity, and instructor training requirements are summarised in Figure 4 [2]. A wealth of resources from the Canadian Heart and Stroke Foundation, the Canadian Partnership for Stroke Recovery, and the Canadian website, Strokengine.ca are included in the Bibliography. These include recently updated systematic reviews of the evidence for stroke rehabilitation as well as specific guidelines for aerobic exercise after stroke [22,33,34].

Programs for people with stroke incorporate strength, balance, and aerobic elements and typically include:

- specific resistance or **functional** strength training to build upper and lower limb strength,
- a cautious progression of aerobic activities to improve cardiovascular conditioning and endurance,
- exercises designed to enhance posture, balance, coordination, and mobility,
- an emphasis on improving walking ability and prevention of falls,
- warm up and cool down periods to ensure safe and effective raising and lowering of heart rate and to develop familiarity with movement patterns,
- a high level of repetition and practice to encourage motor re-learning, important to stroke recovery,
- **task-focused** activities to assist participants achieve functional independence which make daily activities like getting up from a chair, climbing stairs, shopping, or walking the dog easier to manage.

"Participants in exercise programs specifically designed for people with balance and mobility challenges describe improvements in balance, strength and confidence that translate to improved ability to perform self-care and social activities"

- TIME™ Program Developer

Figure 4: Canadian Stroke Community-based Exercise Recommendations [2]

1. Screening by a Qualified Health-care Professional

Exercise providers should ensure people with stroke have consulted with a qualified health-care professional (e.g., physician, nurse practitioner, or physical therapist) before participating in any exercise program to ensure that there are no conditions that require special consideration or would be contraindicative to participating in the exercise program. [Strong Recommendation; Low Quality Evidence].

2. Screening by the Program/ Exercise Provider

The program/exercise provider should undertake a formal screening process to ensure the participant meets program eligibility criteria and to ensure a match between the program and the participant. Screening processes could include a range of activities such as interviewing potential participants, reviewing health information from the physician/other referring health-care professionals, reviewing information about the participant's functional ability level, and identifying the need for other exercise considerations. [Strong Recommendation; Low Quality Evidence]. A mechanism should be in place to ensure that the exercise provider is aware of any concerns and recommendations identified through the screening process.

3. Exercise Program Supervision and Format

The exercise program supervision and format (e.g., individual versus group) should be designed to meet the needs of the targeted population.

Supervision: Participants with stroke should be supervised during the exercise program by trained exercise providers using a one-on-one or group format. [Strong Recommendation; Low Quality Evidence].

Group versus individual format: When people with stroke are able to exercise more independently, a group format should be provided to foster social support and confidence (i.e., self-efficacy). [Strong Recommendation; Low Quality Evidence].

Participant-to-instructor ratio: A participant-to-instructor ratio of 4:1 should be provided when supervising group exercise programs that incorporate the practice of standing and walking tasks for people with stroke and balance and mobility limitations. [Conditional Recommendation; Low Quality Evidence]. Participant-to-instructor ratios may vary depending on the functional ability of the participants and skill level of the exercise provider.

4. Exercise Program Principles

The exercise provider should incorporate standard exercise training principles [Strong Recommendation; Low Quality Evidence], including an emphasis on the practice of functional tasks [Strong Recommendation; Moderate Quality Evidence] within the exercise program to address the needs of people with stroke.

5. Program Evaluation

Evaluation procedures should be in place to monitor program delivery (e.g., referral and screening processes, compliance with exercise program and procedures), participant engagement, and program **impact**. [Conditional Recommendation, Low Quality Evidence].

6. Exercise Providers

6.1. Exercise providers should receive education and training to attain the necessary knowledge of stroke and stroke-related impairments, common comorbid health conditions, and basic exercise principles. Additionally, exercise providers should have the skills required to safely and appropriately deliver the exercise program, to safely increase or decrease the level of challenge of the exercises, and to recognize and respond to adverse events and emergencies. [Strong Recommendation, Low Quality Evidence].

6.2. Exercise providers should establish linkages with health-care providers who have stroke-specific and exercise expertise. These linkages can facilitate exercise program referrals, training, and ongoing consultation to support delivery of a safe and beneficial exercise program. [Strong Recommendation, Low Quality Evidence].

7. Facility

The exercise provider should offer participants a general orientation to the facility, and a safe and accessible exercise environment that meets the needs of the participants. This should include barrier-free access to parking, facility entrance, transit pick-up/drop-off areas, exercise classrooms, exercise equipment, change rooms/locker rooms and washrooms. [Strong Recommendation, Low Quality Evidence].

8. Emergency Plan and Equipment

The program provider should have an emergency plan and adverse event protocol in place that is documented and known to all exercise providers including: access to in-house first aid services from qualified personnel; phone access to Emergency Medical Services; access to an Automatic External Defibrillator (AED); and access to a source of glucose (e.g., fruit juice). There should be a quality improvement process in place to track and review incidents or adverse events. [Strong Recommendation, Low Quality Evidence].

2 Conduct a Community Scan

The planning team has now formed. Key partners, including people with stroke, are on board; the group has made decisions about why and how it wants to work together; there is a common understanding of the value of exercise for people with stroke. The purpose of this next step is to collect community data to understand the local context and support making evidence-informed decisions.

Why is it important to fully assess and understand the local environment?

Conducting a community or 'environmental' scan creates a current snapshot of your setting, identifies relevant trends, events, strengths, gaps, or areas of concern, and gathers the information needed to plan for successful implementation and sustainability of the proposed program.

Activity 2.1

Gather community information

1. Begin by preparing an inventory of existing community programs and services. This is done to understand what niche the proposed exercise program might fill while also identifying potential competitor programs. A template is provided in the package of Tools.

Skip to Tool 2.1: Scan Inventory Programs & Services

2. Contact government and regional health authorities and agencies, stroke networks, and patient advocacy groups to obtain information about the number of residents in your community with stroke. Consider reports of hospital, rehabilitation facility and long-term care admissions, and home care rehabilitation service usage. The health partner on your team may have access to stroke data for your region from the Canadian Institute for Health Information (CIHI) [35]. Determine if any provincial community wellness or health promotion programs or policies exist in your area. Consider potential resource implications for this assessment; you may need to allocate some funds to support this activity.
3. Collect information about community awareness and attitudes towards the introduction of the proposed exercise program, for example: how far would participants be willing to travel to attend a specialized program and how much would they be willing to pay? Are fitness professionals willing to be trained and prepared to travel if necessary? Your method can be as simple as chatting with people or as complex as conducting interviews, focus groups and formal surveys. A tool is provided to help you determine community level of interest and focus on potential concerns or issues. You may wish to develop your own set of questions. Each inquiry helps to build a clearer picture of your setting and will ensure your decisions are evidence-based.

Skip to Tool 2.2: Scan Community Readiness Questions

3 Select an exercise program and initiate implementation planning

Having now developed a firm understanding of the core components of an evidence-based exercise program for people with stroke and gathered the necessary information about your unique community, your team can proceed to check the feasibility, applicability, acceptability, equity and affordability of each program under consideration to determine the program option which offers the best fit.

Why is it important to select a program that best matches your community's needs, interests, and resources?

Simply stated, the better the fit, the greater the likelihood the program will be sustained over the long term. How well a program meets your objectives and capacity to deliver depends on multiple factors.

Guiding questions

- Does the population described for this exercise program match our participant population?
- Does this exercise program meet participant and provider views and preferences?
- Does this program meet best practice standards and guidelines?
- Is a suitable location, necessary equipment, and expertise (knowledge and skills) available locally? What are the instructor training requirements? If additional training or certification is required, is it available?
- Are there significant constraints, organizational barriers, policies, legislation, or resource issues in our setting that would delay or block implementation of this program?
- Is this program compatible with the mandate, culture, and values in our organization/setting?
- Could this program be maintained over time in our community?

Participant eligibility factors

When considering program options, check any stated minimum requirements for participation. Most evidence-based exercise programs are developed to consider both the effectiveness and safety of a structured exercise regimen as researched and conducted with a defined population. Consider whether the programs you review are designed exclusively for people who have had a stroke, if a certain level of mobility is required, and if it is safe to accept participants with lower functioning levels provided they have a supportive care attendant (e.g., family member or paid caregiver) accompany them to sessions.

The FAME, Fit for Function and TIME™ programs noted in the Planner, for example, share common criteria for enrolment, including that participants:

- are ambulatory (walking) adults (18+ yrs.)
- have the ability to stand for 5 minutes, walk for 10 metres (30 feet) with or without assistive devices such as a cane or walker; can tolerate 60 minutes of activity with rest intervals
- are able to follow instructions and communicate with the fitness professional
- are medically stable (e.g. stable asthma, diabetes, or chronic obstructive pulmonary disease (COPD); can exercise safely with no angina, seizures, uncontrolled hypertension, or atrial fibrillation); have obtained medical clearance and permission to participate
- can independently make transfers (e.g. sitting to standing) and use the washroom

Stay true to a participant-centred approach

Know your participant base; exercise after stroke is not a one-size-fits-all solution. Consider the demographic characteristics of the population with stroke in your community and their needs and preferences. Our study participants advised, for example, that younger individuals may be interested in programs that focus more on physical improvements, while older individuals enjoy opportunities for social encounters; there may be a need for women-specific services, etc.

There are also several factors or considerations that might discourage a person with stroke from participating in a community-based exercise program. For example:

- Most programs require participant screening and medical clearance to participate; not everyone will be eligible. An attending physician or therapist may advise against participation.
- A group class format does not appeal to everyone. People (with the necessary resources) might prefer to exercise independently or with a personal trainer at home or at a private gym.
- Individuals with a mild physical disability may have the capability and confidence to take part in a variety of regular (non-adapted) but less intense classes in public or private facilities.
- Individuals who experience more moderate to severe mobility challenges or struggle additionally with cognitive **impairment** or speaking can find communication and participation in a group class challenging at the start although often will improve given sufficient time and practice. They might depend heavily on support from an attending family member or caregiver and be unable to attend on a regular basis.

The developers of the Canadian Stroke Community-based Exercise Recommendations [2] include a companion brochure for people with stroke. It enables prospective participants to make informed decisions about what to look for in a program designed for people with stroke and what they might expect as a participant. Consider distributing this material in your community; from an advertising standpoint, it could facilitate awareness and boost enrolment to your program. Be prepared to answer inquiries about how well your program would meet their needs.

Conducting classes with people who have different health conditions

A number of other cardiovascular, respiratory, and neuromuscular conditions or acquired brain injuries are known to limit a person's ability to participate in regular exercise programs. People with mild, non-disabling stroke, multiple sclerosis, Parkinson's disease, arthritis, the frail elderly, or those in cardiac rehabilitation may also benefit from an adapted exercise program similar to those designed for people with stroke. From a practical, economic standpoint, it is often more viable for a community-based fitness centre to offer a program that appeals to a wider segment of the population; however, there will be staffing, supervision and safety issues that must be considered. In every case, making changes to a specifically designed program should always be discussed with the program developer.

The FAME, Fit for Function and TIME™ exercise programs were designed primarily for people with stroke although some accommodations can be made for people with other cardiovascular or neurological conditions affecting mobility and balance. For example, TIME™ is currently open to people with balance and mobility challenges from stroke or any other health condition. Guidance is based primarily on functional ability, not diagnosis. Participation for other than the defined population is best established on a case-by-case basis in consultation with a health partner. For details, check the program information provided in the Appendix.

"The training is focused on stroke … if you open to all types of disability, you will need to tailor the training to suit. However, broadening the diagnosis also makes for greater uptake in smaller communities."

- Rehabilitation Specialist

Read More in the Appendix

F. Exercise Program Information: FAME, Fit for Function, TIME™ and Heart Wise information

Read More in the Appendix

G. Overview and Evidence for FAME, Fit for Function, TIME™ Programs

Customizing or adapting a program

The degree to which a program can be modified is often a big concern for program managers and fitness professionals. How flexible is the program? How much can be changed without compromising the integrity of the program? The ability to change an exercise regimen to accommodate individual or system requirements or constraints may be an important factor when it comes to deciding which program option provides the best fit for your community. Although some elements may be flexible, other components and how they are delivered might be essential to ensure participant safety and progress. **Program fidelity**, or how closely it can be delivered as it was designed, affects the success of the program and participant outcomes. Instructors will need to have the knowledge, skill, and support to effectively adapt exercises within program parameters.

Keep in mind the diversity and cultural identity of the stroke population in your region. It may also be necessary to adapt the exercise program based on the unique needs and interests of your target population. Researchers [36–38] have proposed several steps in the process of culturally adapting an intervention to meet the needs of specific populations. We have identified key steps which include:

- Information gathering to better understand the needs and concerns of the target population
- Identifying elements or components for adaptation which could include aspects that are culturally unique to the **target population** (e.g. in this situation possibly marketing and communications strategies, referrals/ recruitment or screening processes, program scheduling, equipment set-up or individual exercises, participant evaluation measures)
- Consulting with local champions in the target community to verify the identified elements or components for adaptation, identify additional gaps and areas for adaptation, and to work in collaboration with local champions to revise protocols
- Conducting a trial with local experts to inform further revision and evaluation

As noted above, any changes to the prescribed exercise regimen should be done in consultation with a health partner and/or the program developer to ensure safe delivery and successful outcomes.

Skip to Tool 3: Exercise Program Comparison Template

When exploring available program options, you might find it helpful to compare key features and **attributes** as they apply to your context. A program comparison table will help you consider and document factors that could influence your program selection.

Conducting virtual classes

The COVID-19 pandemic created significant barriers to program implementation and generated more interest in organizing virtual exercise classes for people with stroke. Online programs can meet the needs of people who aren't comfortable leaving home, live in rural or remote areas without access to classes, do not have a way to travel to in-person locations, or cannot travel due to bad weather (or pandemic lock-down restrictions!).

Planning for virtual exercise programs was not specifically addressed in the Planner evaluation, but the fundamental planning steps still apply. Planners in every case are encouraged to adapt their assessments and activities to meet their local context. We have included information about several virtual programs in the Appendix as well as tips from study participants whose organizations considered the unique challenges of organizing online classes.

Read More in the Appendix

H. Virtual (online) exercise programs for people with stroke

Activity 3.1

Check program feasibility, applicability, acceptability, equity, and affordability (FAAEA)

To help you decide which exercise program is the best fit for your setting, reflect on the feasibility, applicability, acceptability, equity, and affordability, (FAAEA), of the program(s) of interest. These factors are posed as questions below to enable a comparison of programs, for example:

- How **feasible** will it be to implement this program in our setting? What factors or issues make the program more or less difficult to implement? How modifiable are these factors?
- How **applicable** is the program to our setting? Consider how relevant or appropriate the program is and how well it will meet the needs of your own community. What would be required to make the program more applicable?
- How **acceptable** is the program? Consider the extent to which the program will be acceptable to your organization, fitness professionals and participants. If elements are unacceptable, what would be required to improve its acceptability? Remember to consider the need for any cultural adaptation.
- Will the program promote health **equity**? While it may not be a primary aim of the exercise program, it is worth considering whether it will promote health equity for all or inadvertently contribute to health inequities among some groups of people with stroke. Is there anything about the nature of the program that would cause some groups (e.g. sex/gender, race, income) to be more or less likely to benefit from it? If there are concerns that a program might produce health inequities for some groups, what can be done to prevent this from occurring?
- How **affordable** is the program? Consider the costs related to space, equipment, staffing levels and staff training (see program budget below). Consider both start up and maintenance funding and your funding sources.

Skip to Tool 3.1: FAAEA Check

A Feasibility, Applicability, Acceptability, Equity and Affordability (FAAEA) checklist tailored to integrate the national recommendations for after-stroke exercise programs is included in the package of Tools.

Weiner and colleagues (2017) have developed and validated other generic measures of acceptability, appropriateness and feasibility [39].

> "We could not obtain the number of people with stroke in our region, but we used the Statistics Canada website to find the population aged 65+ years (17% of 200,000 = 34,000). About 1 in 5 over age 55 have a stroke (6800); we assumed at least 2 of 5 live and return home, so were left with 2700 potential candidates. There were no stroke-specific community exercise programs."
>
> **- Physiotherapist/Program Developer, FAME program**

Consider program costs

Program costs (the affordability factor) have critical implications for selecting —and maintaining—a program. Ensuring adequate and appropriate staffing is a key consideration. Many of these adapted programs require a high staff to participant ratio, e.g. the programs noted in this Planner stipulate a 1:4 staff-participant ratio. Fitness staff may also require additional training and certification.

Consider the costs associated with your exercise venue including potential rental charges or necessary modifications to the space, heating or utility expenses, and the purchase of dedicated equipment.

Are there program licensing fees or provider insurance premiums that apply at start-up and for ongoing maintenance of the program?

Programs often utilize or strongly recommend the engagement of a health-care partner to advise on medical concerns, program modifications, and fitness trainer support. Will this type of professional consultation involve compensation?

Locating funding sources for most community organizations requires considerable effort and creativity. It can involve redirecting or sharing staff, space, or resources with partners, locating sponsors or donations, or establishing participant co-pay (subsidized) or sliding scale fees, especially for limited/low income participants. Consider potential sources of support, e.g. in some jurisdictions, the health authority or stroke network may contribute funding as part of a community rehabilitation program. Are you eligible for any special public health or fitness initiatives or community development grants (e.g. non-profit, regional, provincial, federal government funding applications)? Finding unique and specific solutions for each community setting will become a focus in Phase 2 of the planning process.

What are the costs of not providing the program?

An equally important question for planning teams to consider is: the cost of not providing an exercise option for people with stroke in your community—at both the individual level in terms of personal independence and quality of life, as well as at the health-care systems level in terms of the costs attached to ongoing institutional care or the risk of suffering a second stroke and hospital re-admission.

Researchers are currently conducting economic evaluations to determine the cost-effectiveness of physical fitness training for people with stroke [40].

Skip to Tool 3.1: ProgramBudgetWorksheet

A detailed budget planning worksheet with sample program expenses is provided in the package of Tools.

Community support and partnerships to ensure program sustainability

Budgetary constraints led to a significant reduction in the funds allocated to the TIME™ program at a local community centre. The program manager decided to pursue alternative sources of funding to support the program. Since a majority of the program participants were diagnosed with stroke, the manager and a program participant approached a local charity organization that supported families affected by stroke.

Recognizing the need for the program, the organization made a significant donation to the community centre to support the program and advertised the program in its newsletter to boost program enrolment. The manager also approached the hospital manager to discuss sharing the cost for the health-care partner, considering it as an investment for public health. After reviewing the program's effectiveness, the manager agreed to split the cost of the health-care partner supporting the program. With the financial support from the community partners, the community centre was able to continue to offer the TIME™ program for its members.

Activity 3.2

Achieve agreement to proceed with planning (or not)

The outcome of your Phase 1 community and program assessments is an agreement to proceed (or not) with the planning of a local, community-based exercise program for people with stroke. The aim here is to agree on intent; your planning team formally decides whether or not to move forward with planning. Document the team's decision either way, including the rationale and decision-making process used, the participants involved, and any issues or concerns raised.

You will also need to agree on your most preferred program option before proceeding with the next step. It is not unusual for a team to still be considering more than one program at the end of Phase 1. You may be ready to implement a particular program exactly as designed or wondering whether it is possible to modify program components to some degree. Further exploration and assessment conducted in Phase 2 will help you determine potential barriers to and drivers for the implementation of your selected program. It's also possible that your program preference might change upon further review!

Choosing not to proceed with implementing an exercise program can also be the right decision at this time. The work you've already completed can help inform future plans.

Use the decision summary in Figure 5 (on the following page) to assist in interpreting the information you have gathered.

> "I think it would be hard to get through all of those steps and then have to decide not to go ahead. But even though it might not be an appropriate time to incorporate this (exercise program), you've made the connections and done these first steps of the research. Then when you get the missing puzzle piece - whether that be your population, the instructor you need, the perfect location, or whatever you were missing, just do a quick double-check that all of that information you gathered before is still accurate and you're off to the races!"
>
> **- Program Coordinator**

Figure 5: Decision-making - should we and can we proceed with an exercise program here?

PRELIMINARY ASSESSMENT

- Who is the intended participant group (the target population)?
- Number of people in our service area in this defined, target population?
- % of the target population eligible, interested, able to attend a group exercise program?
- The options/resources for exercise available in our community?
- The level of Community/ Partner Support?

TARGET POPULATION

Ambulatory adults with stroke

Other Populations

Consider how to address (include/ exclude?) those who may not meet the eligibility criteria for a proposed program, e.g.

- People with stroke who have greater mobility and/or cognitive challenges
- People with other acquired brain injury, cardiovascular or neuromuscular conditions

PROGRAM OPTIONS

Specialized classes delivered in community recreation facilities, e.g.

- FAME, Fit for Function, TIME™
- Heart Wise Exercise (HWE)[A]
- **Keep Moving with Stroke**[B]
- Life After Stroke[C,D]
- Municipal Parks and Recreation Centre inclusive or adapted stroke-specific programs (e.g. Aquafit for Stroke)
- Acquired Brain Injury (Canada) community programs
- Senior or adult day programs

Individual care/therapy providers, e.g.

- Neurorehabilitation facility
- Physiotherapy clinic/private practice
- Home-based services (public or private)
- **Telehealth**/virtual therapies

Self-directed/self-managed options, e.g.

- (Emerging) virtual/online programs, DVDs
- Private trainer
- Mainstream gym memberships and regular (less intense) programs

Other?

RESULTS OF THE FEASIBILITY, APPLICABILITY, ACCEPTABILITY, EQUITY, AND AFFORDABILITY CHECK

Consider, e.g. for each program option:

- History of program development and use
  - Evidence-based?
  - Meets post-stroke exercise program best practice standards and guidelines?
- Availability and role of health-care partner
- Measures for monitoring and evaluation
- Facility/space implications, e.g. equipment, accessible washrooms, parking
- Staffing implications, e.g. staff to participant ratio, training and certification, supervision, and support
- Budget/Cost implications, e.g. program licensing, insurance, participant fees
  - Start-up and maintenance expenses?
- Agency medico-legal and safety requirements
- Participant intake implications, e.g. referrals, screening procedures

GO!

Agreement to proceed with implementation planning

STOP!

Introducting a program does not seem feasible at this time.

[A] heartwise.ottawaheart.ca
[B] www.northwesthealthline.ca/displayService.aspx?id=189285
[C] www.southwesthealthline.ca/printService.aspx?id=160093
[D] www.daleservices.on.ca/life-after-stroke-recovery-day-program

Once you've decided to proceed with planning and you've determined your preferred program, transfer the information you've gathered (your local evidence) to two key tools designed to guide your planning decisions and advance the project: a business case (3.3) and a detailed implementation workplan (3.4).

Activity 3.3

Firm up the business case

If your organization has already established a clear mandate to provide special programming and is fortunate to have the funding, facilities, staff, and processes already in place to offer an exercise program for people with stroke, you might think preparing a business case is unnecessary. However, if your team is considering the introduction of such a program for the first time, preparing a business case will ensure you have the necessary data—and confidence—needed to convince others of the need and value of your proposal.

Write your business case in language familiar to the intended readers. A typical proposal:

- provides an executive summary,
- includes background on the current situation,
- uses local data to identify the issue/problem and the opportunity/ proposed solution,
- conveys how the solution matches organizational aims, including impact to community health,
- presents a number of options with supporting evidence for each option,
- recommends a preferred solution including a brief description of the (exercise) program requirements and implementation approach,
- outlines a budget, and
- clearly states the requested support.

Why is this task important?

You may need to persuade internal and external municipal or health authorities to view this exercise program as a priority worthy of funding and resources. A strong business case will help you justify expenditures, obtain administrative approval, and negotiate the necessary support from within and beyond your organization.

Like most formal project documents, an Executive Summary informs readers what is contained in your report. It is usually written after the report is completed but read first by the intended audience. Sometimes it is the only thing read by the intended audience, so it must be accurate and compelling. It should minimize jargon and focus on value and benefits. It must clearly state your proposal's purpose, recommendations, and what action is requested from the reader.

The information your planning team gathered in Phase 1 (and will continue to gather in Phase 2) will supply the necessary information. Your business case can be as simple or as comprehensive as your situation demands. There are many standard templates for writing a business case; your organization may already have a preferred format. A simple template and sample case are provided in the package of Tools.

Skip to Tool 3.3: BusinessCase Template & Sample

Activity 3.4

Develop the implementation workplan

Your implementation workplan should address the complete planning cycle from initial proposal for the exercise program through to final evaluation of program and participant outcomes and impact. It serves to anticipate requirements across the entire lifecycle of program planning and delivery. For example, while it may seem that assessing exercise program outcomes is something to be arranged at the end of a session, advanced planning is necessary to determine what type of information can be practically collected during program delivery, specifically the kind of measurements, obtained by whom, at what intervals, and using what techniques (see Step 6).

Keep in mind that planning is a fluid process. Your planning team will need to be flexible and respond to new information and challenges that occur along the way.

Why is preparing a workplan important?

The preparation of a detailed work plan will ensure that critical elements are identified, responsibilities assigned, and that the implementation planning process, including all decisions and actions taken, are documented and visible to everyone.

Skip to Tool 3.4: Implementation Workplan Template

Your organization and planning team may have access to project management software; use it if it is available to you. A simple template based on the 3-Phase planning model in this guide is included in the package of Tools. This implementation workplan will help your team identify key tasks, assign responsibilities, track timelines, and record decisions.

Phase 1 Tips & Potholes

Travel Tips

Orientation session

When inviting potential partners from the community to participate in planning, consider hosting an orientation session to present the goals of the initiative and discuss the proposed planning approach and your guiding principles. The package of Tools contains a slide deck to introduce the planning model.

Skip to Tool 3.5: Planning Orientation_Slidedeck

Study participant ideas about funding:

- Ask other organizations (e.g. YMCA, retirement homes, physiotherapy clinics) if they will offer their space at no or minimal cost.
- Consider covering staffing costs by paying instructors through participant fees (possibly subsidized by facility), approaching hospital or health authority partners to pay for a physiotherapist's time, or engaging students as volunteers (practicums and/or internships).
- Seek donations from philanthropic organizations.
- Consider partnerships and sponsorship or funding opportunities with local businesses, e.g. banks, grocery chains, a dominant industry in your town/city, legal firms, etc.
- Seek opportunities to participate in research studies.
- Apply for grant funding, (e.g. New Horizons seniors grant, ParticipACTION, Ministry of Health Promotion Communities in Action, Heart and Stroke Foundation).

Shifting from an internal planning team to partnering with the community

A group of health providers formed a planning team to explore the feasibility of implementing an exercise program for people with stroke in their setting, a primary care facility. Initially, they decided to include only members from their organization as this was the place where the program would be delivered. However, as they worked through Phase 1 of the Planner, they began to re-consider the composition of their planning team. By completing an inventory of programs/services in their area, they realized offering the program in their own setting might duplicate an existing program. By reaching out to several exercise program developers, they recognized the importance of shifting their exercise program away from a health-care facility into a community facility. The planning team agreed this would better meet the needs of their community and people with stroke.

With the anticipated change to program location, the planning team now needed to engage new members who were external to their organization. They did not have a connection to the municipality and felt uncertain about doing a "cold-call" to the local recreation centre. The team champion contacted the centre to introduce herself, explain their interest in developing a stroke-specific community-based exercise program, and invite them to partner in planning a program. She received an immediate positive and supportive response from the recreation centre, who were keen to not only partner on this program, but also on future programs for special populations.

Potholes

Failing to include people with stroke in the planning process can be a fatal flaw

"Actively involving and engaging key-stakeholders, users of programs (people with stroke) to be part of the planning and implementing process is critical. They know best what they need, can identify areas in need that otherwise might not be known to program developers."

- Person with stroke

"Overall, an excellent plan (the Stroke Recovery in Motion roadmap) and having stroke survivors and their caregivers/family members will be key throughout".

- Person with stroke

"Including and seeking our input from planning, to inception, implementing, and assessments is essential if the program is going to truly meet our needs"

- Person with stroke

Insufficient demand for the program. A study participant expected high enrolment in their new program based on the number of people with stroke in their area but was surprised to see few people registering. Their tip for other planning teams is in the quote box below:

"Make sure there's a need [for the program] in your community. We knew there was a need for it here but now we're thinking maybe people aren't as interested as we thought. Do that research before you start so you're not launching a program and getting like three registrants for it and then you don't know if you can run it after all that work."

- Physiotherapist

PHASE 1 Progress Checklist

Download Editable Progress Checklists:
AfterStroke.ca/SRIM

By the end of Phase 1, your planning team will have achieved agreement to proceed with the introduction of a program (or not) and have some idea of best program option(s). Use this checklist to gauge your progress and consider what remains to be done. Keep in mind at the outset and throughout planning how planning decisions and actions might influence program sustainability over time.

	Was This Completed?	
	No	Yes
* We have assembled a planning team which includes our stakeholders including key community partners and exercise program participants and provides the knowledge and skills we need to proceed with planning.		
* We have identified our champions, leadership and member roles and responsibilities, and decision-making processes for the planning team.		
We have developed a project charter.		
We are familiar with the aims, strengths and benefits of exercise designed for people with stroke.		
We are familiar with the sources of research evidence, best practice principles, and standards for exercise designed for people with stroke.		
* We are familiar with the delivery requirements for an exercise program designed for people with stroke including space, equipment, fitness professional training, staffing requirements, and support from a health-care partner.		
* We have conducted a thorough community assessment to determine: • Number and level of interest of eligible program participants • Opportunities for exercise: services/programs currently available • Community partner interests, priorities, attitudes, concerns		
* We have conducted a feasibility, applicability, acceptability, equity, and affordability assessment for an exercise program designed for people with stroke.		

(continued on next page)

PHASE 1 Project Checklist

(continued from previous page)

	Was This Completed?	
	No	Yes
* We have prepared a budget for introducing and sustaining a program.		
* We have prepared a business case to negotiate necessary support with identified partner organizations including referral networks and program sponsors.		
Based on our findings, we have reached consensus to proceed with the introduction of a program.		
We have documented our Phase 1 findings and started preparation of an implementation workplan.		
Other tasks/factors unique to our setting?		

* Some of these factors may also have implications for longer term program sustainability.

Assess your team's progress

STOP: We have not addressed most of these implementation planning factors; we are missing critical information, key resources, and/or sufficient level of support to continue.

CAUTION: We have addressed some but not all these implementation planning factors. We can proceed cautiously pending further efforts to complete outstanding planning elements.

GO: We have sufficiently addressed most of these implementation planning factors and are confident with proceeding to the next Phase.

Caution: The links below do not include a link back to this page. Please take note of the page number (51) or, if viewing in Adobe Acrobat, use the Alt + left arrow (PC) or Command + left arrow (Mac) to return to this page (these commands may not work for all users across all platforms).

Planning Tools & Resources

Step 1

- Figure 2 Implementation Planning Roadmap
- Tool 1.1 Engaging Stroke/Caregiver Partners on your planning team
- Tool 1.1a BudgetWorksheet_PlanningTeam Expenses
- Tool 1.1b Project Charter Template and Sample
- Tool 1.1b Disclosures

Step 2

- Tool 2.1 Scan_InventoryPrograms&Services
- Tool 2.2 Scan_CommunityReadinessQuestions

Step 3

- Tool 3 ExerciseProgramComparisonTemplate
- Tool 3.1 FAAEA Check
- Tool 3.1 ProgramBudgetWorksheet
- Figure 5 Phase 1 Decision Summary
- Tool 3.3 BusinessCaseTemplate
- Tool 3.4 ImplementationWorkplanTemplate
- Tool 3.5 PlanningOrientation_Slide deck TBD

Tool_ProgressChecklist PHASE 1

Appendix (read more)

A. Glossary
B. Bibliography
C. Knowledge Translation/Mobilization: The Knowledge to Action Cycle
D. Developing a Planning Partnership
E. Decision-Making Methods
F. FAME, Fit for Function, TIME™ and Heart Wise information
G. Overview and Evidence for FAME, Fit for Function and TIME™ programs
H. Virtual exercise program information

PHASE 2 Building solutions that work for us

Steps

Activities

Identify Barriers and Drivers to Program Implementation

4.1 – Assess barriers and drivers to program, program users, and program setting

4.2 – Confirm program choice

Develop Solutions Tailored to Specific Implementation Barriers

5.1 – Prioritize barriers and drivers

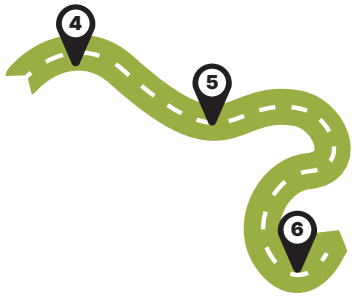
5.2 – Develop strategies and tactics to address each barrier

Plan for Evaluation

6.1 – Develop evaluation methods

6.2 – Assess sustainability capacity

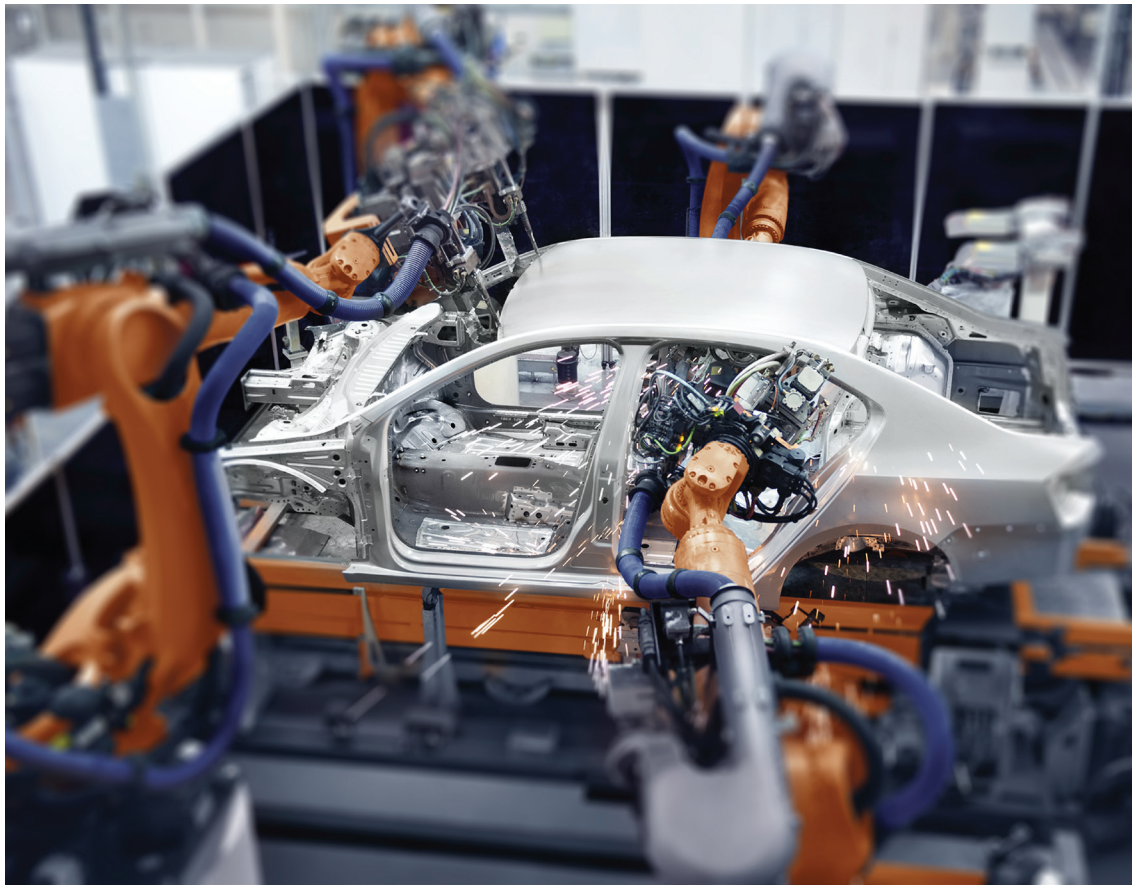
PHASE 2 Building solutions that work for us



The planning team has now agreed to move forward with the implementation of an exercise program for people with stroke and determined which program provides the best fit for their community.

In Phase 2, Step 4 the team systematically explores potential barriers and drivers associated with implementing the selected option. In Step 5 they create a comprehensive implementation plan outlining the strategies and tactics required to minimize or remove any identified barriers and successfully deliver the program. In Step 6, prior to launching the program, the team develops their evaluation strategy for assessing the implementation process, the program's impact, and implications for sustaining the program over the long term.

If your planning team completed the assessments outlined in Phase 1, you will have most of the information you need to proceed. If you're starting with limited program and community data, your team will have more work to do in this phase.



4 Identify barriers and drivers to program implementation

Why is it important to systematically examine potential barriers (challenges) and drivers (facilitating or supporting factors) to the implementation of your selected program option?

When introducing any change, what is often considered at the outset to be a simple adjustment to the current way of doing things can have broader impacts as the full extent of the proposed change becomes clear. Introducing a new program can generate many changes which will need to be managed if the program is to be successful.

In a 2018 review of the research literature regarding **third sector** (the non-governmental, not-for-profit sector) organizational capacity to successfully implement evidence-based innovations, the authors noted the most cited barriers and **facilitators** [41].

The five most cited key facilitators (drivers) for implementation were:

- The evidence-based innovation matches well with the mission of the organization
- Flexibility regarding the implementation of the intervention
- Perceived effectiveness of the evidence-based intervention
- Organizational support and prioritization
- Supportive leadership

The five most cited critical barriers (challenges) to implementation were:

- Recruitment and retention issues
- Problems adapting the evidence-based innovation
- Lack of financial resources
- Lack of staff or high turnover
- Implementation difficulties/fidelity issues

A recent study conducted in Canada [42] reported several key challenges to implementation experienced by exercise program providers, including:

- Insufficient funding for recreation providers to run the exercise program and for health-care providers to offer training and support
- Staff training: challenge of training instructors to have the multiple skills required to deliver these programs (e.g. adapting exercise difficulty to account for participant ability or injury)
- Marketing of the program
- No access to recruit exercise participants directly from rehabilitation hospital programs
- Exercise program full and not open to new registrants
- Maintenance of program integrity, i.e. delivering the exercise program as intended both at start up and over time
- Sustainability of the exercise programs (i.e. continued provision of programs)

Activity 4.1

Assess barriers & drivers associated with the program, program users, and program setting

In Step 3, the planning team considered broadly the feasibility, applicability, acceptability, equity, and affordability of available program options. Your team may already have many ideas for implementing the selected program. It is common to begin brainstorming and problem solving in Phase 1. Using a structured approach to guide your discussion of potential barriers and drivers will reduce the risk of overlooking critical challenges while consuming valuable planning time and resources on less important issues. A useful framework is to group potential issues into three categories [43], those related to: 1) the PROGRAM, 2) the Program USERS, and 3) the Program SETTING, for example:

1. The Exercise PROGRAM

Consider the features and attributes of the program itself, e.g.

- History of the program and the process used to develop it
- Perceptions regarding the scientific validity of the program; a complete and clearly described development process based on research evidence may be of particular interest to health-care partners
- Experience and credibility of the program developers
- Inclusion of the targeted population in the development process
- Freedom from conflicts of interest
- Level of program awareness amongst referral sources
- Compatibility of program with existing community programs or care management options and routines
- Degree of program complexity or convenience
- Degree to which a program can be modified
- Relative advantages of the program, e.g. costs and risks

2. The Program USERS

Consider the characteristics of each program user including their current, awareness, knowledge, skills, attitudes, expectations, motivations, behaviours, and routines, e.g.

Exercise Program Participants including attending Family member Caregivers, Volunteers

- Perceptions about program value and how it meets their needs; they may have concerns about 'fitting in.'

Fitness Professionals (e.g. Instructors)

- Responsible for conducting the program and possibly contributing to participant eligibility assessment, program adaptation, evaluating effectiveness, and monitoring adverse events; they may express specific concerns and require additional skills to conduct the exercise regimen, safely assist participants, and evaluate their progress.

(continued)

2. The Program USERS (continued)

Program Managers and Coordinators; Consulting Health Partners (e.g. Physiotherapists, Kinesiologists)

- Responsible for instructor training, program fidelity, and safe delivery; a consulting health-care partner/therapist may be contracted to assess individual participant challenges or need for program adaptation.

Organization Administrator

- Responsible for setting program priorities, authorizing funding, providing resources, and managing relationships and possible referral patterns with community health partners

Regional health authority or health practitioner, e.g. referring physicians, rehabilitation specialists

- Responsible for discharge planning, referrals, medical assessments, or participant screening; they may be concerned about program benefits, risks, and safety of patients in their care.

3. The Program SETTING

Consider factors associated with the organization's operating environment and systems, e.g.

- Existing patient care systems including the routines of primary care physicians, health-care facility referral and discharge patterns, health-care partnerships
- Organizational decision-making processes, e.g. program provider rules, regulations, and policies
- Administrative capacity and infrastructure (e.g. marketing, memberships, program registration)
- Human resource factors, e.g. level of staffing, staff scheduling and workload, compensation, willingness of staff to travel if program is offered at some distance or at multiple sites.
- Organizational cultural and belief systems
- Politics and personalities, leadership, peer influences, the availability of local champions
- Economic considerations such as venue, equipment, supplies, cost of utilities, e.g. heat/AC
- Physical structure of the setting, accessibility factors, potential construction, or renovation plans for the intended facility
- Medico-legal concerns, insurance, safety and liability issues, health records and information privacy

Photo by AbsolutVision on Unsplash

Address multiple points of view

Be aware that issues can overlap across these three categories and their relative importance can vary between community partners and/or planning team members. Encourage an open dialogue about user attitudes and expectations. It is important that everyone has adequate and safe opportunities to express their views and concerns. Your planning team may need to balance multiple perspectives and establish priorities as it begins to build solutions to overcome the barriers.

Skip to Tool 4.1: IDBarriers&Drivers_PROGRAM

Skip to Tool 4.1: IDBarriers&Drivers_PROGRAMUSERS

Skip to Tool 4.1: IDBarriers&Drivers_PROGRAMSETTING

Worksheets to help planning teams assess, summarize, and prioritize the many factors which can influence program implementation, positively and negatively, are included in the package of Tools .

Skip to Tool 6.2: Program Sustainability Assessment

Another tool you might find useful in this exercise is the Program Sustainability Assessment. This worksheet is aimed at assessing an organization's capacity to sustain a program (Steps 6 and 8) but the questions will also help you consider possible barriers to implementation.

To ensure you've adequately heard and considered multiple perspectives, it is helpful to have these assessments completed by different stakeholders, e.g. program participants, provider administrators, those responsible for program delivery including instructors, volunteers, and program managers or supervisors.

> "Having hospital-based recreation therapists who can integrate participants into the exercise program as a component of discharge planning helps alleviate fears about accessing a new program."
>
> **- Rehabilitation Therapist**

Example: An exercise PROGRAM factor

Using the health-care partnership to overcome initial challenges when implementing a new program

A new community centre decided to implement the TIME™ program for its members with balance and mobility limitations. When the program started, the instructors observed that the participants significantly varied in their physical abilities, with some participants requiring greater supervision than others. The fitness instructors who did not have previous experience working with people with disabilities found it challenging to identify exercises that would be safe for all participants and were unsure how to progress with the group.

After consultation with the health-care partner, participants with similar ability levels were grouped together. Participants with poor balance or requiring greater supervision performed the exercises at the lowest level of challenge while those with higher abilities performed more challenging exercises. Two volunteers were recruited to help during the class which improved the participant to instructor/ volunteer ratio and made the participants feel safe. In order to support the fitness instructors through their first program, the health-care partner increased the number of visits to the program and encouraged daily consultations via email after class to discuss issues and challenges encountered. The fitness instructors reported greater confidence to deliver subsequent programs.

Example: A Program USER factor

In rural areas, lack of program awareness and transportation challenges may affect program implementation

A manager from a community centre in a rural Ontario municipality visited a TIME™ program in Toronto and wished to implement the program back home. Since training was not available in their town, fitness instructors had to travel several hours to a neighboring urban centre to undergo training. The community centre had to bear the costs of transportation and training, as well as finding replacement instructors to work in their absence. Identifying local partners was also challenging as there was little awareness of the program and its benefits. A program champion was invited to help identify a health-care partner and establish a referral source from the local hospital. However, due to a lack of public transportation services, several potential participants with balance and mobility limitations who could no longer drive, did not register to the program, significantly slowing the enrolment. Due to these challenges, the start of the program was delayed by over a year.

Example: A Program SETTING factor

Turnover of trained staff may impact program delivery and continuity

As a part of its recently adopted mission to provide exercise and fitness programs to members of all ages and abilities, a busy, not-for-profit community centre adopted the TIME™ program. Three fitness instructors who had previous experience working with people with disabilities underwent the training program. With referral from a rehabilitation hospital, the spots in the program filled quickly and many interested individuals were put on a waiting list. To keep up with the demand, two programs were run simultaneously. However, after one year, two of the fitness instructors moved on to new positions at different organizations. With no other fitness instructors trained and no volunteers available, the centre was unable to maintain a safe participant to instructor ratio and had to temporarily discontinue the program while new instructors were being trained. With the program no longer offered, several participants withdrew or signed up for programs at other locations.

Example: A Program DRIVER

The power of positive health partner relationships!

The YMCA of Hamilton, Burlington, Brantford LiveWell Operational Model includes a 12-week group fitness program for people with stroke offered through a unique partnership between the YMCA, Hamilton Health Sciences and McMaster University, the Brant Community Healthcare System and Niagara Health System. Over the course of the last decade, residents of this region have benefitted from the evolution of an innovative and very active community health collaboration dedicated to promoting wellness through community access to evidence-based programs. LiveWell principles include creating a smooth transition for patients between hospital care and community health and an integration of research, education and training opportunities between partners.

YMCA LiveWell programs are membership-based (financial assistance is available). The Fit for Function exercise class for people with stroke requires physician permission. In addition to the exercise regimen, clients participate in the Living with Stroke educational module developed by the Heart and Stroke Foundation.

YMCA LiveWell Partnership [17]

It is important to also seek out available program drivers.

Your team may have access to significant assets, opportunities or expertise associated with the program, the program users, or within the local system and setting. Identifying such strengths and having confidence in these capacities will help you build effective solutions to identified barriers.

Activity 4.2

Confirm program choice

Once the planning team has completed a thorough assessment of the extent of potential challenges related to implementation, they will need to confirm the choice of the program they intend to implement. If the barriers are significant and considered insurmountable, the team may wish to consider whether a different program option would be a better choice – in which case conducting another assessment of the barriers and drivers associated with that program may be necessary before moving on.

Ideally, planning team members, their planning partners and stakeholders are in full agreement; if there are differences of opinion as to the preferred program, these should be respectfully explored and resolved. If this is not achievable, then a strong majority is required before moving to Step 5.

Planners may also need to seek approval or endorsement of the selected program from administrators, and other stakeholders, sponsors, or funders. This can require submitting a business case as described in Step 3. Now (before investing any more time in developing the implementation plan!) is the time to seek this approval.

In the next step, the team will focus on prioritizing identified implementation barriers to the chosen program and developing strategies to overcome them.

5 Develop solutions tailored to specific implementation barriers

In building solutions, why is it important to target specific potential implementation barriers?

The planning team's next task is to prioritize the identified challenges to program implementation and begin developing solutions for them. This is the 'exactly what will it take to get it done?' step. The more tailored your strategies and tactics are for each barrier, the greater the likelihood of program success.

Activity 5.1

Prioritize barriers and drivers

Many different barriers can affect the implementation of the chosen exercise program; some are significant and others less influential. Planning teams usually have a finite amount of resources (human and financial) and will not be able to address every issue. It is important to review and prioritize the barriers identified in Step 4 in terms of their potential negative impact on implementation. Focus on the barriers which, if not addressed, are most likely to scuttle your implementation efforts and note the drivers which are most likely to facilitate success. Once you have determined your list of priorities, you are ready to develop strategies and tactics (build solutions) to remove or minimize the impact of barriers and leverage the contribution of any identified assets.

"It became clear that Centres need a program to fit into their existing timeline for session scheduling and registration procedures .... we also found that time of day matters and season. Summer and daytime are best for participants but not for staff and getting volunteers."

-Exercise Program Developer

"They (exercise program participants) need more than one round of 8-12 weeks but sometimes enrolment capacity is an issue. We try to encourage progressive integration with other more mainstream programs like seated yoga and aqua-fit."

- Manager, Inclusive Programming, City Parks and Recreation

Activity 5.2

Develop strategies and tactics to address each barrier

Approach solution building using the same three factors described in Step 4, i.e. determine how you will address barriers associated with the exercise PROGRAM, the intended program USERS, and your organizational SETTING.

Work together to develop your barrier management plans; continue to involve your planning partners and stakeholders, especially people with stroke, to ensure the proposed solutions are appropriate and achievable.

It is also good practice to test your tactics whenever possible to ensure your actions are effectively addressing the barriers they are intended to overcome. For example, if the identified barrier is a lack of awareness of the program and the solution is to distribute advertising flyers at doctor and clinic offices, program participants would ideally be involved in co-creating the flyer. Share a draft with potential program participants and health-care providers to ensure the messaging is appropriate and helpful before printing the material. If a perceived barrier is a lack of referrals to the program and the solution is to engage a stroke navigator to visit local health-care facilities and health-care providers to promote the program, have them do a few trial visits, assess the response, and refine the presentation before expanding the tour.

Your implementation workplan should also consider what mechanisms to put in place from the outset to ensure that the program remains viable in the longer term. Consider if your strategies provide one-time, short-term fixes, or whether approaches can be maintained over time. For example, it may become necessary to repeat or boost earlier activities such as advertising the program to the community or providing for ongoing training of fitness trainers to ensure continuity when there are changes in leadership or staff assignments.

"I volunteered to train the instructors. Now they've asked me to train the volunteers as well. I'd like to help them get started, but I won't be able to continue doing this given all my other commitments."

- Physiotherapist

Skip to Tool 5.1/5.2: SolutionBuildingWorksheet

As you build solutions, consider how you will assign specific responsibilities and what your anticipated timeline is for completing each action. Use the Solution Building Worksheet to note your priority barriers and critical assets and to begin drafting your action plan. You can add this information to the full implementation work plan you started in Phase 1.

Exercise PROGRAM strategies

Barrier: Low enrolment

Solution: Adapt the program to improve appeal to participants

A private recreation centre had recently started offering a task-oriented group exercise program for people with stroke living in the community. Participants were being referred to the program from a local rehabilitation hospital, but only a few participants had registered, and the classes were at half capacity.

Solutions: To improve program enrolment, the management team decided to implement a two-pronged approach by a) increasing retention of existing participants by making the program more social and interactive, and b) employing marketing strategies to improve program awareness in the community. To make the program more enjoyable and to increase bonding, instructors included interactive activities, rewards, and end-of-program potlucks. To improve program awareness in the community, flyers were distributed to physician offices, and senior centres, and were included in the quarterly local activity guide. Both strategies proved to be successful in improving program enrolment and helped to ensure program continuity.

Barrier: Stakeholder hesitancy about program quality

Solution: Leverage brand recognition and program credibility

People with stroke, fitness instructors, health partners, and other community stakeholders may indicate a preference for a well-established program with a good reputation. Your referral network may have more confidence in a program they believe to be well designed and supported by evidence. Brand recognition can be a powerful driver in facilitating participant enrolment and securing necessary resources.

> "Through professional connections with different neuro groups, we had been aware of this program for quite a while. I've been going to these stroke conferences for a long time and we kept hearing about this program. The program has a long history; it was known by physiotherapists; it had a toolkit, and it had great support for someone like us who really hadn't done a community program. We quickly decided this could be a great program to try to implement here."
>
> **- Program Coordinator**

Program USER strategies

Barrier: Stakeholder concern about participant safety

Solution: Manage staff ratios and ensure participant safety

We had a lady in our class who had been coming for weeks and was doing really well. She knew her routine and was able to complete the circuit quite independently. She used a walker. One day, she got up from a seated position at one station, turned to walk to the next station a few feet away – and went down to the floor. I had turned my back for just a second! Fortunately, she wasn't hurt but it was a lesson for all of us. What we might consider a simple movement was in fact quite challenging for her; it involved shifting her weight from sitting to standing, maintaining her balance while making a turn, and taking a step forward all at the same time. She did not have the strength or control to manage it. Her walker was right there but she says she 'forgot' to grab it. It all happened so fast!

Solutions: We run a mixed class and can't always meet the 1:4 instructor/staff to client ratio but we ensure we have caregivers or volunteers now for those who need a little extra attention. We also brought in an occupational therapist to do a session for everyone on the safe and appropriate use of walkers.

Barrier: Lack of program fidelity resulting in compromised participant outcomes and safety

Solution: Ensure fitness professionals/instructors possess necessary level of knowledge and skills

In a recent review of fitness instructor and fitness coordinator perspectives on implementing a community exercise program within a health care-recreation partnership [44], the authors describe instructor and coordinator roles, experience, challenges and suggestions for ensuring program quality and safety. Recommendations for supporting these staff include:

- training that involves a comprehensive review of the impairments that exercise participants may experience and program modifications to address these impairments; ongoing education sessions led by a health professional
- collaboration between new and experienced program centres; sharing information about class set up and delivery
- ongoing access and program visits from local health-care professional to support instructors and participants, address questions about modifications, and reinforce use of multiple difficulty levels.

Training and certification requirements vary by province and territory. In general, instructors need a good understanding of the health and mobility issues associated with stroke including **risk factors** and exercise implications such as **aphasia**, **drop foot**, **hemiparesis**, and cognitive impairment. They should be familiar with safe exercise prescription for older adults with chronic disease and may be required to assess participant eligibility for a program. It is important that instructors are able to judge a person's activity tolerance and allow for progression of activity.

Check the program you are considering for any stated instructor training and certification requirements. The three exercise programs used in the Stroke Recovery in Motion study include special preparation for fitness professionals. Materials are available from the program providers [16-18].

Read More in the Appendix

I. Fitness professional training

Barrier: Lack of program awareness

Solution: Tailor communication and information sharing

Each program user, e.g. enrolled participants, provider organization/facility/agency, fitness professionals, and health-care partners will have unique information requirements. Communications should be tailored to meet specific needs, e.g.

Participants want to know about program availability and location, the benefits of exercise, who is eligible, what is involved in the exercise regimen, if they will need or can bring a partner or caregiver, program costs and availability of subsidized, co-pay or sliding scale member fees, how to sign up, and where to find transportation and/or accessible parking. Keep in mind what information caregivers/attendants will need. And remember to consider strategies for reaching out to those who may not be aware or as motivated to consider exercise as part of their recovery or lifestyle. Sample program notices are provided in the Appendix.

Provider organizations need information about the demand for the program, what space, equipment, resources, and community partnerships will be required, what it will cost, and how success will be monitored. As noted, organizations managing competing priorities may need to convince administration or sponsors to provide funding.

Fitness professionals express interest in certification requirements, training to deliver the selected program, making changes to the program, their role in screening for participant eligibility, monitoring participant performance and progression, management of confidential client information, safety measures and management of adverse events, level of support from supervisors, relationship with health partners, HR concerns such as scheduling, compensation, and personal liability.

Health-care partners, including rehabilitation centre professionals responsible for discharge planning, local health authorities responsible for community care services, primary care physicians, and regional physiotherapy or rehabilitation service providers who may refer their clients often seek assurance that the exercise program is evidence-informed and meets best practice guidelines, and that the fitness instructors have the required training (knowledge and skills) to safely deliver quality exercise programs for people with stroke. They may want to know how the proposed exercise program compares or fits into existing community services or management options, request specific guidance about the referral process, completing pre-screening assessments, or have an interest in receiving updates on the participants' progress.

Read More in the Appendix

J. Program Communications Samples

Organizational SETTING strategies

Barrier: Lack of necessary resources – space, staff, etc.

Solution: Establish partner agreements to acquire necessary resources

Finding an appropriate, accessible venue, the necessary exercise equipment, and adequate staffing levels are significant and common organizational challenges. Your planning team might be considering a number of strategies including, e.g. sharing public or private spaces to deliver the class, borrowing equipment, approaching a college or university to enlist rehabilitation or recreation therapy students to volunteer as part of an academic internship to assist in delivering the program.

Depending on the extent to which you engage community partners, you may need to establish formal service level agreements or memorandums of understanding between organizations [45,46]. Consult with your planning partners and seek appropriate assistance, including legal advice if necessary, to draft any contract arrangements.

Note: While municipal recreation centres have advanced in ensuring convenient, safe access for people with disabilities, not all private or public spaces, especially older buildings, will offer the same level of accommodation. Accessibility Services Canada provides information about the legislation and links to accessibility acts and standards across Canada [47]. It also provides education and training resources to support accessibility and barrier-free design. The US National Center on Health, Physical Activity and Disability (NCHPAD) is a public health practice and resource centre on health promotion for people with disability. Their website posts many resources including recommendations for assessing and addressing accessibility requirements [48–51].

Barrier: Unable to support increasing local demand for program

Solution: Scale up programs to accommodate community needs

Located at the centre of a large suburban region, participants were referred to a TIME™ program at a private recreation centre from local hospitals as well as from family physicians. The program became very popular and grew from one program (2 times/week for 12 weeks) for 8-10 participants in the spring and the fall, to two bi-weekly classes at different days of the week throughout the year. With a limited number of trained instructors available to deliver the program and the limited availability of the health-care partner, it was challenging to accommodate new registrants into the program. Moreover, existing program participants who experienced benefits re-enrolled in the program.

Solutions: Recognizing the need for such a program in the community, management decided to offer the program at another local branch, identify a new health-care partner, and train new fitness instructors. Additionally, with the help of the health-care partner, fitness instructors identified existing program participants who had progressed to the highest level of challenge and may have achieved the maximum benefit from the TIME™ program. These participants were encouraged to join other group-based programs available at their facility that were more suitable to their current abilities and would further enhance their recovery.

6 Develop evaluation methods

By this point, the planning team has selected the community-based exercise program it intends to implement, determined barriers and drivers to implementation, and developed and tested solutions to overcome priority roadblocks. The team now focuses on the strategies and measures they'll use to evaluate the program's implementation, impact, and capacity for sustainability. These critical components need to be defined prior to the program launch. The last task in Phase 2 involves conducting a readiness check to ensure everything is in order before opening the doors for that first eager class!

Why is it important to collect evaluation data?

By monitoring the program's impact as well as the 'fidelity' and extent of its use, provider organizations will be able to gauge improvement in participant and system performance. An evaluation plan helps identify where specific support is required to encourage use and where follow-up interventions may be needed to sustain the program. A minimum set of key data can help make a stronger case for continued program funding.

Activity 6.1

Develop evaluation methods

Guiding questions

- What is the purpose(s) of this evaluation?
- Who are the intended users of the evaluation and what are their evaluation questions?
- Who needs to be involved in developing the evaluation plan?
- Who will be responsible for the evaluation?
- What is the design of the evaluation: the key **indicators**, data sources and data collection methods that will be used?
- What is the timeline for the evaluation?
- Have adequate resources been obtained to conduct the evaluation?
- How will the evaluation data be stored, and privacy considerations addressed?

*Questions adapted from Harrison and Graham 2021 [14]

The practical collection of evaluation data occurs once a program is underway (Step 8), however, designing the evaluation plan needs to occur in advance.

> "While my team had considered evaluation plans and monitoring strategies, we did not take the time to fully outline this and are continuing to develop these as the program is underway. We should have taken the time to thoroughly plan as we now realize we are missing data because we didn't collect it early on and it is too late to collect it now."
>
> **- Physiotherapist**

There are many reasons to undertake an evaluation [52–55]. These include:

- understanding how effectively program implementation has occurred
- assessing how closely your program delivery mirrors how it was designed to be delivered
- facilitating course corrections to the implementation process or the exercise program
- making judgements about the success or failure of the program and its sustainability
- determining the impact of the program

Two types of evaluation [56] to consider are:

- **Implementation evaluations** (also referred to as process evaluations); these are used to determine whether a program has been implemented as planned, and
- **Outcome evaluations** which measure the **outcomes** or effects of a program (also referred to as program impact).

Activity 6.1a

Implementation evaluation and program monitoring

An implementation evaluation can answer the questions: Is the exercise program being delivered as required? and How is the program being used? Assessing the extent to which program delivery complies with the methods and standards outlined by the developers will help program managers make course corrections to improve implementation. Tracking enrolment and class participation alerts managers to action that may be needed to maintain or improve program use.

Assess program fidelity

Exercise program developers encourage maintaining 'program fidelity', i.e. monitoring whether the exercise regimen is being consistently delivered as designed to achieve best outcomes and ensure the safety of participants. Exercise programs often include a fidelity checklist that can be used by program managers to review the delivery of the exercise regime with their fitness professionals. The exercise programs noted in this Planner (FAME, Fit for Function, TIME™) include program fidelity observation tools. A Sample is included in the package of Tools. Your planning team may wish to prepare your own fidelity checklist using this example.

Skip to Tool 6.1a: ProgramFidelityChecklist_FitforFunctionSample

The time interval(s) for observation as well as who will be conducting the assessment of the class should be specified in the evaluation plan. Elements to observe include participant screening processes, equipment maintenance and emergency procedures, and management of the class structure and activities, including fitness professional interaction with participants and their caregivers. It is also important to check in with your instructors to ensure they have the necessary training and feel comfortable supporting participants who may have special needs. Program fidelity usually improves once fitness professionals gain experience with delivering the program. Periodic assessments are recommended because as time passes, there is often a temptation to modify the exercise regimen beyond what might be advised by the program developers and against the evidence used to support the original design.

Monitor program use

Ongoing survival of a program depends largely on how well it is used and perceived by participants. Monitoring program use involves collecting data over time about who and how many participants are registering, withdrawing, and re-registering in the classes, completion and dropout rates, and participant satisfaction with their experience in the program. A change in any of these indicators should prompt an investigation, especially into the reasons behind poor enrolment, high dropout rates, or dissatisfaction with the program. Other program aspects to observe are safety record (e.g. number of adverse events or injuries) and fitness staff experiences delivering the program and commitment to the program. A negative indicator signals the need to explore the cause of the change and develop strategies to get the program back on track.

In addition to any formal collection of data for the implementation evaluation (e.g. attendance records, structured questionnaires or surveys, interviews, focus groups), take some time to informally chat with both participants and fitness professionals about how things are going and whether anything could be done to make the program run more smoothly. Listen for barriers to delivering the program or issues that influence participation which may have emerged over time. Watch for any unintended consequences of program delivery.

Photo by Frankie Lopez on Unsplash

> "Fitness instructors can evaluate any need for changes or modifications to the program after each session by having a quick debriefing meeting with participants."
>
> **- Physiotherapist**

Assess planning team dynamics

As part of your implementation evaluation, your planning team might also benefit from debriefing your planning approach and how your staff and community planning partners, including people with stroke, perceived their experience working together.

The Stroke Recovery in Motion planning model places a high value on effective, collegial team functioning. For teams who may be interested in assessing their members' engagement on the team, the Patient Engagement In Research Scale (PEIRS) may be a useful tool [57]. Although developed specifically to assess patient engagement on research teams, the items in the scale can be applied to other teams and the survey is easy to complete in less than 10 minutes. PEIRS contains 22 items covering seven themes of meaningful engagement; these are: procedural requirements, convenience, contributions, team environment and interaction, support, feeling valued, and benefits. PEIRS is a companion to the Patient Engagement In Research (PEIR) workbook [20] referenced in Step 1 where you worked on your project charter and established your team's terms of reference. Team members could periodically complete the PEIRS survey during the planning process to review their working relationship and identify areas that might need to be addressed to improve team functioning. Conducting the assessment at the end could provide helpful information to guide future collaborations.

Activity 6.1b

Outcome evaluation

Outcome or impact evaluations are aimed at measuring the effects of a program. An outcome evaluation answers the question, "What happened (resulted/changed), if anything, because this exercise program was offered, and participants engaged with it?" Outcomes can be measured at multiple levels; consider the impact of a program on participants, on those delivering the program, and on the organization hosting the program. The information obtained from outcome evaluations allows you to make judgements about the value of your program. It can tell you whether the program is providing sufficient benefit to justify its continued existence or whether action is needed to make improvements.

Participants usually have personal goals. A participant-centred program that includes some level of assessment of participant outcomes helps people understand how they are progressing. Learning how you are doing can be personally motivating. People might want to know when they are ready to progress to non-adapted or mainstream exercise options. Information about participant outcomes can also be used to improve the program or seek funding for it.

Fitness professionals may want to know how the program is affecting participant health outcomes. If their employment prospects depend on favourable practice or performance reviews, they would also benefit from knowing the extent to which their knowledge, skills, confidence, and ability to coach participants may have improved after gaining experience delivering these exercise classes. Their satisfaction with the program and their role are other outcome measures.

Program administrators might focus on how well the program is meeting its stated goals in order to assess ongoing staffing levels, staff training requirements and program sustainability. If a goal of the program is to increase an individual's community-level activity, decrease social isolation, and improve balance or walking ability, these aspects of the program should be measured. Providers may also be interested in organizational outcomes including the cost of program administration and the effectiveness of health partner relationships.

It is particularly important to involve invested **community partners and stakeholders** in determining meaningful indicators as they may be interested in different outcomes. Consider the specific interests of your health partners and referral networks, and any program benefactors including sponsors and funders.

"I went everyday. I have young children ... I needed to get back on my feet. I kept asking 'What's next?.'"

- Person with Stroke, Exercise program participant

"It would be great to collect testimonials from participants. These stories can be helpful in demonstrating the personal impact the program is having on participants. Folks willing to give testimonials may also be effective advocates for the program – especially when making presentations for funding."

- Program Coordinator

Tasks involved in developing an evaluation plan

Determine the purpose of the evaluation

Will your focus be on an implementation evaluation, an outcomes evaluation - or both? What is critical to know about the program? What are the available resources for the evaluation? Often there are many purposes for the evaluation, and it may be important to prioritize based on what is essential to find out within the time and budget available.

Identify intended users of the evaluation data and their evaluation questions

Ensuring that key stakeholders are consulted about the evaluation questions most important to them may increase their acceptance of evaluation results and potentially affect their buy-in and ongoing support for the program. The more precise the questions, the easier it is to plan the evaluation. Prioritize the questions if you lack sufficient resources to address them all.

Assign responsibility for the evaluation

The planning team might assume or delegate responsibility for overseeing the planning and handling of the evaluation. Where possible, involve people with evaluation experience and skills. If you have access to in-house evaluation expertise, get them involved. External evaluation consultants may be available if there are resources to support this expense. Check with your local college or university for students in relevant programs (e.g. evaluation, kinesiology, health professions, epidemiology, education, psychology), who may be able to help as part of a course assignment or practicum.

Decide on the evaluation design, select indicators, determine data sources and collection methods

Best practices for evaluating 'post-stroke' community-based exercise programs [2,31] include a variety of participant and program outcome indicators. If you plan to assess, e.g. participant fitness levels before and after the exercise program, you'll need to determine which tests or measure(s) to administer. Participant outcomes may be assessed in terms of capacity, performance, body function, community participation, quality of life, or personal goal attainment (Figure 6).

Establish the evaluation timeline

The evaluation plan needs to indicate when each measure will be assessed, e.g. what information needs to be collected at baseline vs. during the program vs. at the end of a (8-12 week) session or some time after the program. For participant measures, understanding the evaluation timeline can also ensure that data collection will not overburden the participants or the fitness professionals.

Ensure compliance with privacy measures

The plan should consider how data will be kept or shared to ensure participant confidentiality. Ensure that all data collected comply with privacy guidelines or regulations in your jurisdiction.

Document your evaluation plan

Documentation of your plan for evaluation can be as simple or comprehensive as you require. A carefully documented plan will facilitate activation of the assessment measures (Step 8). It also provides a record for your organization describing why and how the evaluation was designed. A simple template is included in the package of Tools.

Skip to Tool 6: Evaluation Matrix template

Figure 6: Types of Participant Outcome Measures

PARTICIPANT OUTCOME MEASURE	DESCRIPTION
Capacity	Capacity describes an individual's ability to execute a task or action, and indicates the highest probable level of functioning [58]. An example of a capacity measure is an assessment of a person's physical ability to balance or walk. An example of this is the Short Physical Performance Battery (SPPB) used by the developers of the FAME exercise program.  Skip to Tool 6.1b: SPPB_FAMESample
Performance	Performance describes what people actually do in their current environment (i.e. home and community), outside of a structured environment such as a clinic or laboratory [58]. These activities typically occur throughout a person's day or week. While capacity may reflect an individual's ability to perform an activity, such as walk 500 meters in 6 minutes, performance indicates whether that person is actually walking 500 meters in the community (e.g. walk with a dog).
Body Function	Body function describes physiological functions of body systems, including psychological functions [58]. A body function assessment provides information about many body systems including mental functions (i.e. confidence, anxiety), pain, sensation, and muscle strength.
Community Participation	Community participation describes involvement in life roles and situations, such as parenting or attending community/social outings [58]. Participation is often measured using self-reported measures that provide the person's perception of participating in these roles and situations.
Quality of Life	Quality of Life describes individuals' perceptions of their position in life, in the context of the culture and values in which they live [59]. This broad ranging concept includes physical health, psychological state, level of independence, and social relationships [59]. Measures that assess quality of life are self-reported and include aspects of mood (isolation, anxiety, depression), level of pain, fatigue, and physical function.

Administrative considerations

Various measurement administration modes can be used, including self-reported measures and performance-based measures. Self-reported measures are often questionnaires that ask about function or quality of life. Performance-based assessments require a trained individual (e.g. a fitness professional or health partner) to administer/score the tasks of the measure and use appropriate safeguarding techniques.

Think about the composition of your class. For example, in a mixed class (people with stroke together with participants with other balance or mobility conditions), you may want to use a generic measure or decide to tailor the assessment for a particular group or level of participation.

You will need to coordinate any necessary fitness professional training or equipment requirements to administer these measures before you start enrolling participants. Community-based exercise program providers have expressed some concern about having the time, skills, and organizational structure to collect and manage data about participant and program outcomes. Therefore, it is important to consider the practicalities of collecting these data when selecting measures and designing the process for collecting the information. Administrative considerations are described in Figure 7.

> "It let me get out to play a little bit of golf with my wife. Not very good golf but I was able to get out there. I'm able to go out and have a nice meal in a restaurant with my spouse. I'm able to go visit my kids and grandchildren. And when they come here, I can participate more with them. And if friends are coming over or if we go to friends, it's no longer... an expedition when you go out."
>
> **- Person with stroke, exercise program participant**

> "He can vacuum now...Making the bed. He's starting to do some cooking. He takes his own shower. He can go outside the house into the garage now by himself. Like he can go up and down the stairs. There's only 3 but he can do them. And he walks outside in the yard and fixes his bird houses. And that's a direct result of having his balance and using that left arm more."
>
> **- Caregiver, spouse of person with stroke**

> "Keep in mind, people with a brain injury who have cognitive difficulties, and whose attendants/caregivers are often over-extended, will prefer short, user-friendly reports and questionnaires, for example a simple checklist. Completing a lengthy survey can be experienced as extra work and added stress."
>
> **- System Navigator, Acquired Brain Injury (Canada)**

> "I realize now how important it is to predetermine how you will evaluate your programs. We often use program outcome indicators and participant surveys/questionnaires to determine the effectiveness of programs, and in a few programs, we have pre-post assessments to measure the participant's perceived progress on their own functional goals. I really appreciate the discussion on program fidelity in the guide - that is something that I will incorporate into practice right away."
>
> **- Program Coordinator**

Figure 7: Administrative considerations for collecting participant outcome data

for ALL Participant outcome measures

- When will the measures be collected? (i.e. in class or scheduled separately)
- How often will the measures be collected? (e.g. within a week of starting and ending the program, and once in the middle)
- Who will check that the measures were completed?
- If measures are not completed, what is the plan to collect the measurement?
- How will individual participant data be stored or shared? (e.g. locked files on site, personal progress logs kept by participants)
- Is there privacy legislation that governs what participant information can be collected and how it must be stored?
- Is there a cost associated with using the measure? If yes, how would this be paid for?
- Will you collect the score on each of the items on the measure, or just the total score?

for Participant SELF-REPORTED measures:

- What is the best mode of administration for your context? Administration modes include paper, online survey, or both options.
- How will the measures be distributed to participants? For example, will a staff member provide the measure (paper or tablet device) to the participant upon arrival? Or, could it be sent by email prior to visiting the centre?
- If a participant does not have sufficient hand function to complete the measure, will a staff member be available to assist? If yes, the staff member should be trained in documenting responses but not guiding the participant to a specific answer.

for Participant PERFORMANCE-BASED measures:

- Is equipment required? If yes, is the equipment readily available at the centre?
- Does the facility have sufficient space to administer the measure?
- Who will score the participant on the measure? If more than one person, how will you ensure that each person is rating the participant the same way?
- How will the rater(s) be trained to administer and score the measure?

Read More in the Appendix
K. Defining Indicators

Read More in the Appendix
L. Participant Outcome Measures

Activity 6.2

Assess sustainability capacity

While concerns and discussions about **sustainability** tend to occur once a program has been delivered, planning for sustainability starts at the beginning of the Roadmap and carries through each step of the implementation planning process. For example, the decisions your planning team makes to ensure the involvement of critical stakeholders (Step 1), assess potential barriers and drivers to implementation (Step 4), and define critical indicators (Step 6) will all influence the success and maintenance of the program.

In this planning process, sustainability is defined as the degree to which the exercise program continues to be offered and used by participants and where the benefits of the program to participants and the organization continue to be realized after the program has been running for some period of time.

Program sustainability, much like implementation, is not an all-or-nothing phenomenon. Consider degrees of program sustainability, e.g. 1) absence of sustainability, 2) precarious sustainability - the program is running but its survival is uncertain, 3) weak sustainability - the program is running but not completely entrenched as an offering, and 4) sustainability through routinization - the program is considered well established and its survival is not in question. Thinking in terms of degree of sustainability has implications for how to measure program sustainability.

Why is it important to plan for program sustainability?

To continue program benefits, it is necessary to understand the factors that contribute to stability of the program, e.g. secure funding and a strategy for ongoing training and supervision of fitness professionals. Additional strategies may be needed over time to respond to changing health-care partnerships or emerging new evidence about exercise techniques, to ensure client retention and continued enrolment, address staff movement, or manage changes within the leadership and mandate of an organization.

"Highlight the importance of collaboration in the success of community-based fitness programs from the beginning of the process to the end. I have worked on several different community fitness programs and have found that when partnering organizations are committed to working towards the common goals and outcomes, the programs are highly successful. However, when organizations are concerned about "protecting their turf" and are more focused on the benefits of the collaboration as it pertains to their own business outcomes – the programs are not successful and usually do not become sustainable."

- Recreation Centre Manager

Factors positively associated with maintenance of program

Aravind and colleagues used case study methods [60] to investigate factors related to whether a TIME™ program remained in place or was discontinued after two years. The following factors were found to be positively associated with maintenance of the program:

- alignment between the site's mission and the goals of the TIME™ program
- an identified need for the program in the community
- a structured and reliable source (referral) of participants through networks established with the local health-care systems; active outreach to both health-care providers and patients that support the development of these networks
- accessible design of the facility and program staff that are experienced and motivated to work with the target population
- high quality staff
- program staff involved in program evaluation to improve the program.
- visible program benefits: positive changes in program outcomes (e.g. balance, mobility, functional ability) observed by instructors, participants, caregivers, and manager
- availability of ear-marked and secure funding that permits continued program delivery, subsidies, training costs, and cost of health-care partner; availability of program fee waivers/financial support for participants' continued involvement

"The sustainability of special programs which might start with grant money would be dependent on integrating clients into regular paid programming, e.g. gentle or low-level fitness classes promoted through municipal or public health recreation programming."

- Program Manager, Seniors recreation centre

Barriers to TIME™ program sustainability included:

- presence of competing programs within the organization or in the community
- poor knowledge of program presence in the community
- absence of established pathways for participant referrals and the absence of a designated individual to actively network with the local health-care system and promote the program in the community
- lack of a health-care partner to guide and support program instructors who may not have experience or face challenges working with individuals with balance and mobility limitations
- unable to meet staffing needs of the program
- inadequate revenue. Reliance on the fees from program registration to cover cost of program delivery, especially with low or dwindling numbers of registration stemming from above mentioned factors

Indicators of Sustainability

Many of the factors that influence implementation success also affect program sustainability. Your implementation process and outcome evaluation data (Step 8) may also flag threats to program sustainability. Evaluate your sustainability capacity in advance of the launch and again once the program is underway as new barriers or drivers to sustainability may emerge once the program is up and running. Be prepared to reassess barriers and drivers (Step 4) to ongoing delivery and use of the program. Decide who will be responsible for these assessments. The results should be reviewed as soon as possible to permit the planning team sufficient time to respond to any identified barriers.

A number of tools are available to help teams consider the sustainability capacity of a program [61,62]. You may wish to develop your own assessment using the Washington University Centre for Public Health Systems Science sample provided in the package of Tools.

Skip to Tool 6.2: ProgramSustainability Assessment

Phase 2 Tips & Potholes

Travel Tips

Evaluation: planning and administration

Consider having participants log their exercise activities (e.g. types of exercises, number of repetitions) as a way for both participants and fitness professionals to monitor individual participation and progress. The logs can be completed at the end of each class and maintained by the participant or stored securely on site depending on agency privacy protocols and regulatory requirements

> Check with your local health authority about the existence of possible measures or statistics that could be used to measure your program's impact such as reduced wait times or fewer re-hospitalizations. Consider tracking referrals as part of your evaluation plan, which may show that coming to your program results in health system cost savings by diverting referrals elsewhere."
>
> **– Physiotherapist**

Suggestions from exercise program developers about administering participant outcome measures:

- How you conduct performance measures might depend on how the program itself is structured. For example, if offered in blocks (where everyone within a class starts and ends together), the program might build in assessment weeks for all participants before starting the next block. If the program has a rolling enrolment (where people enter as they register), consider allocating a separate appointment to complete assessments or assign a dedicated assessor to conduct assessments while the rest of the class is still running for everyone else.

Barriers & solutions

> Getting our folks to the program was initially problematic until we introduced car pooling and found some caregivers who were willing to drive another participant or we found volunteers willing to drive."
>
> **– Program Provider**

> We had a speech pathologist from the regional stroke centre come to work with our trainers on how to interact with clients who had some difficulty speaking."
>
> **– Program Manager**

> We're lucky the (Ottawa) Aphasia Centre is next to our physiotherapy clinic; we conduct the exercise classes there. Participants don't have to have a speech impairment to join the group, but it's handy to have support on site if we need it. They also have social workers who can assist with other care requirements if clients need assistance."
>
> **– Physiotherapist/Trainer**

Note: The Canadian Stroke Community-based Exercise Recommendations [2] includes strategies to enhance participation for adults with communication (aphasia) and swallowing (dysphagia) difficulties.

- Programs could select 2-3 standardized brief measures of well being and physical function in addition to collecting data on motivation to register for the program and program satisfaction (e.g. TIME™ satisfaction questionnaire), for example:
    - validated self-report measures (which adults don't need assistance to complete)
    - simple measures of physical function requiring a brief administration time, e.g. the 30-second sit-to-stand test could be incorporated into the seated warm-up of a class. In the first 2 classes an instructor could administer this measure during the warm-up to obtain a baseline.
    - another strategy is to hand out step counters and monitor and document # steps achieved during the class in the first 1-2 sessions, then repeat for the last 2 classes. This would work well for classes that have a walking activity.

      Note: You may have to adapt measures (e.g. replacing text with minimal text and graphics) for people with aphasia. The Aphasia Institute may do this for a cost
- Include the assessments as part of the screening process at an introductory session before the program formally starts. As new people join the program, they may come 15 minutes before the class to have their assessments. Having shorter assessments helps but there are still cost and resource implications. Where possible, we have students to assist in this process.
- The SPPB (Short Physical Performance Battery, a capacity measure used in the FAME program, see Tools, Step 6) should take 10-15 minutes to perform and is an efficient way of gathering outcome measures and feedback for participants in addition to assessing the program.

> "Most patients are given an exercise program upon discharge. The patient should start their program immediately so as not to lose momentum. Perhaps a community program could work with the hospitals to see if patients leave with the same exercise instructions."
>
> **– Person with stroke**

> "Toileting became a big issue for us. Some people require assistance and supervision in the washroom - you can't stop a class or jeopardize the participant to instructor ratio to take someone to the washroom. The centre needs an accessible washroom."
>
> **– Fitness professional, Trainer**

> "Consider having a volunteer 'Greeter' to help people manage coats and boots in winter… this all takes time; many participants need a little extra help."
>
> **– Fitness professional, Trainer**

Sustainability

> "The best sustainability outcome may be having participants transition into mainstream fitness/ recreation programs offered at a local fitness facility or perhaps starting their own walking program in their neighborhood or at a local mall which are typically open to communities in the early morning hours before the stores open."
>
> **– Disability Consultant**

> "Make sure you have a lead with dedicated, paid time. It's really hard to do this (implementation) off the side of your desk; you really need a dedicated project lead."
>
> **– Stroke Rehabilitation Specialist**

Potholes

Avoid the temptation to rush into offering an exercise program without dedicating time, effort, and funding to the implementation planning process. You risk launching a program that cannot be sustained past the first cycle.

"Our goal at the beginning was to offer the program as a pilot project. Our mindset was, let's just do it, we're not planning for long term. We're just planning to get the first 10-12 weeks done. We realize now that we wasted critical time and money by not following a planning process that is aimed at creating success and sustainability."

- Physiotherapist

"We brought in a program as an offering. It kind of fell into our laps and we jumped at the opportunity. Had we completed the steps included in this Planner, it could have helped us to offer a more solid, evidence-based program that we might still be offering today."

- Therapist delivering Conductive Education

"We did think a lot about the client barriers, but we didn't think about all of the cultural barriers at the facility (for example, comfort level in a group class)."

- Rehabilitation Specialist

"We did have something going for a while; it was managed by a kinesiologist, I think. He had money for a study about balance, but after the project was finished, we were not able to obtain further funding."

- Manager, City Parks and Recreation

Photo by Stefano Valicchia on Unsplash

PHASE 2 Progress Checklist

Download Editable Phase 2 Checklist:
AfterStroke.ca/SRIM

By the end of Phase 2, your team will have examined potential barriers and drivers associated with the implementation of the proposed exercise program, prioritized the recognized challenges, developed and tested solutions tailored to each barrier, and leveraged any identified supports. An evaluation strategy has been established and capacity for sustainability assessed. Use this checklist to gauge your progress and consider what remains to be done. Keep in mind how planning decisions and actions might influence program sustainability over time.

	Was This Completed?	
	No	Yes
*We have previewed potential exercise programs, completed a comparative assessment, and reached a preliminary decision on which program best meets our needs.		
*** For our preferred program option, we have considered barriers and drivers, including a detailed assessment of:**		
For the Exercise Program – we have considered features/attributes such as:		
• History of the exercise program, supporting research evidence and adherence to established best practice guidelines for exercise designed for people with stroke		
• Availability of expertise and resources to meet stated delivery requirements including necessary training and supervision of fitness professionals		
• Level of flexibility; degree to which program can be adapted to meet our needs		
• Monitoring and evaluation processes for program and participants		
• Space and equipment requirements		

(continued on next page)

PHASE 2 Project Checklist

(continued from previous page)

	Was This Completed?	
	No	Yes
For the Program Users – we have considered characteristics such as:		
• Participant eligibility criteria and implications for stroke-specific or mixed classes		
• Participant readiness, receptiveness, and commitment		
• Fitness professional training, motivation, skill/expertise, experience, confidence		
• Health partner belief in value of program; supportive leadership within the community		
• Culture and language factors		
For the Organizational Setting and Systems – we have considered factors such as:		
• Compatibility with provider organizational mandate, culture, and values		
• Organizational stability, administrative capacity; investment in program		
• Continuous funding supports		
• Health partner discharge planning and referral patterns		
• Participant recruitment and retention factors		
• Partnership and collaboration agreements; licensing and insurance requirements		
• Participant transportation needs		

(continued on next page)

PHASE 2 Project Checklist

(continued from previous page)

	Was This Completed?	
	No	Yes
We have prioritized each identified challenge and developed a solution and action plan tailored to stakeholder interests and concerns, including:		
• Program strategies		
• User strategies		
• Setting strategies		
*** We have developed an evaluation plan, including:**		
• Defined indicators (specific measurements) and methods for evaluating our implementation process and monitoring program use		
• Defined measures and process for assessing participant and program outcomes		
*** We have completed a sustainability capacity assessment**		

* Some of these factors may also have implications for longer term program sustainability.

Assess your team's progress

STOP: We have not addressed most of these implementation planning factors; we are missing critical information, key resources, and/or sufficient level of support to continue.

CAUTION: We have addressed some but not all these implementation planning factors. We can proceed cautiously pending further efforts to complete outstanding planning elements.

GO: We have sufficiently addressed most of these implementation planning factors and are confident with proceeding to the next Phase.

Caution: The links below do not include a link back to this page. Please take note of the page number (85) or, if viewing in Adobe Acrobat, use the Alt + left arrow (PC) or Command + left arrow (Mac) to return to this page (these commands may not work for all users across all platforms).

Planning Tools & Resources

Step 4

- Tool 4.1 IDBarriers&Drivers_PROGRAM
- Tool 4.1 IDBarriers&Drivers_PROGRAMUSERS
- Tool 4.1 IDBarriers&Drivers_PROGRAMSETTING

Step 5

- Tool 5.1/5.2 SolutionBuildingWorksheet (with sample approach)

Step 6

- Tool 6 EvaluationPlanning Matrix_template
- Tool 6.1a ProgramFidelityChecklist_Fit for Function Sample
- Tool 6.1b SPPB_FAME Sample
- Tool 6.2 Program SustainabilityAssessment

Tool_ProgressChecklist PHASE 2

Appendix (read more)

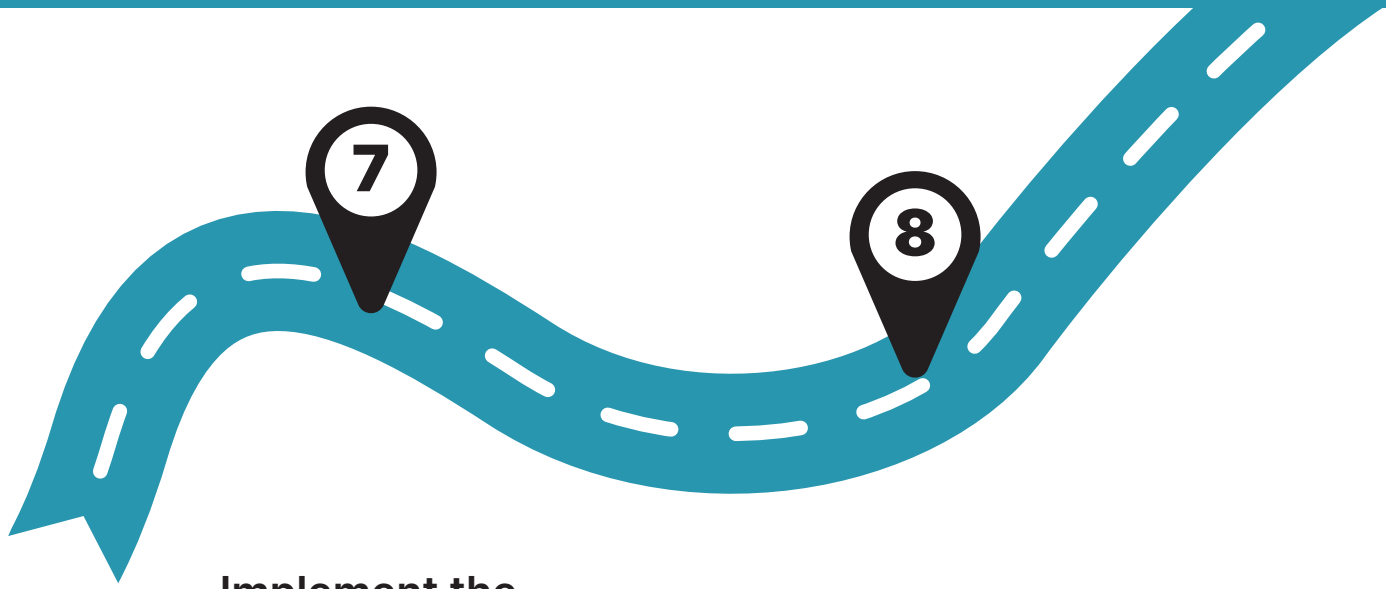
Glossary

Bibliography

I. Fitness Professional Training
J. Program Communications Samples
K. Defining Indicators
L. Participant Outcome Measures

PHASE 3 Implementing, monitoring and maintaining our program

Steps



Activities

Implement the Exercise Program

7.1 – Prepare to launch

7.2 – Deliver program

7.3 – Celebrate launch

Evaluate, Adjust, Sustain

8.1 – Conduct evaluation in the Implementation Period

8.2 – Adjust Implementation Plan

8.3 – Continue evaluation and adjustments in Sustainability Period

7 Implement the exercise program

The planning team has addressed known barriers to implementation, defined their evaluation strategy, and is prepared to monitor the exercise program as it gets underway. In Phase 3, the team conducts a final launch-readiness check and delivers the program. Implementation and outcome evaluation data are then collected and any challenges to implementation are identified in real-time.

The planning team, including evaluators and community partners, works together to respond swiftly to concerns, continue to facilitate implementation, and ensure the program is successful and sustainable over the long term.

Skip to Tool 7.1: ReadinessChecklist_TIME™ Sample

A sample checklist is included in the package of Tools; tailor to your specific requirements.

Activity 7.1

Prepare to launch

After months of preparation, your planning team will be eager to announce a program launch date. By this stage you have established a firm basis of support amongst all interested parties, formed critical relationships and referral patterns with relevant health partners, set in motion your promotion and recruitment strategy, prepared the necessary facilities and equipment, and conducted instructor, staff and possibly volunteer training. The launch-readiness check is to help the team confirm that everything is in place for a successful program start. Any areas that may not be ready should be reviewed and issues resolved.

Create a 'Readiness Checklist' to use before proceeding with your first exercise session. Have you addressed, e.g.:

- Program and/or Partner Licensing agreements
- Exercise space - rental and/or service contracts, accessible washrooms, accessible parking
- Exercise equipment
- Instructor hiring, training, and supervised practice
- Staff and volunteer availability, training, and scheduling
- Program manager and supervisory roles
- Rehabilitation health partners - expertise and advisory capacity
- Promotional campaign and materials - flyers, posters, ads, social media
- Enrolment and registration procedures
- Funding, membership fees or co-pay and sliding scale arrangements
- Pre-screening and eligibility assessment procedures - tools, training, and documentation
- Medical letters, participant eligibility and waivers
- Program and participant outcome measures - tools, training, and documentation
- Insurance issues, agency, and participant safety/liability
- Participant transportation options

Promoting the program

Your marketing and communications strategy will have been discussed as a key element of your implementation plan (Step 5). Study participants shared several ideas, including:

- Ensure that your program is entered in community event calendars. Municipal recreation centres often publish a spring and fall program guide; check their publication dates to determine if your program can be included in the catalogue.
- Low cost tactics include posting flyers at senior centres and retirement residences, doctors' offices and clinics.
- Consider the publication of an article in the local newspaper.
- Make a presentation at centres where your target participant group gathers, e.g. community and senior centres, churches, advocacy associations.
- Consider providing health-care professionals with a referral form.

Read More in the Appendix

J. Program Communications Samples

Pre-screening and medical authorization considerations

Several tools are available to assist participants and health-care professionals determine an individual's readiness to participate in an exercise program after stroke. The exercise programs may provide recommendations and include a sample participant questionnaire or waiver form in their training materials. Municipal recreation facilities often use a standardized form at intake such as the **Physical Activity Readiness Questionnaire for Everyone (PAR-Q+) and Physical Activity Readiness Medical Examination (ePARmed-X+)** [63]. The Canadian Society for Exercise Physiology (CSEP) also provides a "Get Active Questionnaire" [64], which a participant could use to begin a discussion with a fitness or health professional about readiness to participate in a program.

The Canadian Stroke Best Practices Post-Stroke Checklist [65] is a 13-item checklist that identifies the potential presence of post-stroke concerns including mobility, activities of daily living, communication, relationships, and others. It might also serve as a useful discussion guide for referring health practitioners or for community centre staff in reviewing program readiness with prospective participants.

The checklist can be accessed at:

- www.heartandstroke.ca/-/media/pdf-files/what-we-do/publications/csbp_post_stroke_checklist_en

Skip to Tool 7.1: Participant Screening_FFF & TIME™ Samples

Sample screening checklists are provided in the package of Tools.

Activity 7.2

Deliver the program

The program developers of FAME, Fit for Function and TIME™ provide comprehensive materials addressing the exercise regimen itself and recommendations for management of the exercise class. It is often useful to do a trial or test run with a small number of participants prior to scheduling a full class. Study participants told us it was also helpful to have the program developer or a health partner present to observe and support the first class to assist with supervising specific activities.

> "I would like to see how participant orientation during the first session is worked into the program. Since everyone will be new, there will be more time spent introducing the program, getting participants settled, demonstrating exercise, etc. This needs to be accounted for (the time and steps). e.g., If I assessed each person's SPPB how long would I allot for this and how would I work it into the program? What do other participants do during this time? A first session of a new program is unique compared to subsequent sessions. And since it sets the tone for the program, should be addressed separately."
>
> **- Fitness Instructor**

> "Each person should be interviewed as to their abilities, goals, permission to attend the class from their family physician, and then perhaps have different categories of classes as to abilities. Exercise providers need to be trained as to the effects of stroke - fatigue, mood, cognition, memory, etc. before working with us."
>
> **- Person with stroke**

Activity 7.3

Celebrate the launch

Why is it important to celebrate your successes?

Consider organizing a special event to celebrate the launch of the exercise program. This is a valuable opportunity for you to formally recognize and thank all those who contributed time, effort, and resources towards this community health initiative. Acknowledging everyone's efforts in getting to this point shows the team that the work it is doing is important and appreciated. This is a major milestone to be applauded.

Consider hosting an open house; invite key partners and municipal leaders. This can occur as part of your marketing strategy prior to the launch or at the beginning or completion of the first session. Notify your local press and arrange a listing in your regional or community events calendar. Building awareness and maintaining momentum is also important to sustaining the program.

8 Evaluate, Adjust, Sustain

In Step 8 the planning team begins a process of program monitoring that involves collecting evaluation data, communicating results, and responding to the findings to resolve any barriers to implementation. This cycle of activity continues after the implementation period into the sustainability period (Figure 8).

Why is activating your evaluation plan important?

Now that the exercise program is up and running, setting in motion the evaluation plan you developed in Step 6 will provide real-time data about your implementation process, program use, and participant, provider, and organizational outcomes. This information is necessary to determine how well the program is functioning and whether improvements are needed on an ongoing basis to ensure the program is sustainable.

If your team has been following the planning Roadmap, the work you did in Step 6 to create a comprehensive evaluation plan will now facilitate the collection of the relevant evaluation data and the interpretation and communication of results. These data will inform both short-term course corrections and longer-term program sustainability. If your planning team is starting at this step, for example to retrospectively evaluate an existing program, you may have limitations on the scope of data that can be obtained but you will still be able to gather some indicators of implementation process and program outcomes to help inform future plans for the program. You are encouraged to review Step 6 and the associated tools and resources to determine which evaluation measures are applicable and feasible at this stage.

Guiding questions*

- Are the necessary resources including staff, data collection instruments or equipment, etc. in place to conduct the planned assessments?
- Have lines of accountability been established between those overseeing the evaluation and the planning team (if members of the planning team are not directly involved in the evaluation)?
- Are the evaluation measures being implemented effectively and consistently as planned?
- Are the evaluation data being reviewed and analyzed promptly?
- How and with whom will results be shared?
- How will the results of the implementation evaluation be used in real time to inform changes to improve operation of the program?
- How will the results from the outcome evaluation be used to improve the program and/or encourage sustainability of the program?

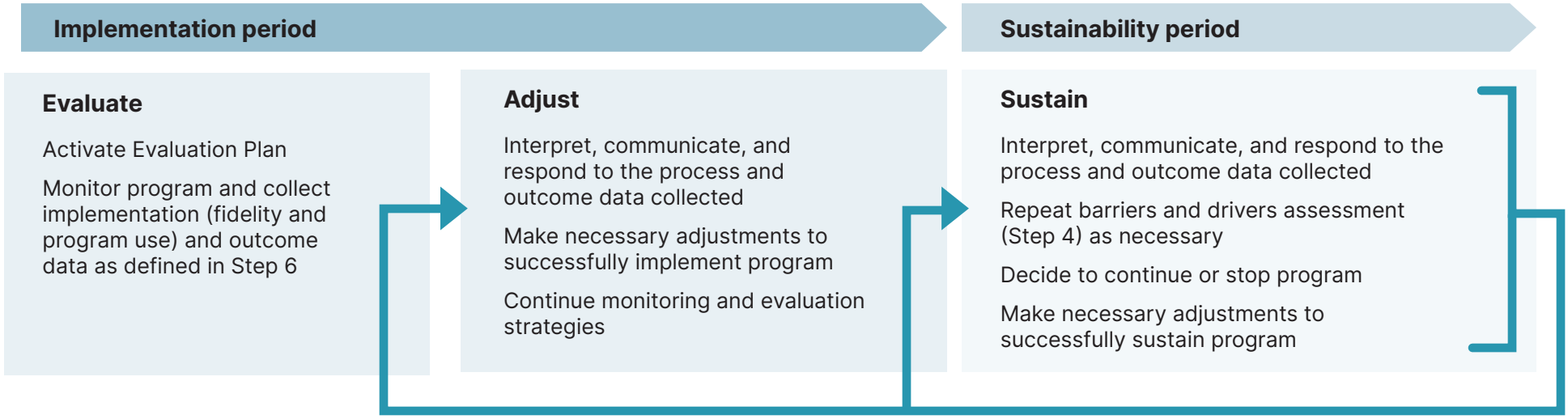
*Questions adapted from Harrison and Graham 2021 [14]

Moving from the implementation period to the sustainability period

The term implementation period typically refers to the timeframe involving the initial launch and early delivery of a program. There are no widely accepted criteria for when the implementation period turns into the sustainability period, but two years post implementation is a benchmark often considered in health-care interventions. With exercise programs, it probably makes more sense to think of the sustainability period being defined as occurring after a number of cycles the program has been offered.

Consider defining the duration of your implementation period (e.g. 2-4 program cycles, 1-2 years) and at what point your organization will consider the program as a viable, sustainable service priority for the community.

Figure 8: Evaluate, Adjust, Sustain



Activity 8.1

Conduct Evaluation in the Implementation Period

Activity 8.1a

Collect data on the implementation process

Evaluating the implementation process begins at, or even prior to, the launch of the program depending on what baseline data are needed. Launching a new program is typically a very busy time and data collection can be easily neglected. The planning team needs to ensure those entrusted with overseeing the evaluation (especially if assigned to a separate group) are engaged and monitoring the evaluation activities from the start. The evaluation and planning teams will need to work together; frequent communication will help prevent the evaluation from stalling. Establish regular briefings or updates to review the data being collected, e.g. numbers of participants enrolled, weekly participation rates, adverse events, program fidelity, etc. Determine the interval between briefings based on the volume of data being collected and the information needs of the planning team (which is now effectively the implementation team) during the early days of the implementation. It is also important to monitor the collection of data to ensure it is happening in a consistent and efficient manner and that those providing or collecting the data are not overburdened.

Program Fidelity Assessment

Once a program is underway, program managers can assess program fidelity together with their fitness professionals to review e.g. the availability of equipment, safety and other procedures, participant screening processes, management of the exercise regimen, and any other factors deemed essential by the exercise program developers for the safe and effective delivery of the program. If the prescribed exercise regimen is not being followed or other conditions are not being met, the program manager will need to determine the risk and impact of such deviations. It may be necessary to consult with a health partner or the program developer to determine how to proceed with any adaptations to the program.

Photo created by frimufilms at www.freepik.com

Program use

Collecting data about program use will help the planning team understand barriers to enrolment and participation. Timely reporting on program use indicators will allow the team to intervene quickly. Indicators of program use were described in Step 6, including e.g.:

- number of participants (new, returning, size of waiting list)
- participant adherence rates (attendance, % dropouts)
- participant experience/satisfaction (re-registration rates)
- staff/participant ratios (number of instructors, volunteers, caregivers per class)
- staff availability (number of trained fitness professionals, volunteers at provider centre)
- number of adverse events (chest pain, dizziness, falls or injuries); number of events resolved

It may be necessary to conduct a second barriers and drivers assessment (Step 4); however, this time the program, program user and program setting factors represent real issues, not hypothetical or anticipated challenges. Once your program is underway and people gain experience with it, some of the barriers you identified earlier may not have materialized and ones not considered in your initial assessment may have emerged. The Implementation Planning Roadmap process is iterative and continuously seeks to identify and resolve barriers to program use and sustainability. Consider tailoring the barriers assessment tools you previously used to sharpen focus on priority concerns.

Activity 8.1b

Collect data on program outcomes

Several outcome indicators were described in Step 6, including e.g.:

- for program participants: capacity, performance, body function, community participation and quality of life
- for program providers, e.g. fitness professionals: knowledge, skills, confidence generated from involvement with the program as well as satisfaction with their role in the program
- for provider organizations: meeting program objectives, cost of implementing and running the program, number of participants transitioning from specialized programs to regular, non-adapted options.

There is also the possibility of unintended outcomes and therefore a need for evaluators to be vigilant and open to recognizing any and all effects of the program, both positive and negative. For example, provider organizations might benefit from new and strengthened relationships within their community and gain support and/or resources for other organizational initiatives.

This information may be collected during or at the end of the program (e.g. at 8-12 weeks), and sometimes after the end of the program. Have a strategy for contacting participants after classes have ended (e.g. telephone numbers, email addresses, social media, newsletters) to reduce the likelihood of losing participants to follow-up.

Activity 8.2

Interpret findings and adjust the implementation plan

Analyzing the data in real time enables the planning team to swiftly respond to any pressing needs for change. For example, if midway through an exercise program cycle a large proportion of the participants have stopped coming to the class, the program manager will want to follow up as soon as possible with the absent individuals to determine why they are not coming and make corrections to the implementation plan.

If your registration statistics reveal fewer individuals are enrolling than projected from your community scan which revealed a considerable local demand for the program (Step 2), this should prompt an investigation into barriers to enrolment. Consider, for example: is it a lack of community awareness of the program? lack of referrals? the enrolment fee? issues related to accessibility of the facility? limited public transportation to the facility? or something else? Similarly, if there is a high drop-out rate or attendance has declined over time, you'll need to understand the reasons before you can build effective solutions.

Alternately, if you discover your program is popular and expanding rapidly, you'll need to determine how to make room for new participants while maintaining access to this or other program/exercise options for previous registrants.

Fitness professionals need to be included in discussions of evaluation findings given their essential role in delivering the program. The reasons for any deviations in program fidelity should always be explored with the fitness instructor, for example, are program fidelity issues related to the staffing ratio, equipment, space, or how the fitness professional is delivering the program? If an issue is identified with how the program is being delivered, it will be important to develop a plan which includes setting clear goals, continuing to monitor program delivery, and providing support to help instructors implement the exercise program with greater fidelity.

Strategies might include retraining or more training on the exercise program, coaching by other fitness professionals or health-care professionals associated with the program, and having the instructor buddy up with a more experienced instructor during classes. It may be necessary to continue to monitor program fidelity over time to ensure the program continues to be optimally delivered.

Consider whether there are other key stakeholders that should be included in reviewing the evaluation findings, assessing the implications, setting priorities, and making decisions about how issues will be addressed.

Utilizing program evaluation to determine program effectiveness and ensure client retention for long term sustainability

A municipal recreation centre offering the TIME™ program observed that many of its participants were dropping out of the program. A program evaluation was conducted to identify the reason for the dropouts. Feedback from the staff and the participants revealed that the recreation facility was not accessible to people with mobility restrictions. For example, the room in which classes were held was far from the parking lot and accessible washrooms that could accommodate a wheelchair were on a different floor. Participants needed the help of a caregiver or instructor to visit the washroom and would miss parts of the exercise class. Some participants found this too burdensome and dropped out to join programs at competing locations. To align with the organizational mission of providing access to fitness for all members of the community, temporary measures were taken to improve accessibility. Classes were moved to a room close to the entrance and parking. Volunteers were recruited to help during the class and to assist participants to and from the washrooms. Renovation plans were set in place to build new accessible washrooms on all floors and build ramps to facilitate easier navigation of the centre. These changes resulted in a greater retention of program participants.

Activity 8.2a

Share evaluation findings

Both positive and negative evaluation findings are constructive and can be used to improve the program. However, negative outcomes (e.g. the program is not achieving its defined objectives) may not be viewed as constructively if this information is perceived to pose a threat to the continuation of the program.

The planning and evaluation teams need to determine together how evaluation outcomes will be communicated. The evaluation team should have assurances that the planning team will not pressure them to produce a positive outcome evaluation. Having a plan for managing negative outcomes will avoid frustration and tension in the long run. Negative findings should be double-checked to ensure there are no errors in data collection or interpretation. Explanations for negative findings should be explored, e.g. is the lack of a specified participant performance outcome the result of the program not being delivered as intended or participants not fully participating, rather than the program not being effective? Both are amenable to being improved. How and when the evaluation results are presented to the planning team or centre administrators should be spelled out in advance, as should the mechanism to respond to any disputed findings.

The planning team should also consider how it will share evaluation findings more broadly. Participants will want to know how they are benefiting from the exercise; fitness professionals may want to know whether participants are improving or how to adjust the program to better to help them; and administrators, benefactors and other stakeholders of the program will want to know what impact the program is having and whether it warrants their ongoing support. Sharing evaluation data can also serve to promote awareness of a successful exercise program in the community and potentially attract new participants.

Activity 8.3

Continue evaluation and adjustments in the Sustainability Period

The implementation strategies developed in Step 5 were aimed at fostering uptake of the program; sustainability strategies focus on maintaining program gains by addressing any ongoing, previously identified, or new barriers. The same indicators you used in evaluating the implementation process and program outcomes during the implementation period help determine the likelihood of sustaining the program over time. Managing barriers to the continued success of your program largely occurs once the program has been implemented and evaluation data about the implementation process and program and participant outcomes becomes available.

Guiding questions

- Has the monitoring of implementation and sustainability indicators identified in Step 6 been initiated, e.g. data collection about program use that would reveal slow or declining rates of participation?
- Are those responsible for collecting the evaluation data and those making decisions about the program, (e.g. the planning team, program manager, etc.) discussing these data as they become available?
- Is the program still meeting a need in our community?
- If the program is still needed:
    - How can support from the original stakeholders and participants be maintained and leveraged over the long term?
    - Have any new stakeholders who need to be engaged emerged since implementation of the program?
    - Is there a plan to reassess barriers and develop additional strategies to overcome identified barriers to sustainability?
    - What adjustments can we make to optimize delivery of the program? (Consider the management of staff issues such as turnover, training, support, participant recruitment processes, participant satisfaction, retention, etc.)
    - Is information about the program and any sustainability issues being effectively communicated to staff, participants, partners, the community?

Human and financial resources are required to maintain programs. The context or circumstances in which the program operates is likely to evolve over time, e.g. competing programs may emerge, the resources available to run the program may decline, participant interest may diminish or grow for different reasons, the cost of running the program may increase, or the benefactors of the program may change their priorities.

As in the implementation period, if ongoing program monitoring reveals any new challenges with the program, investigate the issues promptly. Consider conducting another barriers assessment, this time with a view to sustainability rather than implementation. You may be able to use the same barriers questions used in Step 4 or modify them to focus on the issues of concern. In addition to formally assessing for barriers, remember to speak to participants and fitness professionals about their perceptions of how things are working, what needs improving and how.

Continue to communicate with the initial stakeholders and engage any appropriate new partners or planning team members. This is critical for obtaining and maintaining buy-in for the program. Review your data on program use and benefits with stakeholders and partners, participants, program staff, and the community. Evidence of impact is a powerful justification for the ongoing existence of a program. Positive outcomes make effective advertising, and if the results are less positive, you may be able to mobilize the necessary support; in either case the data can be used to argue for more resources for your program.

Over time, a critical and sometimes difficult question must be asked, "Is this program still needed?" Ensure your stakeholders and partners are involved in discussing this question. Deciding to discontinue a program should not be considered a failure if the decision is based on the available evidence on program use, resource use, demand for the program, and benefits accruing from the program. If the decision is to maintain the program, information obtained in repeating your barriers assessment may help identify future threats. Again, as advised in Step 5, involve all interested parties to co-develop solutions for minimizing and/or overcoming identified barriers to the continued success of your program.

> "The first session we ran was the best one and I think there were somewhere between five and ten people in the program. But then we were dropping off by one or two people each time which is why (the program) lasted for not even two years. My role is such a busy role with programming for so many other things here and also supervising staff in all the HR functions, the program wasn't something we were properly able to market and promote. If we had had somebody that was specifically dedicated to administering the program, it would've been easier. It probably would've taken off a lot better with the proper health-care coordinating. Budget was not an issue for us. The training wasn't an issue for us. It was just more not having the proper amount of time to promote it and really get the connections going."
>
> **- Program Manager**

Phase 3 Tips & Potholes

Travel Tips

- When deciding on a program start date, remember to account for the lead time needed to recruit new staff, determine providers of relevant training, or partner with a physiotherapist or kinesiologist to conduct training or supervise practice sessions prior to launching the program.
- Link with a stroke coordinator/stroke navigator and encourage them to promote the program with patients, caregivers, and hospital staff when they visit the rehabilitation units in the hospital. Negotiate for the coordinator to screen patients prior to discharge to determine suitability for the program.
- Have staff managing participant intake conduct a baseline assessment of balance and mobility and a follow-up assessment at the end of each program. Ask participants to complete satisfaction questionnaires about their experiences, benefits, and challenges. Discuss this information at staff meetings to monitor areas for improvement in program delivery.
- Reach out and promote the program as much as possible. Create flyers to market the program and share with colleagues to post in doctors' offices, community health centres, and the local hospital. Use real life stories of participants that have gone through the program and describe the benefits they have received from it. Invite clinicians who might refer to the program and potential participants to tour the program.
- Inquire about opportunities for more stable funding from the regional health authority or local acute care or rehabilitation hospital.
- Set up systems or strategies for fitness professionals to share information about what is working and what is not working with supervisors/health partners, as well as between instructors (e.g. co-teaching scenario).

> "Consider once class capacity has been met, how it will be maintained and how you will bring new participants into the group if the class is full with 'old participants', perhaps those who have been living with stroke for a long time".
>
> **- Program Coordinator, Municipal recreation centre**

Potholes

- Not increasing awareness of the organization's new role and program when the organization is unknown in the community for programming aimed at individuals with stroke.
- Not promoting local transportation services as some participants may lack the knowledge of or the ability to bear costs for paid transportation services.
- Assigning instructors not interested in working with individuals with disabilities.
- Failing to develop a stable, sustainable funding model for the program.

"(We learned) a social group for people with stroke had started up on the same day and time as the exercise class and is competing for participants."

- Program Coordinator

PHASE 3 Progress Checklist

Download Editable Phase 3 Checklist:
AfterStroke.ca/SRIM

In Phase 3 the planning team conducts a launch-readiness check and implements the exercise program. They assess their implementation process, monitor program use, and evaluate program and participant outcomes. Using the results of these assessments, the team stays responsive to program and participant needs to ensure program sustainability. Use this checklist to gauge your progress and consider what remains to be done.

	Was This Completed?	
	No	Yes
***We've completed our launch-readiness checklist and can confirm:**		
• Program funding secured		
• Space, equipment, circuit stations ready		
• Fitness professionals hired, scheduled, trained		
• Licensing, insurance, and health partner agreements established		
• Marketing, promotion, communications strategies in place		
• Participant screening process established		
• Participant eligibility/medical waivers process in place		

(continued on next page)

PHASE 3 Progress Checklist

(continued from previous page)

	Was This Completed?	
	No	Yes
***We have activated our Evaluation Plan and are:**		
• Collecting data on implementation process		
• Collecting data on program and participant outcomes		
• Reviewing the data on a regular basis		
• Sharing results with participants, staff, partners, community		
***We are developing strategies and tactics (solutions) to respond to identified barriers to our implementation process**		
• Co-creating solutions with planning team staff, participants, and partners		
***We are developing strategies and tactics (solutions) to respond to identified barriers to program sustainability**		
• Co-creating solutions with planning team staff, participants, and partners		

* Some of these factors may also have implications for longer term program sustainability.

Assess your team's progress

STOP: We have not addressed most of these implementation planning factors; we are missing critical information, key resources, and/or sufficient level of support to continue.

CAUTION: We have addressed some but not all these implementation planning factors. We can proceed cautiously pending further efforts to complete outstanding planning elements.

GO: We have sufficiently addressed most of these implementation planning factors.

Caution: The links below do not include a link back to this page. Please take note of the page number (103) or, if viewing in Adobe Acrobat, use the Alt + left arrow (PC) or Command + left arrow (Mac) to return to this page (these commands may not work for all users across all platforms).

Planning Tools & Resources

Step 7

- Tool 7.1 ReadinessChecklist_ TIME™ Sample
- Tool 7.1 ParticipantScreening_FFF& TIME™ Samples

Tool_ProgressChecklist PHASE 3

Appendix (read more)

Program Communications Samples

In Closing...

You and the team have now followed the planning journey outlined in the Stroke Recovery in Motion Planner. We hope this roadmap will help you successfully implement and maintain your community-based exercise program for people with stroke. The information in the guide is based on best implementation planning practices accompanied by the experiences and wisdom contributed by all our study participants who reviewed versions of the guide or used it in their communities.

Although the approach has been newly applied to planning exercise programs for people with stroke, many benefits from using this roadmap to implementation planning have been identified when used to bring about change in other contexts [14], including:

- more consistent and evidence-informed practice which translates into improved health outcomes for people and possibly more efficient use of resources,
- sustainable, participant-centred programs,
- local ownership of issues and solutions,
- engagement of all relevant stakeholders/partners and improved team functioning,
- capacity building among team members about how to plan, implement and sustain programs, and;
- greater team member and participant satisfaction

The implementation process described in the Planner is intended to be used by teams as they see fit, according to their program goals, their individual experience as planners, access to resources, and the unique circumstances of their planning environment. In some cases, this will mean following each Phase, Step, and Activity closely, while for others, it may be to select which elements most support their needs. However you choose to use the guide and tools, remember that, as with most travels, how you get to your destination can be as important and rewarding an experience as the actual destination.

The Planner is meant to evolve over time as users share their experience with program planning. Your continued feedback is welcome. Please provide comments to:

afterstroke@marchofdimes.ca

Good luck with your planning. Enjoy the trip! We leave the final word to one of our study participants who astutely reminded us:

> "We are well past the time when we need to acknowledge that these exercise programs need to be run in the community, for the community, by the community; it's just to get everybody's buy-in."
>
> **- Stroke coordinator**

Photo by Dario Morandotti on Unsplash

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Acknowledgements

This study was made possible with the financial support of Health Canada, through the Canada Brain Research Fund, an innovative partnership between the Government of Canada (through Health Canada) and Brain Canada, and the Heart and Stroke Foundation Canadian Partnership for Stroke Recovery. The views expressed herein do not necessarily represent the views of the Minister of Health or the Government of Canada.

Ce projet a été rendu possible grâce au soutien financier de Santé Canada, par le biais du Fonds canadien de recherche sur le cerveau, un partenariat novateur entre le gouvernement du Canada (via Santé Canada) et Brain Canada, et le Partenariat canadien pour le rétablissement de l'AVC.

We are grateful to all the individuals (municipal recreation facility managers and program coordinators, fitness professionals, physiotherapists, other health partners and, most importantly, people with stroke) who reviewed evolving drafts of the Planner and provided such detailed feedback. Initial feedback obtained from dozens of stakeholders during the development phase revealed we were on the right track and encouraged us to revise the early draft and carry on. We are indebted to the community groups who then field tested the Planner and shared what worked well and what could be improved from a user's perspective. We are grateful to those participants who shared their planning documents, templates, and worksheets with us and provided permission to include adaptations of them in the Planner. The coronavirus pandemic of 2020-2021 posed a major challenge to communities attempting to develop and deliver new programs. Municipal recreation centres across the country faced lockdowns and closures; programs were halted; staff were redeployed or unemployed. We especially appreciate our field-testing sites' willingness to maintain contact with the study team and to give such thoughtful feedback during this difficult period. Their dedication and resourcefulness in serving their communities is heartening.

During the course of the study we heard that the Planner was very comprehensive, and some thought too long. Fortunately, study participants also offered great ideas on how to organize and navigate the material to use it most effectively. We appreciated the requests for even more information about topics such as developing community partnerships and how to evaluate exercise participant performance. Many of the tools we include in the Planner have been informed by the experiences of our study participants.

We also offer a special thank you to our project advisors: Drs. Sharon Straus and James Rimmer, and members of the Canadian Partnership for Stroke Recovery Advisory Committee for generously offering advice and suggestions for improving the Planner. We are indebted to Dr. Jennifer Moore for providing expert advice on outcome evaluation measures and Dr. Gayatri Aravind for drafting the Glossary and providing field notes and material about factors affecting program sustainability. All the feedback received greatly improved the usability of the Planner but all errors or deficiencies remaining are ours alone.

We would also like to thank Patrick Faucher of the George & Fay Yee Centre for Healthcare Innovation for providing graphic design and style editing services.

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Latest Relevant Information

Please note that hyperlinks are embedded throughout this document for your convenience and were verified at the time of publication. Regretfully, over time, many links will likely become obsolete as websites evolve. We encourage you to perform a web search for the latest relevant information.

Appendix List

Acquired brain injury (return to page 22)

an injury to the brain which is not hereditary, congenital or degenerative, or induced by birth trauma (e.g. stroke, injury to brain from a motor vehicular accident, tumors etc.)

Adaptation (return to page 26)

alterations in response to demands or needs. In modifying evidence-based recommendations for exercise after stroke, it is important that any proposed changes continue to meet the safety and best practice standards supported by the underlying research.

Adaptive exercise (return to page 16)

Mobility is an essential part of most daily activities and important for health and well-being. Adaptive exercise is a term used to describe a variety of interventions designed to enhance balance, coordination, strength, and build functional mobility in individuals with compromised physical ability.

Advocacy group (return to page 22)

an organized group of people working on behalf of and supporting a cause or a group of people, with the aim of influencing public opinion and/or policy

Aerobic (exercise) (return to page 10)

physical activity that strengthens heart and lungs; uses large muscle groups at a moderate intensity, maintained continuously (e.g. 5-10 minutes)

Ambulatory (return to page 44)

able to walk or related to walking

Aphasia (return to page 64)

a cognitive disorder which affects the ability to comprehend or express language in its written or spoken form. This condition is caused by diseases which affect the language areas of the brain.

Applicability (return to page 20)

the extent to which a proposal, research findings and care recommendations or solutions can be applied to or implemented in real world settings

Attributes (of program) (return to page 39)

characteristics, features or qualities (positive and negative) of a program that may influence its acceptability, implementation, or ability to be maintained

Barriers (return to page 11)

factors that prevent an action or pose a challenge to the adoption of a practice, implementation of a program, or a change in behaviour

Best practice (return to page 26)

a treatment method or a technique that is accepted as superior to its alternatives to improve a health condition and is based on a thorough summary of current research findings

Cardiorespiratory
(return to page 10 page 30)

related to heart and lungs

Cardiovascular (return to page 10)

related to the heart, the blood vessels, and the circulatory system

Circuit training

a training program that uses selected exercise or activities performed in sequence

Cognitive (return to page 23)

related to the act or process of knowing, including awareness, perception, reasoning, judgement, intuition, memory, and intellect

Community (return to page 8)

a group of people who live in the same place, or share a particular belief, experience or characteristic in common

Core exercise activity (return to page 29)

exercise activities that are considered to be fundamental components of the program. For example, task-oriented activities are a core exercise activity for the TIME™ program.

Deconditioning (return to page 30)

a change that takes place in the cardiovascular, neuromuscular, and metabolic functions because of prolonged bed rest, or inactivity

Deficit

limitation or impairment of physical abilities or function as a result of a disease or injury

Disability (return to page 10)

an inability or limitation in the performance of an activity in the manner, or within the range considered to be normal for a human being. It reflects the consequence of physical or mental impairment that limits one or more major life activities.

Drop Foot (return to page 64)

a gait abnormality in which the dropping of the forefoot happens due to weakness, irritation or damage to nerves or paralysis of the muscles in the anterior portion of the lower leg

Evaluation (return to page 53)

a process that attempts to systematically and objectively determine the relevance, effectiveness, and impact of activities in the light of their objectives. Two types of evaluation are:

Implementation evaluations
(return to page 68)

(also referred to as process evaluations); these are used to determine whether a program has been implemented as planned, and

Outcome evaluations
(return to page 68)

measure the outcomes or effects of a program (also referred to as program impact).

Evidence-based (or evidence-informed)
(return to page 9)

the integration of clinical expertise, current best evidence, and client values to provide high-quality services reflecting the interests, values, needs, and choices of the individuals served

Exercise

physical activity that is usually planned, structured, repetitive, and designed to improve or maintain physical fitness, physical performance, or health

Facilitator (return to page 54)

a factor or an individual that provides support to other individuals, or organizations in order to achieve (usually beneficial) change; also known as a 'driver'

FAME (return to page 13)

Fitness and Mobility Exercise (FAME) is a community-based exercise program developed for persons with stroke who have some standing and walking ability, developed in Vancouver, Canada. The program is based on current scientific evidence and leads to improvements in mobility, arm and hand function and cardiovascular fitness for people with stroke.

Feasibility (return to page 20)

the likelihood that a project can be undertaken as proposed, keeping in mind the timelines, costs, and resource requirements, as well as the proposed impact

Fit for Function (FFF) (return to page 13)

a community wellness program consisting of group and individual exercise programs and self-management education for persons with stroke. Developed in Hamilton, Canada, it aims to improve mobility, strength, balance, gait, and coordination in persons with stroke.

Flaccidity

the state of absence of normal muscle tone

Functional (exercise activities)
(return to page 32)

exercises based on activities that are identified by an individual as essential to support physical and psychological well-being as well as to create a personal sense of meaningful living. For example, reaching, sitting, standing, turning, and lifting motions are required to manage routine daily tasks like dressing, carrying groceries, loading the dishwasher, getting in and out of a car.

Gait (return to page 30)

manner or style of walking

Guideline (return to page 14)

a direction or principle representing current or future rules of policy and clinical practice; generally, a comprehensive guide to problems and approaches in any field of activity

Health authority (return to page 11)

a regional governance model set up by the provincial government to administer and deliver public health care to Canadian residents

Heart Wise Exercise (return to page 13)

Heart Wise Exercise partners with community organizations to develop and identify exercise programs and classes that are appropriate for people living with a health condition or for those who wish to stay healthy.

Hemiparesis (return to page 64)

weakness of one entire side of the body (hemi- means "half"). Hemiplegia is, in its most severe form, complete paralysis of half of the body. Hemiparesis and hemiplegia can be caused by different medical conditions, including congenital causes, trauma, tumors, or stroke.

Impact (return to page 34)

the effects or influence of a change (an action, a program, or policy) on the recipient of the change, or society at large

Impairment (return to page 37)

a loss or abnormality of anatomical, physiological, mental, or psychological structure or function; the natural consequence of pathology or disease

Implementation Planning
(return to page 7)

a process that turns strategy into action. An implementation plan covers all aspects of a project including objectives, scope, budget, timeline, personnel, and progress monitoring. It is an actionable roadmap from project inception to completion.

Inclusive (return to page 12)

inclusion can be thought of as fostering an environment where the uniqueness of individual beliefs, backgrounds, talents, capabilities, and ways of living are welcomed and leveraged for maximum engagement, including decision-making.

Indicator (return to page 67)

a specific observable, measurable variable that shows changes or progress

Keep Moving with Stroke
(return to page 44)

Keep Moving with Stroke is a community-based exercise program involving aerobic conditioning, functional strengthening, mobility and balance exercises specifically designed to meet the needs of those living with chronic stroke.

Knowledge translation/mobilization (return to **page 2**)

a set of processes within a complex system of interactions between providers and users involving the creation, synthesis, dissemination, exchange, and application of knowledge to provide improved health, more effective services and products, and a strengthened health-care system to Canadians

Mobility (return to **page 10**)

the ability to move from one place to another

Outcome (return to **page 68**)

change resulting from set of actions. In health, an outcome is the possible result of an exposure to an intervention (or a lack thereof). Outcomes are the bottom-line measure of effectiveness of the health-care delivery system.

PAR-Q+ and ePARmedX+ (return to **page 88**)

measures of readiness for undertaking physical activities. PAR-Q+ is a self-administered questionnaire that assesses a person's readiness to participate in physical activities. ePARmedX+ is an online application that can be completed with or without the help of a qualified exercise professional. It is more detailed than the PAR-Q+ and includes questions about current and past health conditions.

Participant (return to **page 12**)

Individuals with stroke who enroll in a community-based exercise program. In the Planner we use the term "participants" rather than "clients" or "patients", which is often used by rehabilitation professionals to refer to those to whom they provide therapy. Additionally, community-dwelling people with stroke have told us they preferred not to be labelled as patients.

Participant-centred (return to **page 12**)

a way of thinking and doing things that sees the people using health, social and community services as equal partners in planning, developing, and monitoring programs to make sure their needs are met [15].

Planning partner (return to **page 25**)

In the Planner, a planning partner might include people with stroke/caregivers, municipal recreation staff including program managers, administrators, fitness professionals or volunteers, health-care providers, and other stakeholders or program funders or sponsors.

Post-stroke (return to **page 2**)

the period of time after the stroke episode

Program fidelity (return to **page 39**)

the degree to which the exercise program is delivered as it was designed including e.g. recommended enrolment, prescribed regimen of activity, staff-participant ratio, fitness professional training and conduct, etc.

Project charter (return to **page 27**)

a document that describes project objectives, scope, how it will be conducted, stakeholders involved, roles, responsibilities of the planning team, timelines and costs involved

Rehabilitation (return to **page 7**)

involves the combined and coordinated use of medical, nursing, and allied health skills (physical therapy, occupational therapy, etc.) along with social, and vocational services to maximize recovery of physical, psychological, and social functions in persons suffering from disease or injury

Risk factors (return to **page 64**)

behaviors, attributes, or environmental influences that increases the chance of developing impairments, functional limitations, or disabilities

Sedentary behavior (return to **page 30**)

a low level of behavior while awake, e.g. sitting, reclining, or lying postures; watching TV while seated, seated work on a computer, lying on a bed while reading, etc.

Spasticity

a condition in which muscles stiffen or tighten, preventing normal fluid movement

Stakeholder (return to **page 12**)

any person who has an involvement or interest in a program or a system, including beneficiaries, providers, users, and funders

Stroke survivor (return to **page 7**)

anyone with a stroke, including individuals with stroke who are planning partners

Study participant (return to **page 7**)

refers to the individuals that reviewed the Stroke Recovery in Motion Planner and provided feedback as part of the evaluation study

Sustainability capacity (return to **page 76**)

the ability to maintain programming and its benefits over time. In this planning process, sustainability is described as the degree to which the exercise program continues to be offered and used by participants, and where the benefits of the program to the participants and the organization continue to be realized after the program has been running for a defined period of time.

Target population (return to **page 39**)

the group of people towards whom an intervention or program is directed, i.e. those that will most benefit from it

Task-focused (return to **page 32**)

similar to functional activities; task-focused or task-oriented exercises involve repetitive practice of real-life tasks (such as walking while carrying a bag of groceries, performing a sit-to-stand, climbing up stairs) with the intention of acquiring the skill and/or improving the ability to do the task

Telehealth (return to **page 44**)

delivery of health services including evaluation, diagnosis, treatment, and management by a health-care provider through remote telecommunications (audio and/or video)

Third sector organizations (return to **page 54**)

also known as the voluntary sector, independent sector, community or civic sector referring to the realm of social activity undertaken by organizations that are non-governmental non-profit organizations. While the use of this terminology is variable, most definitions point to five characterizing traits: they are (1) formally structured, (2) privately owned and independent from the government, (3) non-profit distributing, (4) self-governing, and (5) benefitting from voluntary activities. Synonymous terms: 'non-profits', 'NGOs', 'community-based organizations' (CBOs), 'charities', 'voluntary organizations' [41].

TIME™ (return to **page 13**)

Together in Movement and Exercise (TIME™) is a task-oriented, community-based exercise program delivered using a health care-community partnership, aimed at improving functional abilities in persons living in the community with balance and mobility challenges.

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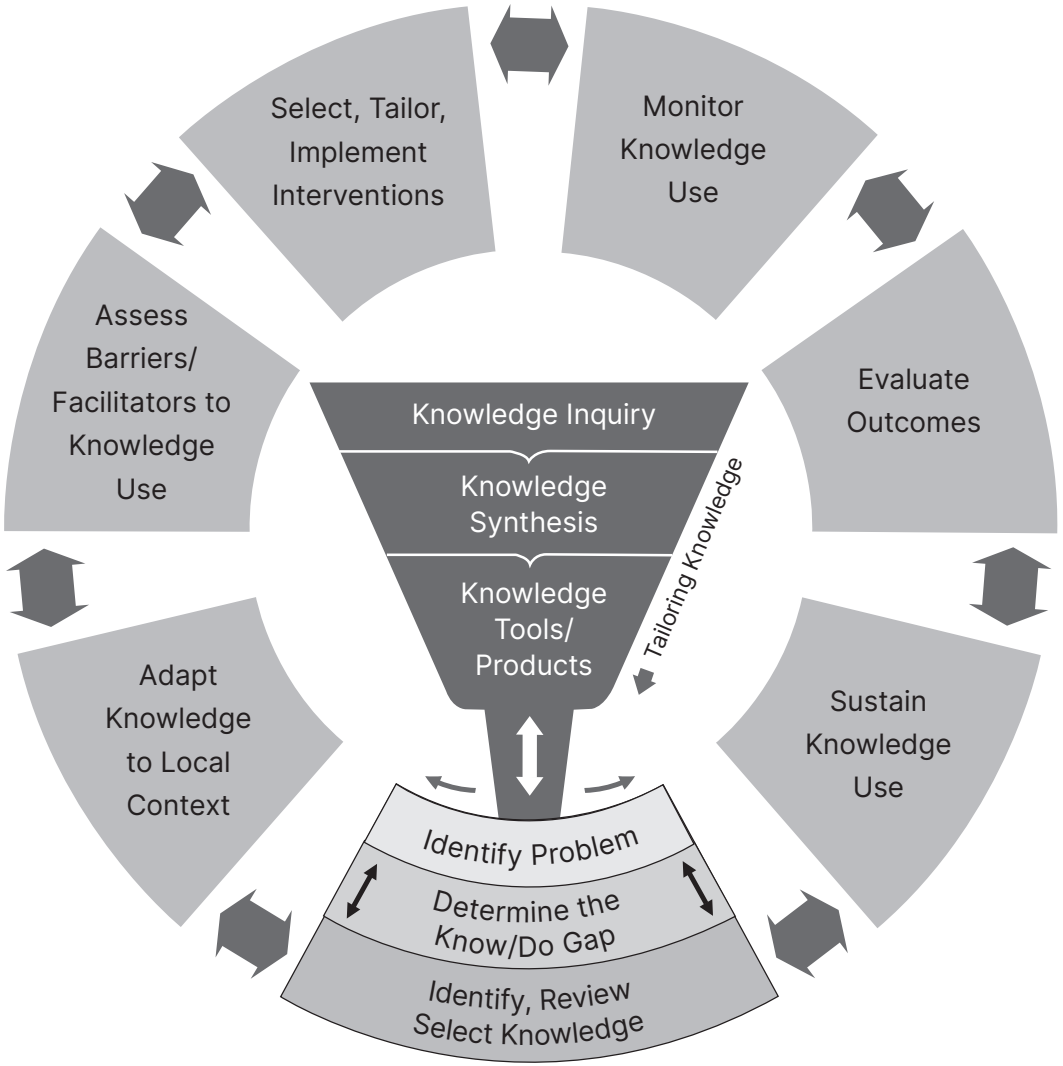
Knowledge creation and application is an iterative, dynamic, and complex process. The implementation planning framework used in this guide is derived from a synthesis of common elements in over 30 planned action theories and comprises two major processes: knowledge creation and planned action. [11,43] In the Knowledge-to-Action cycle, the central funnel illustrates where knowledge is created and involves three stages to tailor and refine information for use:

- knowledge inquiry, e.g. primary research studies such as clinical trials,
- knowledge synthesis, e.g. a rigorous appraisal and summary of a body of research work, and
- development of knowledge tools or products, e.g. clinical practice guidelines or treatment/program recommendations, in this case, an evidence-based exercise regimen.

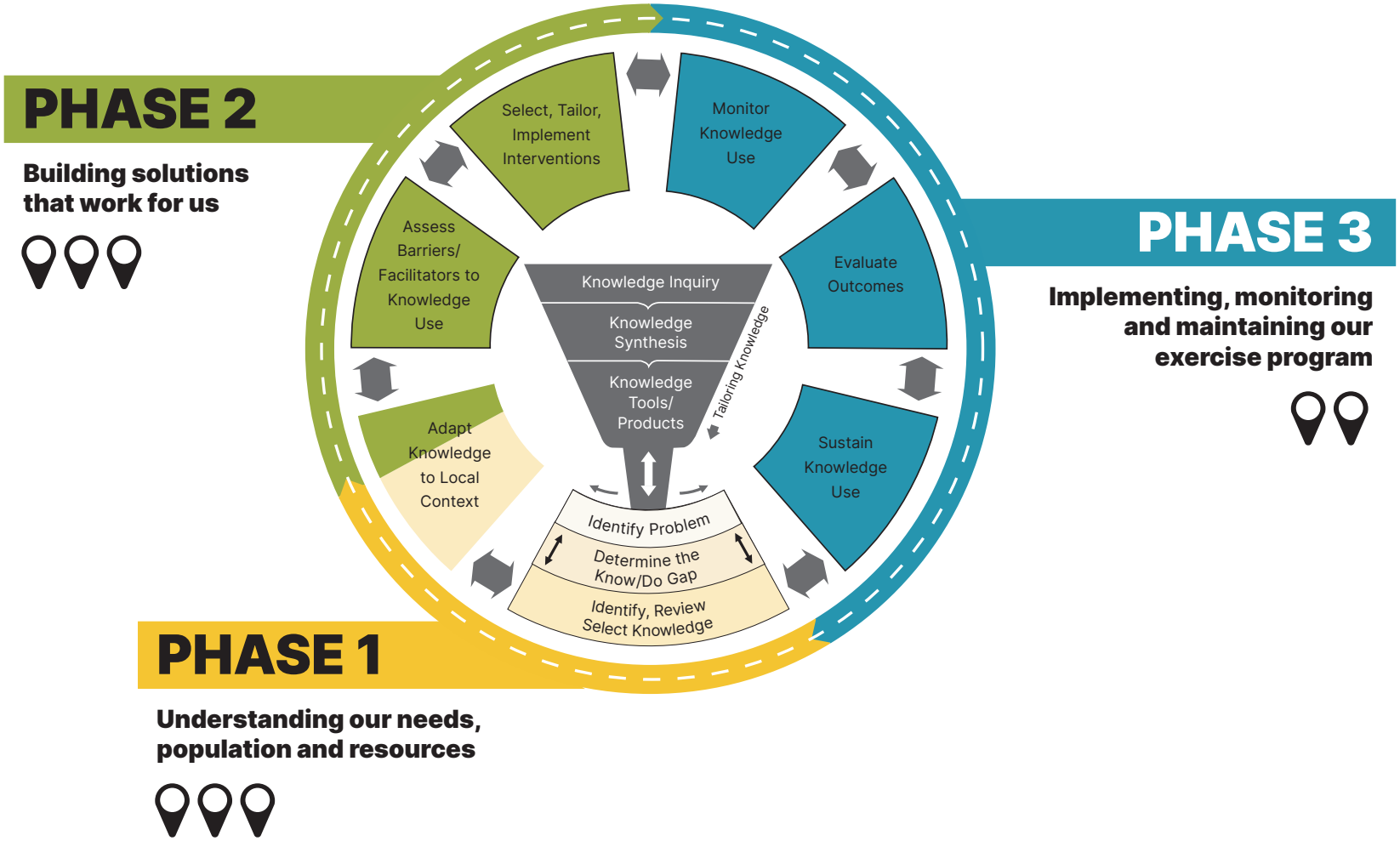
The task for a community usually begins at the base of the knowledge funnel when a care issue or need is identified. Recognition of a 'gap' in health-care services often serves as an important stimulus for action. A structured planning process enables stakeholders to carefully determine their needs, examine the available evidence supporting a proposed change in practice (e.g. introduction of a special exercise program), and consider the unique characteristics of their practice setting.

The figure illustrates the elements of the KTA cycle.



Repoduced with permission from Straus et al. (2013). This edition first published in 2013 by John Wiley & Sons

The planning elements comprising the KTA cycle are embedded in the Phases and Steps of the Stroke Recovery in Motion 'Roadmap'. The linear presentation of the Roadmap follows this planning cycle but does not convey the cyclic nature of planning activity. In practice, knowledge gained from ongoing program monitoring and evaluation as well as new knowledge informs continuous planning for change.



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Research has revealed several factors which contribute to effective health promotion partnerships. In a recent systematic review of the literature, Stolp and colleagues [67] identified several factors that were significantly related to effective partnerships; these are:

- strong leadership
- gender (women more likely to collaborate)
- trust among team members
- the length of time the collaboration existed
- financial resources for the partnership
- fewer changes in the organizational model over the life of the partnership

Jones et al [68] studied 337 partners in 40 health promotion partnerships and found trust, leadership, and efficiency of the partnership to be the most important predictors of partnership synergy. They concluded that trust-building mechanisms need to be built into the partnership forming stage and this trust needs to be sustained throughout the collaborative process to ensure effective partnerships.

For more information about partnership practices:

United Way Toronto provides a Toolkit for assisting community-facing staff members to build effective collaborations. United Way Toronto. Participating effectively as a collaborative partner: A United Way Toronto Toolkit. 2011. https://www.unitedwaygt.org/document.doc?id=232

Health Nexus (Canada) supports community engagement as a key health promotion strategy to strengthen the capacity of people to address shared health concerns. They provide resources to assist communities in developing strong partnerships.
en.healthnexus.ca/topics-tools/community-engagement/partnerships

Human Resources Canada provides materials including The Partnership Handbook (2000), created by the Labour Market Learning and Development Unit to advance the understanding of partnerships for building community capacity and undertaking community development activities.
publications.gc.ca/collections/Collection/MP43-373-1-2000E.pdf

The University of Kansas [69] provides an extensive Community Tool Box with resources for engaging stakeholders and creating and maintaining partnerships.
https://ctb.ku.edu/en/table-of-contents

National Council for Voluntary Organisations (NCVO) Collaborative Working Unit (CWU). Joint working agreements: Developing agreements between voluntary or community organisations. 2006.
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Groups will need to reach agreement at many stages in the planning process. A well-defined, clearly communicated approach to decision-making is needed. Importantly, all decisions and the methodology for making them should be documented to ensure transparency. Groups may be familiar with both informal and structured approaches; however, a systematic and structured approach is considered to be more rigorous. Decision-making can take several forms including voting, unanimous or majority rule, group consensus, or consultation with a principle decision-maker or executive who will consult with the planning team, consolidate input and make the final choice.

Consensus vs. voting

Voting is a means by which one alternative from several is selected: usually a majority rule, quantitative method of decision-making. A decision is reached based on achieving an agreed portion of votes from the group. Determine the designation of majority, super majority (e.g. 60%, two-thirds), or highest number of votes and establishing a minimum level of participation or number of votes needed to proceed. It is important to state the manner used in your documentation, i.e., show of hands, private ballot, etc.

Consensus is a process which synthesizes many diverse elements and allows people to work through differences to reach a mutually satisfactory decision; an effort is made to understand and value each member's input. It can involve more time and often requires skill in conflict resolution – but can also result in greater commitment to the decisions made.

To reach consensus, a select group of people may be brought together, e.g. the full planning team, a working panel or advisory committee, or a separate group of experts. At times, the group may reach decisions through informal consensus. To be effective, each individual in the group must be able to freely present their views. This is particularly important for patient representatives who may feel reticent. Enough time should be allowed to debate assumptions in an open and constructive manner so that the group can agree (or not) to endorse recommendations. If the entire group does not come to consensus on a particular area, any dissenting opinions should be reflected in project documentation.

The American Heart Association [66] offers practical advice for groups using a consensus-based decision-making method:

A consensus based decision-making process is an effort in which affected parties (stakeholders) seek to reach agreement on a course of action to address an issue or set of related issues. In a consensus process, the stakeholders work together to find a mutually acceptable solution.

Acting according to consensus guidelines enables a group to take advantage of all group members' ideas. By combining their thoughts, people can often create a higher-quality decision than a vote decision or a decision by a single individual. Further, consensus decisions can be better than vote decisions because voting can actively undermine the decision. People are more likely to implement decisions they accept, and consensus makes acceptance more likely.

Consensus demands a high level of trust among the members of the group. People need to believe that each member is a fair and reasonable person of integrity who has the organization's best interests at heart. There are no perfect groups or perfect individuals, but for consensus to work the members must believe that everyone is honestly doing their best.

Consensus building processes require active listening, open communications and patience. Participants are usually asked to agree to operate by consensus, use gentle candor, put interests and concerns on the table, attend meetings faithfully, remain flexible and demonstrate willingness to listen to proposals of other participants.

Each consensus process is unique because the parties design their agreement to fit their circumstances.

Successful consensus processes follow several guiding principles:

- Participants make decisions by agreement rather than by majority vote.
- Inclusiveness: to the extent possible, all necessary interests are represented or, at a minimum, approve of the decision.
- Accountability: participants usually represent stakeholder groups or interests. They are accountable both to their constituents and to the process.
- Facilitation: an impartial facilitator accountable to all participants manages the process, ensures the ground rules are followed, and helps to maintain a productive climate for communication and problem solving.
- Flexibility: participants design a process and address the issues in a manner they determine most suitable to the situation.
- Shared Control/Ground Rules: participants share with the facilitator responsibility for setting and maintaining the ground rules for a process and for creating outcomes.
- Commitment to implementation: all stakeholders commit to carrying out their agreement.

Elements of a Consensus-Based Decision

- All parties agree with the proposed decision and are willing to carry it out,
- No one will block or obstruct the decision or its implementation, and
- Everyone will support the decision and implement it.

Levels of Consensus

- I can say an unqualified "yes!"
- I can accept the decision.
- I can live with the decision.
- I do not fully agree with the decision; however, I will not block it and will support it.

Sample Ground Rules

1. This is our process; the facilitators are resources to take us where we agree to go. We determine the agenda, ground rules, issues and process. We agree to attend and fully participate in all meetings.
2. We agree that all participants in the process are equal.
3. No relevant topic is excluded; we agree no relevant topics are excluded from consideration unless we agree they are. This is our opportunity to bring up and thoroughly discuss issues that concern us.
4. No discussion is ended; we agree no discussion is ended, including process discussion, ground rules and rule of decision. Agreements reached at prior meetings, unless implemented, are always open for further consideration.
5. Respect opinions; we agree to respect each other's opinions - we will use gentle candor in comments to each other and will not interrupt.
6. Respect the time; we understand the time constraints we face and agree to respect the time. No one will dominate the discussions, and all participants will have an opportunity to express their opinions.
7. Silence is agreement; we agree that silence on decisions is agreement. If it appears the group is reaching consensus on an issue, and no one voices disagreement, it is assumed all agree.
8. Keep the facilitator accurate; we agree to make certain facilitators capture what we mean to say. We will keep the facilitators accurate.
9. Non-attribution; we agree we will not attribute ideas or comments made by participants to others outside of this process.
10. Rule of decision; we agree the rule of decision is consensus. If agreement by all participants on an issue is not possible, we will seek to develop a clear and balanced statement of the areas of disagreement. Neutrality by any participant does not constitute a lack of consensus.

Lack of Agreement

A refusal to enter consensus should be based on a very strong belief that the decision is wrong - and that the dissenter(s) would be doing the group a great disservice by allowing the decision to go forward. Feelings can run high and it's important for the group not to put pressure on those who differ. It's hard enough to feel that you are stopping the group from going forward, without feeling coerced to go against your examined reasons and deeply felt understandings.

Some groups operate under a modified consensus approach called "Consensus-Minus-One." This means it takes more than one dissenting member to block consensus. One voice at odds with the rest is considered a workable way to go forward, but more than one is a sign that the decision should be re-thought. Consensus-Minus-One can be a reassuring arrangement for people who are new to the process of consensus decision-making, or in groups where members are not well acquainted enough to have the level of trust needed to commit to achieving full consensus. In practice, many groups have found that Consensus-Minus-One serves as a safety valve that rarely gets used. If even one member has strong reservations about a decision, it's often enough to keep the group searching for a better answer.

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The Heart and Stroke Foundation of Canada provides information for three community-based exercise programs: FAME, Fit for Function, and TIME™. They advise people with stroke to consult their health-care team about whether any of the programs are right for them.

Fitness and Mobility Exercise (FAME) program

What is this program?

- A group exercise program developed specifically for stroke survivors for outpatient or community settings.
- Can be instructed by fitness instructors, physical therapists or rehabilitation assistants
- Recommends 4 participants to 1 instructor
- Facilitator resources are available for instructors who offer the program
- FAME has been shown to improve mobility, cardiovascular fitness, walking, muscle strength, and bone density in stroke survivors.
- FAME has been shown to reduce falls and the risk of fractures.
- Participants are progressed according to ability.
- Each session lasts 1 hour. Suggested frequency of 2x/week for 2-4 months.
- No equipment is required beyond chairs and a few steppers
- FAME is accredited by Canfitpro and the British Columbia Parks and Recreation Association

Who is appropriate for the program?

People who:

- Are medically stable and are able to stand and walk at least short distances. If needed, people can use a cane or walker
- Are able to pay attention, follow instructions and are aware of their safe limits of ability
- Trained caregivers may be able to help, but this should be assessed on an individual basis.

Who developed the program?

The University of British Columbia and GF Strong Rehabilitation Centre with funding from the Canadian Institutes of Health Research and Heart and Stroke Foundation of Canada.

How can a site gain the skills to deliver FAME?

When possible, a full day interactive hands-on accredited workshop for instructors from a site with a facilitator and stroke survivors is ideal, and is the method most sites have gained the necessary skills. When a workshop is not possible, a detailed manual, instructional PowerPoints and videos can help sites gain the skills, especially with local clinical support.

Contact information

Contact chihya.hung@ubc.ca if your site is interested in delivering FAME.
fameexercise.com

Fit for Function: A community wellness program for persons with stroke

What is this program?

- A 12-week community-based exercise and educational program.
- Designed to give you the confidence you need to manage some of the challenges of living with stroke.
- Will teach you how to exercise safely and effectively.

Who is appropriate for the program?

- Adults aged 18 years+, with stroke, discharged from active physical rehabilitation program and living in the community (Hamilton/Burlington/Brantford)
- Able to walk independently with or without an assistive device for at least 10 metres
- Activity tolerance of 60 minutes with rest intervals
- Able to independently follow instructions
- No musculoskeletal contraindications to exercise and no other disorders that affect balance
- No unstable medical conditions

Who developed the program?

Fit for Function was developed by McMaster University (Dr. Julie Richardson and Dr. Ada Tang), Hamilton Health Sciences, and YMCA Hamilton, Burlington, Brantford.

Contact information

mobilityresearch.ca

Together In Movement and Exercise (TIME™)

What is this program?

- A community-based group exercise program focused on improving balance and mobility.
- Designed by physiotherapists and classes are led by specially trained fitness professionals.
- Exercise in a friendly class setting with people who have had a stroke or similar conditions.
- Designed to meet your ongoing exercise needs.
- Ongoing support to the fitness professionals from health-care providers – usually physiotherapists – who visit the class periodically.
- Available in more than 40 YMCAs and community centres in Ontario, British Columbia and New Brunswick.

Who is appropriate for the program?

Exercises are designed for people who can:

- Walk at least 10 metres (30 feet), with or without a cane or walker.
- Can exercise standing while holding on to the back of a chair or other support.

A caregiver can attend with you.

Who developed the program?

TIME™ is designed by physiotherapists at Toronto Rehabilitation Institute, University Health Network with support from the Department of Physical Therapy at the University of Toronto, the Ontario Stroke Network and the BC Fraser Health Authority. The program is led by fitness instructors in community centres.

Contact information

ers.snapuptickets.com/UHN/TIME

Heart Wise Exercise

Heart Wise Exercise works with community physical activity providers to designate facilities, programs and classes where individuals can exercise regularly to prevent or limit the effects of living with a chronic health condition. Heart Wise Exercise (HWE) programs are suitable for individuals who have completed a cardiovascular or other rehabilitation program as well as those living with, or at risk of developing a cardiovascular or chronic health issue.

A program or class selected to display the Heart Wise Exercise logo meets the following criteria established by the University of Ottawa Heart Institute, fitness professionals in the community, and other stakeholders, including participants.

- Encourages regular, daily aerobic exercise
- Incorporates warm up, cool down and self-monitoring with all exercise sessions
- Allows participants to exercise at a safe level, and offers options to modify intensity if appropriate
- Accepts participants with a cardiac disease (or other chronic conditions), provided they have physician approval, where appropriate
- Offers health screening for all participants
- Has an emergency plan that is documented and known to all exercise leaders, including the requirement of current cardiopulmonary resuscitation (CPR) certification, phone access to EMS – Paramedic Services and, for in-person exercise classes, the presence of an automated external defibrillator (AED)

Program options range from structured group fitness classes to walking programs to personal training. A searchable map helps participants discover HWE programs in their area: heartwise.ottawaheart.ca/locations

Training fitness professionals and exercise leaders is a core component of the HWE model. To date, over 1,050 fitness leaders have been trained. The HWE training program is available in a variety of formats including online modules, webinars or in-person sessions. HWE Training Information is available on the website. heartwise.ottawaheart.ca/professionals/heart-wise-exercise-training

The HWE model was created to serve cardiac patients within the Ottawa Region. Since its inception it has been expanded to reach those with other chronic conditions, including stroke, diabetes, COPD, and osteoporosis and has been adopted in many regions throughout Ontario - there are currently over 400 HWE programmes. UOHI partners with other health-care centres and physical activity networks to create regional centres of excellence through which the HWE model is disseminated locally. We have national partners interested in helping make the model accessible across Canada.

Contact information

email heartwise@ottawaheart.ca

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FAME

Resistance Exercises

1. Heel raises
2. Toe raises
3. Chair push ups
4. Sit-to-stand
5. Sit-to-stand and walk around
6. Wall push ups
7. Wall sits

Active break between exercises (if people need to sit)

1. Reclined crunches

ARM COMPONENT

1. Shoulder retraction
2. Biceps curl
3. Lateral raises
4. Front raises
5. Arm extensions

References

Marigold D, Eng J, Dawson A, Inglis J, Harris J, Gylfadottir S. Exercise leads to faster postural reflexes, improved balance and mobility, and fewer falls in older persons with chronic stroke. JAGS, 2005;53:416-23.

Pang M, Eng J, Dawson A, McKay H, Harris J. A community-based fitness and mobility exercise program for older adults with chronic stroke: a randomized, controlled trial. JAGS, 2005;53:1667-74.

Pang MYC, Eng JJ. Determinants of improvement in walking capacity among individuals with chronic stroke following a multi-dimensional exercise program. J Rehabil Med. 2008;40:284-90.

Eng JJ. Fitness and Mobility Exercise Program for Stroke. Top Geriatri Rehabil. 2010;26:310-323.

Eng JJ, Chu KS, Kim CM, Dawson AS, Carswell A, Hepburn KE. A community-based group exercise program for persons with chronic stroke. Med Sci Sports Exerc. 2003;35:1271-1278.

Fit for Function

Resistance Exercises

Task oriented strengthening (Together with Task oriented cardiovascular conditioning [described below], 20 min)

1. Sit to stand 10 reps x 3 sets
2. Heel raises 10 reps x 3 sets

Fit for Function program materials 12-Functional group exercise class, pp 9, 11

References

Dean CM, Richards CL, Malouin F. Task-related circuit training improves performance of locomotor tasks in chronic stroke: a randomized, controlled pilot trial. Arch Phys Med Rehabil. 2000;81:409-417.

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TIME™

Resistance Exercises

Body weight is primarily used to improve strength through the following exercises:

1. Sit to stand practice
2. Sitting and reaching (leg loading)
3. Standing and reaching
4. Wall push ups
5. Muti-direction lunges and return
6. Tap-ups, step-ups, heel/toe raises, mini-squats, hamstring curls
7. Resistive arm movements using theraband, dumbells, weighted hoops

References

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Dean CM, Channon EF, Hall JM. Sitting training early after stroke improves sitting ability and quality and carries over to standing up but not to walking: a randomised trial. Aust J Physiother. 2007;53(2):97-102.

Dean CM, Shepherd RB. Task-related training improves performance of seated reaching tasks after stroke: A randomized controlled trial. Stroke. 1997;28(4):722-728.

FAME		Fit for Function		TIME™	
Aerobic Exercises (named as agility and fitness) 1. Stepping up and down 2. Side stepper (with step) 3. Side stepping 4. Forward stepping 5. Fast high knee marching 6. Fast and low steps Active break between exercises (if people need to sit) 1. Marching high knees 2. Quick foot taps 3. Forward/side reaches 4. Scooching (scooting back and forth in the chair) 5. High knees (fast) 6. Heel/toe taps	**References** Marigold D, Eng J, Dawson A, Inglis J, Harris J, Gylfadottir S. Exercise leads to faster postural reflexes, improved balance and mobility, and fewer falls in older persons with chronic stroke. JAGS, 2005;53:416-23. Pang M, Eng J, Dawson A, McKay H, Harris J. A community-based fitness and mobility exercise program for older adults with chronic stroke: a randomized, controlled trial. JAGS, 2005;53:1667-74. Pang MYC, Eng JJ. Determinants of improvement in walking capacity among individuals with chronic stroke following a multi-dimensional exercise program. J Rehabil Med. 2008;40:284-90. Eng JJ. Fitness and Mobility Exercise Program for Stroke. Top Geriatri Rehabil. 2010;26:310-323. Eng JJ, Chu KS, Kim CM, Dawson AS, Carswell A, Hepburn KE. A community-based group exercise program for persons with chronic stroke. Med Sci Sports Exerc. 2003;35:1271-1278.	**Aerobic Exercises** Task oriented cardiovascular conditioning (Together with Task oriented strengthening [described above], 20 min) 1. Overground walking over 40m square course, 5 min x 2, RPE 3-4/10 Fit for Function reference document: 12-Functional group exercise class, Page 7	**References** Ada L, Dean C, Hall J, Bampton J, Crompton S. A treadmill and overground walking program improves walking in persons residing in the community after stroke: a placebo-controlled, randomized trial. Arch Phys Med Rehabil. 2003; 84:1486-91. Potempa K, Lopez M, Braun L, Szidon J, Fogg L, Tincknell T. Physiological Outcomes of Aerobic Exercise Training in Hemiparetic Stroke Patients. Stroke, 1995;26:101-105. Rimmer et al 2000 (above) Rimmer JH, Rauworth AE, Wang EC, Nicola TL, Hill B. A preliminary study to examine the effects of aerobic and therapeutic (nonaerobic) exercise on cardiorespiratory fitness and coronary risk reduction in stroke survivors. Arch Phys Med Rehabil. 2009;90:407-412 Tang A, Eng JJ, Krassioukov AV et al. Exercise-induced changes in cardiovascular function after stroke: A randomized controlled trial. Int J Stroke. 2014;9(7):883-9 Teixeira-Salmela et al 1999 (above)	**Aerobic Exercises** Body weight is primarily used to improve strength through the following exercises: 1. Sit to stand practice 2. Sitting and reaching (leg loading) 3. Standing and reaching 4. Wall push ups 5. Muti-direction lunges and return 6. Tap-ups, step-ups, heel/toe raises, mini-squats, hamstring curls 7. Resistive arm movements using theraband, dumbells, weighted hoops	**References** Salbach NM, Brooks D, Romano J, Woon L, Dolmage TE. Cardiorespiratory responses during the 6-minute walk and ramp cycle ergometer tests and their relationship to physical activity in stroke. Neurorehabil Neural Repair. 2014;28(2):111-119. Pang MY, Eng JJ, Dawson AS, Gylfadottir S. The use of aerobic exercise training in improving aerobic capacity in individuals with stroke: a meta-analysis. Clin Rehabil. 2006;20(2):97-111. Kelly LP, Devasahayam AJ, Chaves AR, et al. Task-Oriented Circuit Training as an Alternative to Ergometer-Type Aerobic Exercise Training after Stroke. J Clin Med. 2021; 10. Kelly LP, Devasahayam AJ, Chaves AR, et al. Intensifying Functional Task Practice to Meet Aerobic Training Guidelines in Stroke Survivors. Front Physiol. 2017; 8: 809.

FAME

Improving Walking and Balance (Balance)

1. Slow weight shift – sideways
2. Slow weight shift forward and back
3. Forward reach
4. One leg stands
5. Heel-toe standing
6. Heel-toe standing (progressed – smaller base and add head turns)
7. Figure eight
8. Long step walking
9. Backwards walking
10. Pushed and take step (multiple directions)

Active break between exercises (if people need to sit)

1. Forward and side reaches

COOL DOWN

1. Trunk stretch
2. Trunk and head rotation
3. Stretches
4. Calf
5. Buttocks
6. Hamstring
7. Thigh
8. Arm and hand

References

Marigold D, Eng J, Dawson A, Inglis J, Harris J, Gylfadottir S. Exercise leads to faster postural reflexes, improved balance and mobility, and fewer falls in older persons with chronic stroke. JAGS, 2005;53:416-23.

Pang M, Eng J, Dawson A, McKay H, Harris J. A community-based fitness and mobility exercise program for older adults with chronic stroke: a randomized, controlled trial. JAGS, 2005;53:1667-74.

Pang MYC, Eng JJ. Determinants of improvement in walking capacity among individuals with chronic stroke following a multi-dimensional exercise program. J Rehabil Med. 2008;40:284-90.

Eng JJ. Fitness and Mobility Exercise Program for Stroke. Top Geriatri Rehabil. 2010;26:310-323.

Eng JJ, Chu KS, Kim CM, Dawson AS, Carswell A, Hepburn KE. A community-based group exercise program for persons with chronic stroke. Med Sci Sports Exerc. 2003;35:1271-1278.

Fit for Function

Improving Walking and Balance

Circuit of Mobility and Balance stations (6 min per station, total 20 min)

Station 1: Standing walk and carry:

- Chairs placed 5m apart. Stand up from chair. Pick up, walk, and put down common household items (e.g. cans of food, cups, jars etc.) Items carried in grocery bag, laundry basket, tray.

Station 2: Forward tap-ups or step-ups

- Using platform stepper

Station 3:

- Reaching and weight shifting: Standing. Reach for targets on wall with targets. Progress to targets that are placed farther away
- Activities to challenge balance: Progression of tasks from standing eyes closed, feet together, looking over shoulders, stride stance, sideways stepping, walking and turning in circle, tandem stance, 1-foot stand, backward walking, tandem walking, cross-over stepping

Fit for Function reference document: 12-Functional group exercise class, pp 12, 14, 16, 17

References

Marigold D, Eng J, Dawson A, Inglis J, Harris J, Gylfadottir S. Exercise leads to faster postural reflexes, improved balance and mobility, and fewer falls in older persons with chronic stroke. JAGS, 2005;53:416-23.

Pang M, Eng J, Dawson A, McKay H, Harris J. A community-based fitness and mobility exercise program for older adults with chronic stroke: a randomized, controlled trial. JAGS, 2005;53:1667-74.

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Yang et al. Task-oriented progressive resistance strength training improves muscle strength and functional performance in individuals with stroke. Clin Rehabil, 2006;20:860-870.

TIME™

Improving Balance and Mobility

Body weight is primarily used to improve strength through the following exercises:

1. Sit to stand practice
2. Sitting and reaching (leg loading)
3. Standing and reaching
4. Multi-direction lunges and return
5. Step-ups
6. Walking practice and walking agility exercise (forward, backward, sideways, walk and carry, grapevine step, giant steps, etc.)

References

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Salbach NM, Mayo NE, Wood-Dauphinee S, Hanley JA, Richards CL, Cote R. A task-orientated intervention enhances walking distance and speed in the first year post stroke: a randomized controlled trial. Clin Rehabil. 2004;18:509-519

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Pang MY, Eng JJ, Dawson AS, Gylfadottir S. The use of aerobic exercise training in improving aerobic capacity in individuals with stroke: a meta-analysis. Clin Rehabil. 2006;20(2):97-111.

FAME	Fit for Function	TIME™
Some of the evaluation methods used during clinical trial development of program • Attendance; • Adverse events; • Fitness instructors used the SPPB to measure changes in physical performance. This is used as feedback to the participants and part of the encouragement piece. Outcome assessments included 6 minute walk test, leg strength, bone density, balance (BERG Balance scale)	**Some of the evaluation methods used during clinical trial development of program** • Attendance; • Exercise Log Books; • Occurrence of adverse events (e.g. falls) Outcome assessments included Rapid Assessment of Physical Activity (RAPA) questionnaire, 6-Minute Walk Test, Reintegration to Normal Living index (RNL), Satisfaction survey	**Some of the evaluation methods used during clinical trial development of program** • Attendance • Adverse Events Outcome assessments include: subjective index of physical and social outcome, 6-minute walk test, 10-metre walk test, 30-second sit-to-stand test, Berg balance scale, activities-specific balance confidence scale

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Web listings (February 2021)

- **GRASP (Graded Repetitive Arm Supplementary Program):** Dr. Janice Eng and her team at the University of British Columbia created the GRASP program for upper-limb rehabilitation after stroke. The GRASP website, which includes videos, workbooks, and more, includes many exercises that can be done at home. https://neurorehab.med.ubc.ca/grasp
- **FAME (Fitness And Mobility Exercise):** University of British Columbia's fameexercise.com program for stroke recovery has a handout and instructions on how to do exercises at home during COVID-19. Videos are posted on the site.
- **TIME™ (Together In Movement and Exercise):** The TIME™ Steering Committee at the Toronto Rehabilitation Institute, University Health Network, has developed an online version of the TIME™ program called TIME™ at Home. For an overview of the license and program, please visit: https://www.youtube.com/watch?v=nlYUc3N36_M. The TIME™ Steering Committee has also compiled a list of free online videos and resources to help people with mobility challenges to stay active during this time of isolation. www.uhn.ca/TorontoRehab/Clinics/TIME/Documents/TIME-Exercise-Wellness-Videos-for-People-with-Mobility-Challenges.pdf
- **The Canadian Disability Participation Project (CDPP):** The CDPP is offering free, telephone-based Physical Activity Coaching for Canadian adults with stroke. The service is called Get in Motion. To sign up for Get in Motion, please visit: https://queensu.qualtrics.com/jfe/form/SV_4Jy9wXHLeF2dLzn or send an e-mail to CDPPprojects@queensu.ca; or call (613)533-6000 x 78841 (the phone number is for Kingston Revved Up). This program is run by Queen's University and UBC.
- **Exercise and mindfulness classes for everyone:** YMCAs across Canada have launched free online programming and workouts through a new digital platform. YMCA at Home features Y programs and workouts from YMCAs all over Canada and will help everyone get their daily dose activities and exercise. The activities are designed for a variety of ages and levels of ability. New activities will be added daily. www.ymcahome.ca
- **March of Dimes Canada/Stroke Recovery Association of BC**: www.marchofdimes.ca/en-ca/programs/Pages/Online-virtual-programs.aspx Virtual Stroke Recovery Program; Chair Exercises for Stroke Recovery
- **Enableme (Stroke Foundation Australia)**: enableme.org.au/community/what-helps/o/online-exercise-classes-for-stroke-survivors-stroke-class-with-susan
- **DifferentStrokes.co.uk**: www.safestroke.eu/2020/06/16/different-strokes-online-execise-classes

Study participants' advice for developing a virtual exercise program

Organization of Classes

- Consider time differences when scheduling classes (if offering a national virtual program).
- How will participants log on? Will you provide a one-page step-by-step explanation page? Will you create a workshop to orient participants to virtual classes?
- Establish a training curriculum and meeting to onboard any new volunteers or instructors. It is important that everyone follows the same protocol. Ensure instructors are confident and experienced with the online program.
- Consider whether instructors will be teaching from home or coming into your agency (provider facility), what equipment they will require, and if it will be supplied to them at home or only on-site.
- Establish your virtual class setup and training for everyone beforehand, including camera positioning for both participants and instructor, equipment needs (e.g. chairs with no arms), use of mute/unmute, etc.
- Use of Music: If the instructor is playing music, participants may struggle to hear directions. Depending on the virtual platform and availability of a professional sound set-up with microphone and mixing board, the music quality could be poor or delayed. You will also need to consider music rights, e.g. if you intend to save video for on-demand classes posted on YouTube, you will need rights to the music. Not using music can really simplify things.
- Building rapport with a person is a little more challenging online; allow time for conversation. It is important to emphasize that social interaction with other people living with stroke is essential for their engagement in the exercise program beyond the physical rehabilitation. Thus, developing strategies that encourage conversations and interactions among participants as well as instructors is key.
- Consider using a script that describes your program and how it will proceed. Find out who else is at home with the participant and if that person could be with them on the call.
- Conduct frequent surveys (e.g. every 3-4 months) to assess program outcomes using quality of life, mood, exercise intensity or other chosen measures to inform program delivery and work on continuous development of the program.

Technology

- Use a safe, secure system that complies with health regulations and privacy rules to conduct assessments and virtual classes. Ensure you have a secure platform for enrolling participants and delivering the class. Consider requirements for confidentiality of personal and health information.
- Establish a system to enable online booking, class registration and scheduling. This is critical as the program grows in size. When possible, consider onboarding program participants in person (e.g. via discharge planning at an outpatient or inpatient rehabilitation centre). It can be more effective and convenient to conduct screening, manage registration, download required software, demonstrate use of platform, etc. with participants face to face.
- You may encounter barriers with the internet connection and access to technology; having technical support available would be an asset. Consider creating a volunteer role to assist participants with any technical issues they are having with signing up or using on-line access.

Safety

- It is important to obtain all relevant information on mobility and condition at intake, whether via virtual or in person intake process. Depending on patient population, your initial assessment may vary. Safety assessments can be done via telephone using a questionnaire to seek information on participant's functional level and abilities to engage in an exercise program. Capture objective outcome measures, determine ability of participant to follow instructions, look for any uncontrolled movement that is deemed to be unsafe.
- It is recommended that a caregiver, family member, volunteer or support personnel should be present to assist participants with the exercises in the program and to provide emergency aid, if required.
- Establish a graded system and develop exercise classes that facilitate participants working at their own level and challenging the deficits that they present with in a safe way. Establish a system to reassess participants if level of exercise is inappropriate.
- Develop an emergency response protocol. Instructors should have emergency contact information and full address for each participant to comply with virtual health regulations.
- Set "ground rules" for participation, e.g. if you are leaving the screen, you need to communicate where you are going (since instructor may not be able to tell if you are off screen from a fall, etc.)
- Establish volunteer base or enough support personnel to act as safety officers. Monitor participants closely and alert the instructor of any concerns. Base the number of volunteers to enlist on the number of participants enrolled.
- Start with seated exercises. Be mindful of the varying functional levels of participants and adapt exercise program accordingly. Support the use of mobility aids.

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Multiple agencies across Canada (and internationally) provide specialized training and certification for fitness personnel working with seniors, people with chronic diseases, or special needs. The resources noted below represent only a sample of programs. Check national and provincial recreation authorities and agencies for additional information, e.g.,

- Western University Canadian Centre for Activity and Aging (CCAA) Functional Fitness for Older Adults(FFOA) www.uwo.ca/ccaa/education/index.html
- The Canadian Society for Exercise Physiology csep.ca/index.php/csep-certification
- National Fitness Leadership Association of Canada (NFLA) www.nflacanada.ca
- CANFITPRO Active Aging Certificate www.canfitpro.com/active-aging-certificate
- American College for Sports Medicine www.acsm.org/get-stay-certified/get-certified

Program-specific training is provided in each of the FAME, Fit for Function and TIME™ exercise programs designed for people with stroke.

Training is also available from:

Heart Wise Exercise instructor training: heartwise.ottawaheart.ca/professionals/heart-wise-exercise-training

"All instructors, assistants and volunteers must have Standard First Aid and Cardiopulmonary Resuscitation (CPR) certifications. In British Columbia, St. John's Ambulance and Red Cross are recognized certifiers. In British Columbia, fitness instructors and personal trainers are certified through the British Columbia Recreation and Parks Association (BCRPA; www.bcrpa.bc.ca) and must have the BCRPA Older Adult Designation to work with the senior population. Depending on the city or country of implementation, there should be an appropriate equivalent to these certifications and programs. It is important that instructors have appropriate insurance coverage and liability protection."

- FAME program [16] recommendations for conducting programs in British Columbia

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Click to return to page 88 (Phase 3)
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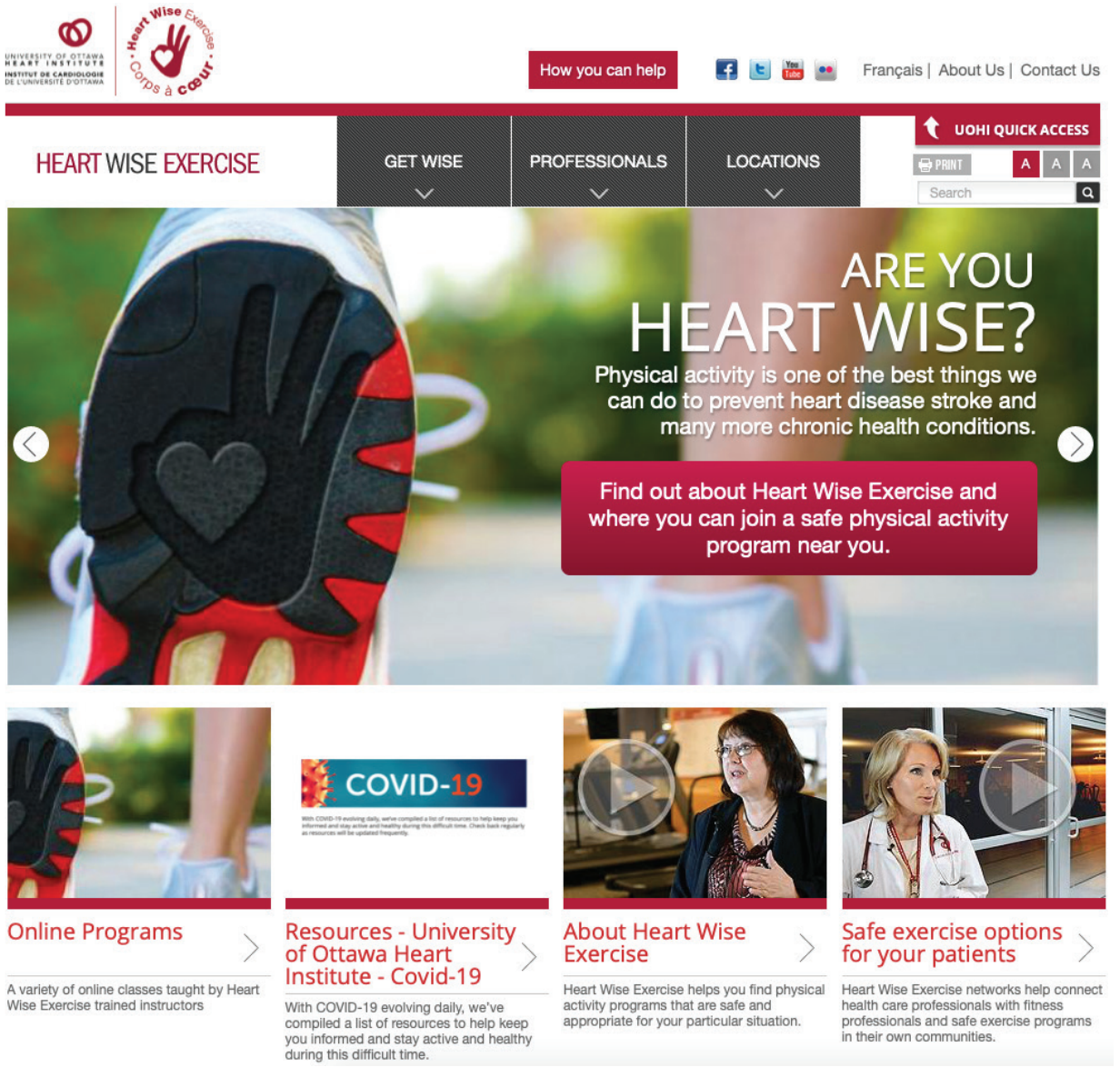

St. Joseph's Care Group

Care Compassion Commitment

St Joseph's Care Group Presents:

Keep Moving with Stroke
at the Canada Games Complex

When: Tuesday and Thursday, 10:45 am – 11:45 am
Spring Session 1: March 19 - April 18
Session 2: April 23 – May 23, 2019

Instructor: [redacted]

Cost: $64 for each 6 week session, or pro-rated when you join
- Fall, Winter and Spring Sessions available

Description

- This class includes aerobic conditioning, functional strengthening, mobility and balance exercises specifically designed to meet the needs of those living with chronic stroke.
- The program offers modifications allowing each participant to work at their own comfort level and ability.

Criteria

- Diagnosis of stroke and living in the community
- Have finished all therapy programs
- Written consent to participate in fitness program from a physician or nurse practitioner (this will be obtained by the health care practitioner)
- Able to follow instruction and have awareness of physical exertion
- Able to walk at least 10 meters /30 feet with or without a walking aid and the ability to perform exercises in standing with or without support
- Free of serious medical problems restricting physical exercise
- Able to tolerate 2x/week exercise sessions for 60 min. with rest breaks
- Transportation to/from Canada Games Complex
- Telephone and physical assessment screen performed by a physiotherapist are required prior to registration to ensure suitability and safety to participate in program
- Once you pre-register you will be contacted to make an appointment for this assessment.

Contact Information

- To pre-register, or for more information, contact the Outpatient Neurology Rehabilitation Clerk, [redacted]

TIME™
Together in Movement and Exercise

Sample Referral Form to the TIME™ Program

(To be completed and signed by Physician, PT, or RN/NP)

_____ [name] is interested in participating in Together In Movement and Exercise (TIME™), a group exercise program for people who have challenges with balance and mobility. Fitness instructors lead the exercise program, which was designed by physiotherapists. Eligible persons are those who can walk a minimum of 10 metres with or without a walking aid.

This program provides exercise for health and wellness, not physiotherapy. It offers exercises to address strength, balance and endurance. Classes include:

- The practice of everyday activities such as standing up from a chair, walking, reaching and bending, and stepping on and off steps. Supports are provided for balance as needed.
- Light to moderate aerobic exercise; 1-hour of exercise, once or twice per week for about 12 weeks per session and up to 3 sessions per year.
- A supportive environment with a safe staff (fitness instructor and volunteer) to participant ratio.

If your patient has either of the following, he/she would not be suitable for this program. Please indicate if either of the following apply: □ Uncontrolled angina □ Uncontrolled hypertension

Is a support person needed to assist with personal care needs (i.e., washroom)? □ YES □ NO

Is your patient presently medically stable and safe to participate in exercise? □ YES □ NO

Can your patient walk by him/herself 10m, with or without a walking aid? □ YES □ NO

Does your patient have a history of, or currently have the following (check all that apply):

□ Stroke
□ MS
□ Acquired brain injury
□ Cognitive and/or behavioural issues that may impede group participation
□ Diabetes
□ Peripheral vascular disease
□ Seizures: Date of last one: _____ Frequency: _____
□ Other medical conditions: _____
_____
□ Osteoporosis
□ Severe joint pain preventing exercise

The following are precautions for which a graded exercise test/stress test is recommended. Does your patient have a history of (check all that apply): □ Cardiac arrest □ Congestive heart failure □ Asthma/COPD that worsens with activity

Do "Hip Precautions" apply? □ YES □ NO In effect until: _____

☐ **Please attach a printed list of your patient's current medications.**

Considering all aspects of my patient's medical history, I agree that _____ does not have any health issues that would prevent him/her from participating in the exercise program as described.

Referring Professional's Name (please print): _____ Phone #: (___) _____

Signature: _____ Date: _____

Send completed form to:
[add your contact information here]

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An indicator is a specific observable, measurable variable that shows changes or progress. Multiple indicators (qualitative and quantitative) may be useful to fully reflect implementation process and outcomes. Quantitative indicators typically express a ratio, percentage, comparison or number, whereas qualitative indicators describe a change in state or situation. The following are characteristics of good indicators:

- **Meaningful –** represent important information about the program for stakeholders.
- **Relevant –** measures an important part of the intended activities; the measured change should be attributable to the intervention (exercise program).
- **Objective –** the indicator should be based on fact; have a clear operational definition of what is being measured and what data needs to be collected.
- **Reliable –** consistently measured across time and different data collectors.
- **Useful –** can be used for program improvement and to demonstrate program outcomes; can measure change over time and progress towards performance or outcome goals
- **Practical/feasible –** the data should not be too burdensome to collect; consider time, frequency, cost factors.
- **Understandable –** easy to comprehend and interpret.
- **Time bound –** there should be a time limit within which changes are expected and measured.

National Centre of Health, Physical Activity, and Disability (NCHPAD) Inclusive Community Implementation Guide [70]

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Physical Capacity

Standardized measures to assess a person's mobility and balance capabilities over time, e.g. standing balance, walking speed and distance, and timed sit-to-standing tests.

The Six-Minute Walk Test (6MWT)

A simple measure that assesses the distance walked in 6 minutes. This measure provides information about aerobic and walking capacity, as well as fitness level [71,72]. In the 6MWT, participants walk on a measured (30 metre), flat, hard surface for six minutes. They may use their typical walking aid during the test, and <10 minutes is usually required to set up, explain, and conduct the test.

Administration instructions are provided at:

- iWalkAssess University of Toronto www.iwalkassess.com
- strokengine.ca www.strokengine.ca/en/?s=6mwt

The Ten-Metre Walk Test (10mWT)

The 10mWT assesses walking speed, or the time it takes for a person to walk 10 metres and is typically reported in metres/second (m/s). Both comfortable and fast speeds can be assessed [73,74]. Walking speed has been described as the "functional vital sign," since research has demonstrated its ability to predict several outcomes including independence, community mobility, falls, hospitalization, and mortality [75]. The test takes < 5 minutes to administer.

Testing procedures are available through:

- University of Toronto iWalkAssess at www.iwalkassess.com

Information about walk tests is also provided by the American Physiotherapy Association and Academy of Neurologic Physical Therapy.

Short Performance Physical Battery (SPPB)

Another method commonly used to assess standing balance, walking speed, and standing up from a chair is the Short Physical Performance Battery (SPPB) [76]. The FAME program instructor manual [16] describes how to conduct this test and includes a simple form to chart results. The SPPB requires 5 – 10 minutes to administer and is performed with equipment typically found in gyms and fitness centres.

- The FAME manual can be accessed here: fameexercise.com/download-fame-manuals

Activities-specific Balance Confidence scale (ABC)

The Activities-specific Balance Confidence scale was designed to evaluate 'balance self-efficacy' in the performance of a wide range of activities that involve position change or walking and that are relevant to community living. Balance self-efficacy is operationally defined as the degree of confidence a person has in performing activities without losing balance or becoming unsteady. This scale has been tested and validated and is widely used in Canada. It is available in both English and French (ABC-CF) [77].

- Additional information about this measure is provided at https://strokengine.ca/en/assessments/activities-specific-balance-confidence-scale-abc-scale/

Physical Performance

Patient-Reported Outcome Measurement Information System (PROMIS) Physical Function questionnaire

- This measure assesses upper and lower body functions, instrumental activities of daily living, and back and neck function [78]. Short forms of the PROMIS Physical Function are available online, with versions that include as few as 4 items and as many as 24 items. A computer adaptive test is also available.
- Information about the PROMIS measures is available at www.healthmeasures.net/search-view-measures

Participant Activity Log:

- A combination of capacity and performance documentation, this is a participant log or diary in which a person describes their goals for the session and records activities for each class.
- The University of Ottawa Heart Institute provides a booklet for patients and families [79] to help people create a personal action plan. It is aimed broadly at patients managing cardiac recovery but contains a wealth of practical information and ideas for anyone developing a long-term plan for regular, safe exercise. www.ottawaheart.ca/document/cardiac-rehabilitation-physical-activity

Body Function

For people concerned about their confidence or efficacy in balance or mobility (e.g., who report they are afraid to do an activity, such as walk in the community, go shopping, or participate in recreational activities because they might fall), an assessment of this area may be indicated.

Falls Efficacy Scale-International (FES-I) [80]

FES-I is a self-reported measure that assesses fear of falling and concerns about falling. The FES-I is a 16-item questionnaire, and a 7-item short form is also available.

- For more information about the measure, visit sites.manchester.ac.uk/fes-i

Community Participation

PROMIS

PROMIS measures also assess social roles and participation. These questionnaires assess social function, which is defined as involvement in, and satisfaction with, usual life roles and activities [81]. These roles include marital relationships and family responsibilities, as well work/school responsibilities and social activities [81]. The PROMIS measures include various short forms with < 10 questions each, as well as a computerized adaptive test. Measures include:

- **PROMIS - Ability to Participate in Social Roles and Activities** includes questions about ability to perform work, family, social, and leisure activities.
- **PROMIS - Satisfaction with Participation in Discretionary Social Activities** includes questions about satisfaction with leisure activities and relationships with friends.
- **PROMIS - Satisfaction with Participation in Social Roles** includes questions about satisfaction with family and work roles.

More information and different testing forms are available at www.healthmeasures.net/search-view-measures.

Life-Space Assessment

This questionnaire assesses usual patterns of a person's mobility for the preceding month based on how far one moves across 5 levels (home, immediately outside the home, neighborhood, town, outside of town) [82,83].

- For more information on this questionnaire, see doi.org/10.1093/ptj/pzz131

Quality of Life (QoL) assessments and Health Status Measures

The Stroke Impact Scale [84]

This is a health status measure designed specifically for people with stroke. This self-reported measure asks questions about the impact of the stroke on many areas including mobility, strength, hand function, activities of daily living, instrumental activities of daily living, emotion, thinking, memory, communication, and participation.

- The measure can be downloaded at strokengine.ca/en/assessments/stroke-impact-scale-sis

EQ-5D-3L

The EuroQol Group [85], a network of international researchers focused on the measurement of health status, provides a simple generic measure of health for clinical and economic appraisal. The EQ-5D-3L is designed for self-completion and takes only a few minutes. Responders check how they are feeling across five dimensions: Mobility, Self-Care; Usual Activities, Pain/Discomfort; and Anxiety/Depression.

- More information about this measure is located at euroqol.org

Neuro-QoL Lower Extremity Function – Mobility [86]

This is a quality of life measure developed specifically for use with adults who have neurologic conditions. This measure assesses a person's ability to carry out various activities involving movement, ambulation, balance, or endurance.

- To access this measure, see www.healthmeasures.net/search-view-measures

Participant Satisfaction Measure

Exercise program developers may include evaluation forms in their support materials. The following satisfaction questionnaire sample is provided with permission from the TIME™ program.

TIME™
Together in Movement and Exercise

Sample Satisfaction Survey

Exercise is important for everyone to maintain health, wellbeing and vitality. The TIME™ Program was developed to give everyone the opportunity to exercise. We are interested in your comments about TIME™. Please answer the questions below and let us know your thoughts about the program.

YOUR NAME (optional): _____

Please circle a rating from 1 to 5.

1. Overall, I enjoyed exercising at the TIME™ Program.

1	2	3	4	5
				
Strongly Disagree		Agree		Strongly Agree

2. I felt safe while doing the exercises.

1	2	3	4	5
				
Strongly Disagree		Agree		Strongly Agree

3. I feel that I received the right amount of attention and guidance from the instructors.

1	2	3	4	5
				
Strongly Disagree		Agree		Strongly Agree

4. I feel that the exercises I do in the Program are at the right level of challenge for me.

1	2	3	4	5
				
Strongly Disagree		Agree		Strongly Agree

5. I feel that I have benefited by coming to the Program.

1 2 3 4 5


Strongly Disagree Agree Strongly Agree

6. Rate the following items comparing how you feel NOW as compared to how you felt BEFORE starting TIME™. Have you noticed any changes in the following from a) to l)? Circle a rating from 1 to 5.

	1 Much worse 	**2 Slightly worse**	**3 No change**	**4 Slightly better**	**5 Much better** 
a) Overall well-being	1	2	3	4	5
b) Ease of general movement	1	2	3	4	5
c) Confidence in walking indoors	1	2	3	4	5
d) Confidence in walking outdoors	1	2	3	4	5
e) Confidence in your balance	1	2	3	4	5
f) Joint and muscle pain	1	2	3	4	5
g) Leg and core strength	1	2	3	4	5
h) Overall energy level	1	2	3	4	5
i) Sleep quality	1	2	3	4	5
j) Stress level	1	2	3	4	5
k) Overall physical activity level	1	2	3	4	5

7. I would recommend this Program to other people in my condition.

1	2	3	4	5
				
Strongly Disagree		Agree		Strongly Agree

8. Have you been on a waiting list for the TIME™ Program? If yes, how long did you wait?

_____

9. What do you enjoy most about the Program?

_____

_____

10. Do you have any suggestions for improvement?

_____

_____

11a. How did this Program help you?

_____

_____

b. Is there anything else you would like to tell us about your experience in the Program?

_____

_____

_____

We hope that you enjoyed the TIME™ Program and that you experienced the many benefits of exercise.
Please return the survey to your instructor.

Thank you for completing this survey.

Planning Tools & Resources

Download editable files at **AfterStroke.ca/SRIM**

Engaging Stroke/Caregiver Partners on your planning team

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Why is this important?

Factors known to promote meaningful engagement of stroke/caregiver partners on the planning team include: offering convenience for participants, being clear about the type of contribution and interaction, addressing support requirements, ensuring inclusivity and appreciation, and recognizing the perceived benefits of participation.*

How to use this tool:

This tool has three components:

1. A template invitation for engaging stroke/caregiver partners on the planning team.
2. Questions to assess stroke/caregiver partner preferences for involvement: After you introduce the project to a potential stroke/caregiver partner, consider using these questions to guide a more detailed discussion with them about their interests, availability, preferences, and needs.
3. TIPS for engaging and working with stroke/caregiver partners on the planning team.

Use and adapt these resources to suit your own setting and circumstances, as needed.

> "Actively involving and engaging key-stakeholders and users of programs (people with stroke) to be part of the planning and implementing process is critical. They know best what they need and can identify areas in need that otherwise might not be known to program developers."
>
> **- Person with stroke**

> "It's not necessarily feasible or appropriate for them (people with stroke /caregivers) to be at every planning team meeting, so connect with them 1:1 after planning team meetings to get their input on key items"
>
> **- Physiotherapist**

* Guidance is adapted from the PEIR (Patient Engagement in Research) Workbook developed by the University of British Columbia and Arthritis Research Canada, 2018; www.arthritisresearch.ca/wp-content/uploads/2018/06/PEIR-Plan-Guide.pdf

1. Invitation to a stroke/caregiver partner to participate on the planning team

Modify this template as needed to introduce your project to a potential stroke/caregiver planning partner. Provide sufficient time to read and reflect on the information; encourage potential partners to ask questions to help them make informed decisions about joining the planning team.

Dear [Name],

Would you like to be part of an exciting opportunity to co-design a community-based exercise program for people with stroke?

Exercise can have many physical and social benefits for people living with the effects of stroke. However, many people living with stroke do not have access to community-based exercise programs that meet their needs. We are forming a team to co-design a new community-based exercise program for people with stroke.

Your lived experience as [a person living with stroke or a caregiver] is essential to creating a successful program. To ensure that the exercise program will optimally meet the needs of our community, we need people with stroke and their caregivers to contribute their knowledge and experience to the planning process.

We would like to invite you to be part of the planning team. This letter provides some information about the planning team, our approach, and what we hope to accomplish.

What is the "planning process" for the new program?

Together, our team will work through several steps to plan and implement a community-based exercise program for people with stroke. Not every team member needs to be involved in every step. You may choose which parts of the planning process are most aligned with your interests, skills, and availability. To summarize, we will:

- form a planning team to co-develop a strategy for implementing a new exercise program;
- explore the needs of the community and how the new program can address these needs;
- select an exercise program that matches community needs and interests;
- identify potential challenges and strengths for delivering the selected program;
- develop strategies to address key challenges;
- decide how we will monitor and evaluate the success of the program;
- promote, launch and deliver the program;
- monitor the use and outcomes of the program and make adjustments as needed to support the success of program participants and maintain the program over the long-term.

(more)

Who can join our planning team?

- Individuals who are living with the effects of stroke
- Individuals caring for people with stroke (e.g., caregiver, family, friends)

The planning team will also include **[fitness professional, health-care professionals, program manager, etc.]**.

What will I do?

- Between **[month, year]** to **[month, year]**, attend a **[monthly, bi-monthly]** meeting. These [one hour] meetings will be conducted **[specify method – online, in-person]**. At these meetings, we will work through the planning process described above.
- We will circulate materials prior to each meeting.
- If you are a person living with stroke, you will also be invited to participate in the exercise program so that you can provide feedback on your experience. The opportunity to enroll in the exercise program is optional and not required to participate on the planning team.

Based on your interest and availability, we can determine a time commitment that works for you. We will make every effort to accommodate your needs and preferences.

Will I be compensated?

In appreciation of your time commitment to the planning process, you will receive an honorarium of **[specify amount and methods: $X, gift card]**.

If taking part in this planning team results in any out-of-pocket expenses, you will be reimbursed. For example: **[specify what will be reimbursed: parking, transportation, caregiving costs; also indicate whether any fees for the exercise program will be waived]**.

. . . . . .

Thank you for considering joining the planning team. Your voice as **[a person with stroke or caregiver]** is essential in the planning and implementation of an exercise program that will truly meet the needs of people with stroke in this community.

If you would like more information or have any questions, or would like to participate, please contact me at **[phone number]** and/or **[email address]**.

Sincerely,

[Add name and contact information]

2. Questions to assess stroke/caregiver partner preferences for involvement

After you introduce the project to a potential stroke/caregiver partner, use the questions below to guide a more detailed discussion with them about their interests, availability, preferences, and needs.

Sample questions	Responses
Do you have any questions about the planning process and the steps involved? • Are there specific step(s) or aspects of the planning process that interest you most?	
What benefit(s) do you hope to get out of taking part in this project?	
Do you have any special needs or limitations that would impact your ability to read project materials, take part in meetings, etc.? • How can we best accommodate these needs?	
How much time do you have to participate in planning?	
What days and times are most convenient for you?	
How would you like to take part in meetings? • In-person? By phone? Online? • In a group setting? Or 1:1?	

(more)

Sample questions	Responses
How would you like to be kept up to date on the project? • Email updates? Brief phone call updates?	
Would it be helpful to receive materials in advance of meetings?	
Will taking part result in any out-of-pocket expenses for you? • Reimbursement for travel? Parking? • [for stroke partners] - Reimbursement to have an attendant/caregiver assist you to participate in meetings? • [for caregiver partners] - Reimbursement for alternate care for person with stroke while you attend meetings?	
Is there anything else you would like to share with me?	
Do you have any questions?	

3. TIPS for engaging stroke/caregiver partners on the planning team

Study stroke advisors offered these additional considerations for partnering with people with stroke and/or their caregivers:

- Enable people with stroke to participate to the fullest extent they would like. Be aware of visual, auditory, communication, or cognitive challenges and accommodate any needs.
- Ensure planning materials are available in an accessible format (e.g., large font size).
- Minimize the use of jargon in your communications. Ensure communications are brief and written in plain language so they are easily understood. Limit the use of acronyms and medical terminology.
- Introduce stroke and caregiver planning partners to the team and make them feel welcome.
- Ask stroke and caregiver planning partners which part of the planning process is of greatest concern to them and where they feel they could make the most meaningful contribution.
- Consider keeping meeting times brief to accommodate potentially limited physical and cognitive energies.
- Be open to alternate methods of communication e.g. a planning team member might connect 1:1 with a stroke/caregiver planning partner after a team meeting to allow for a brief, focused discussion of relevant items.

Tool 1.1a > Download editable file at **AfterStroke.ca/SRIM**

Budget Worksheet – Planning Team Expenses

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Why is this important?

Depending on the size and scope of your initiative, your planning team may incur some expenses over the planning cycle. While not typically a large budget concern, be aware of out-of-pocket meeting expenses for members, especially your volunteers, people with stroke and their caregivers. You may have additional administrative costs related to gathering and sharing the necessary information to proceed with your plan.

How to use this tool:

This table outlines potential planning team expenses; use and adapt to suit your own setting and circumstances, as needed.

Note: An Excel worksheet version is also provided.

Use this spreadsheet as you develop your project charter to consider management of planning team expenses. Add or delete rows to include other expenses, as necessary.

Note: A separate budget template is provided for forecasting costs related to the exercise program itself.

Item	Description	Estimated cost ($)	Funding source	Notes
COMPENSATION OF TEAM MEMBERS AND/OR ADVISORS (if applicable)				
Honorarium/stipend for stroke survivor or caregiver advisor(s)				
Honorarium/stipend for health-care provider advisor(s)				
Honorarium/stipend for other team members				
Reimbursement of caregiver costs to attend meetings				
Reimbursement for time of caregiver/support person to accompany person with stroke to meetings				
TRAVEL COSTS FOR TEAM MEMBERS AND/OR ADVISORS (if applicable)				
Travel costs to and from planning meetings, e.g. bus or taxi fare, mileage reimbursement, driver costs				
Parking costs at meeting location				
MEETING COSTS (if applicable)				
Fee to rent meeting space				
Catering at meetings				
Video conferencing application (e.g., Zoom license)				
Printing and distribution of planning materials and meeting notes				
OTHER COSTS (if applicable)				
Other out-of-pocket expenses?				

Download editable file at AfterStroke.ca/SRIM

Tool 1.1b – Download editable file at **AfterStroke.ca/SRIM**

Project Charter Template & Sample

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Why is this important?

Building a successful community-based exercise program requires good leadership, effective community partnerships, and terms of reference that everyone understands and shares. A project charter is a working agreement that helps team members stay focused on goals, clarifies commitments, roles, responsibilities, and assists the team to make and document critical planning decisions.

How to use this tool:

In the first 'Call to Action' step of the planning process, you begin to determine how your planning team, whether large or small, will be organized. Key considerations are included in the template; it can start simply and evolve over time. A sample agreement is provided. Use and adapt this template to suit your own setting and circumstances, as needed.

"I think this tool in the planner talks about the whole idea around decision-making and consensus building from the start. And I think that if some of that would have been established from the very beginning, we may have had a better opportunity to keep the program going into the future having that direction and connection with the partner as opposed to kind of somebody in the middle playing point for both groups."

- Program manager

"The project charter is important to outline expectations and commitments and to be clear about who is there and what each person contributes."

- Project lead

"I could have delegated more … I'll just do most of the work because it was almost like a fear if I put more work on other people they wouldn't want to be involved, so I thought I'll just do most of the work."

- Physiotherapist

Template

Title of Project

Introduction: brief overview/background)

Purpose: (brief outline)

- Aims and objectives
- Scope of work to be completed
- Anticipated timeline

Project Committee/ membership

- Steering Committee or Executive*
- Task Force or subcommittees*
- How membership is constituted

*Include people with stroke, caregivers, and family members in all committees

Project Committee Terms of Reference (key working agreements)

- Location, means, and frequency of meetings; availability and commitment of members to meet and/or to review findings or reports
- How decisions will be made, how consensus will be achieved, and how decisions are reported
- Designated roles and responsibilities, including signing authorities, communications, project documentation and meeting notes
- Statement of disclosures, e.g. possible relationships with corporations whose products or services are related to the proposed program. Financial interests or relationships, ownership, employment, contractual, creditor or consultative relationships that may require disclosure.
- Management of meeting costs (e.g. travel, accommodation, parking, supplies, out of pocket expenses); potential compensation (e.g. possible advisory committee stipends or gifts, training, administrative or consulting fees); costs associated with production, distribution, translation, and implementation of program materials, etc.

Acknowledgement of Partners/Sponsorships /Funding

Sample

Note: this sample is provided with permission from a study participant. Names of people, organizations, and places have been removed.

Title

Community-Based Stroke Exercise Program for [Name of community]

Introduction

Determining the need and feasibility of a community-based exercise program for individuals who have experienced a stroke. Working with community partners, health care, and individuals/families to develop a plan for implementation.

Purpose

- Investigate need and feasibility by retrieving numbers of strokes discharged to the community in [Name of community]
- Discuss barriers and work through possible solutions
- Complete training of those who will be implementing program
- To begin exercise program within the next year depending on COVID-19 restrictions

Project Committee/ membership:

- Chair
- [Name of municipality] Recreation Staff
- [Name of health authority] Physiotherapists
- Individual who has had stroke or caregiver

Project Committee Terms of Reference:

- Meet through teleconference once per month. Will determine objectives and tasks to be completed after each meeting and report findings at subsequent meeting.
- Chair to be primary decision-maker on program specifics in conjunction with [Name of health authority] Management. [Name of municipality] staff to make decisions regarding staff personnel and payment options in conjunction with [Name of municipality] regulations.
    - Chair (in this case, position held by trainer and consulting therapist for program).
    - Contacts for [Name of municipality], in charge of running program, taking payment as necessary, ensuring safety in facility, and organizing personnel to implement program, screening participants.
    - Physiotherapy consultants for inpatient and referral sources.
- No conflicts of interest present.
- Management of meeting costs to be accounted for individually – no funding source available for these costs at this time.

Acknowledgement of Partners/Sponsorships /Funding

[Name of health authority] and [Name of municipality] personnel provided. No other sources of funding provided at this time.

Disclosures

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Return to planning tools and resources list

Why is this important?

If you begin planning with a very small team, you may decide to forego formally declaring conflicts of interest - or assume that none exist. However, as your initiative develops and participation expands to include greater representation from your community, e.g. potential partner agencies, private or public funding or sponsorship, health professional consultants, and stroke advisory members, it becomes increasingly important that everyone is clear on the expectations and operation of the planning committee as well as the proposed implementation plan. This includes being transparent about any perceived advantages or benefits to individual planning team members.

How to use this tool:

A sample disclosure form is provided. It raises a number of factors, most related to commercial and financial disclosures. Not all potential conflicts are financial. Use and adapt this template as necessary by adding or removing factors important to your own planning context.

> "I think this section can be made into a document and given to every member on the planning committee to sign."
>
> **- Program Coordinator**

[1] Adapted from CAN-IMPLEMENT Toolkit

Harrison MB, van den Hoek J, Graham ID. CAN-Implement: planning for best-practice implementation. 1st edition. Philadelphia, PA: Lippincott, Williams and Wilkins; 2014.

Harrison MB, Graham ID, van den Hoek J, Dogherty EJ, Carley ME, Angus V. Guideline adaptation and implementation planning: a prospective observational study. Implement Sci. 2013;8:49.

Name

Name of project team or task force

The following questions are designed to allow project team members to disclose potential conflict(s) of interest with respect to program activities. A conflict of interest might include:

- planning team member or partner involvement in the development or endorsement of any of the programs or program recommendations
- relationships with companies whose products or services are related to the program
- perceived competitive advantages or benefits favouring a planning team member or partner
- terms and conditions related to sponsors, funding partners or stakeholder contributions
- financial interests or relationships, e.g. honoraria, consultancies, employment, or stock ownership

Answer each question by circling either "Yes" or "No". If you answer "YES" to any question, please describe the nature of the interest and/or relationship and identify the relevant commercial entity.

---

1. PARTICIPATION IN DEVELOPMENT of PROGRAM/RECOMMENDATIONS **Yes** **No**

Have you been involved in the development of any of the program recommendations?

- If YES, please identify the program and describe your involvement:

2. ENDORSEMENT of RECOMMENDATIONS **Yes** **No**

Have you directly participated in any processes to formally endorse any of the program recommendations?

- If YES, please identify the program and describe your involvement:

3. EMPLOYMENT **Yes** **No**

Are you or have you been employed by any entity having a commercial interest in any of the programs under consideration?

- If YES, please describe your involvement:

(more)

4. CONSULTANCY **Yes** **No**

Have you served as a consultant for any entity having a commercial interest in any of the programs under consideration?

- If YES, please describe your involvement:

5. MANAGEMENT **Yes** **No**

Do you have or expect to hold a managerial position in or serve on the Board of directors or an advisory board for any entity having a commercial interest in any of the programs under consideration?

- If YES, please describe your involvement:

6. OWNERSHIP INTERESTS – PART A **Yes** **No**

Do you have any ownership interests (including stock options) in any entity, the stock of which is not publicly traded, which has a commercial interest in any of programs under consideration?

- If YES, please describe your involvement:

7. OWNERSHIP INTERESTS – PART B **Yes** **No**

Do you have any ownership interests (including stock options but excluding indirect investments through mutual funds and the like) valued at [$xxxx] or more in any entity that has a commercial interest in any of the programs under consideration?

- If YES, please describe:

(more)

8. RESEARCH FUNDING **Yes** **No**

Are you currently receiving, or have you received research funding from any entity that has a commercial interest in any of the programs under consideration?

- If YES, please describe:

9. HONORARIA **Yes** **No**

Have you been paid honoraria or received gifts of value equal to or greater than [$xxxx] per year from any entity having a commercial interest in any of the programs under consideration?

- If YES, please describe:

10. OTHER POTENTIAL CONFLICT(S) OF INTEREST **Yes** **No**

- If YES, please describe:

Name

Date

Signature _____

Tool 2.1 – Download editable file at **AfterStroke.ca/SRIM**

Scan – Inventory Programs & Services

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Return to planning tools and resources list

Why is this important?

Your assessment of the local community (environment) creates a snapshot of the setting, identifies relevant trends, events, strengths, gaps, or areas of concern, and gathers the information needed to plan for successful implementation and sustainability of the proposed program. A key component of this scan is achieving a full understanding of the type of programs and services currently available to people with stroke.

How to use this tool:

Explore your local environment, contact colleagues, provider agencies, your health network, people with stroke, caregivers. Complete the table to determine existing scope and use of services. Review this 'evidence' with your planning team to assess the feasibility, applicability, acceptability, equity, and affordability of introducing a new program. Use and adapt this template to suit your own setting and circumstances, as needed.

"After completing an inventory of programs in our community, we realized that our initial idea for a program was actually a duplicate of an existing program. Once we saw what we had and didn't have in our community, we revised our plan to start working towards a different type of program in a different setting to meet the current needs of the community."

- Physiotherapist

"The community assessment piece was something that was really interesting for me because that's not something that I have experienced when being involved in planning for programs. And I think it's important because you don't know what else is out there."

- Program Manager

Service provided Agency providing service; Agency mandate and goals; Length of time in community	**Population served** Age range and characteris-tics; Inclusion, Exclusion	**Demand** Anticipated number of clients; Current and future needs	**Geographic reach/service area**	**Referral and intake patterns and processes** Enrolment capacity; Actual attendance	**Service outcomes**	**Program strengths / weaknesses**	**Funding amount and source**	**Data source**
1								
2								
3								
4								
5								
Other questions, issues, comments								

Download editable file at AfterStroke.ca/SRIM

Tool 2.2 – Download editable file at **AfterStroke.ca/SRIM**

Scan – Community Readiness Questions

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Return to planning tools and resources list

Why is this important?

Your assessment of local community (environment) 'readiness' creates a snapshot of the setting, identifies relevant trends, events, strengths, gaps, or areas of concern, and gathers the information needed to plan for successful implementation and sustainability of the proposed program.

How to use this tool:

Review the issues identified in the worksheet as they relate to your organizational setting and planning environment including health partners and program participants. Consider whether you need to explore any of these further with your planning partners. Contact relevant stakeholders including colleagues, provider agencies, your health network, people with stroke and caregivers. Review your findings with your planning team to assess impact on the feasibility, applicability, acceptability, equity, and affordability of implementing a new program.

Use and adapt this question guide to suit your own setting and circumstances, as needed.

"I think when you write a [community assessment] survey, people start talking about it, and it's almost like your first promotion of the program. People are like 'OK, is it going to happen now? When is it going to happen?' So, we've had a lot of interest from people through word of mouth or people emailing us after seeing the survey. It has definitely helped us prove that there is a need and there is interest"

- Program Coordinator

"Make sure there's a need [for the program] in your community. We knew there was a need for it here but now we're thinking maybe people aren't as interested as we thought. Do that research before you start so you're not launching a program and getting like three registrants for it and then you don't know if you can run it after all that work."

- Physiotherapist

CONTEXT	CONSIDER...
Organization • Structure • Culture • Knowledge and Skills • Commitment to Quality Management • Resources	☐ To what extent is the exercise program consistent with the values, attitudes, and beliefs of the organization? ☐ To what degree does organizational culture support change and value evidence? ☐ To what extent do organizational leaders support (visibly and behind the scenes) implementation of the program? ☐ What are the organization's priorities? ☐ How can the program help achieve these priorities? ☐ Are there priorities that will need to be delayed or altered to implement this program? ☐ Who are the organization and community stakeholders that should be consulted? ☐ How knowledgeable are the stakeholders about evidence-based, best practices? ☐ Do staff have the necessary knowledge and skills? To what extent are they motivated to implement the program? ☐ What education mechanisms are available in the organization? ☐ Are there communication systems (formal and informal) to support information exchange relative to the new program, change, and implementation process? ☐ What features of the work processes might facilitate or challenge adoption of the new program? ☐ Do quality improvement processes and systems exist to measure results of implementation of the program? ☐ What resources are required to implement the changes and sustain them in the long term? ☐ Are the necessary services, and equipment available: staff, technical, physical, and financial? ☐ Will the program contribute to increased or decreased costs? ☐ Will the changes have cost implications for other services? ☐ Are there regulations or legislation that affect implementation of the program?

(more)

Adapted from CAN-Implement Toolkit based originally on work by Renaud Smith and Donze, Assessing Environmental Readiness: First Steps in Developing an Evidence Based Implementation Culture and from the Registered Nurses Association of Ontario. Toolkit: Implementation of clinical practice guidelines.

- Harrison MB, van den Hoek J, Graham ID. CAN-Implement: planning for best-practice implementation. 1st edition. Philadelphia, PA: Lippincott, Williams and Wilkins; 2014.
- Registered Nurses Association of Ontario (RNAO). Toolkit: implementation of clinical practice guidelines. Toronto, ON; 2002. Available from: https://rnao.ca/sites/rnao-ca/files/storage/related/668_BPG_Toolkit.pdf
- Smith JR, Donze A. Assessing environmental readiness: first steps in developing an evidence-based practice implementation culture. J Perinat Neonatal Nurs. 2010;24(1):61–71.

CONTEXT	CONSIDER...
Planning team • Commitment • Roles • Decision-making • Terms of Reference	☐ Has the team identified and agreed upon the target population and goals? ☐ Do all members of the team have access to/understand the evidence and jointly decide upon priorities and goals? ☐ Is there a strong commitment to the process from all team members and leadership? ☐ Are specific roles identified for team members such as program champion, advisory/expert? ☐ Are there positive relationships and trust between all the disciplines that will be involved or affected by the program? ☐ Does the organization/planning team support shared decision-making; is there a process for shared decision-making? Is the process non-hierarchical and are decisions based on evidence and not position within the organization? ☐ Is there a process for building consensus? ☐ Are all key stakeholders identified and included in decision-making from the preliminary to final steps?
Health partners and practitioners	☐ Are there positive relationships and trust between community agencies, including professional care providers/health practitioners? ☐ Are practitioners aware of the service/practice gap and the need for a program? ☐ Are practitioners motivated to support a program? change practice? ☐ What are the practitioners' perceived barriers to implementing the program and/or changing their practice: time, resources, knowledge, referral patterns, confidence in program, etc.? ☐ Are practitioners aware of exercise program recommendations and benefits; the supporting evidence? ☐ What are the practitioner attitudes toward the exercise program recommendations? ☐ Do needs vary among various health-care providers?
Participants **Families**	☐ Are participants/families aware of and do they understand the evidence for best practice; benefits of the program? ☐ What are their attitudes towards exercise program? ☐ Do they have the resources to participate in the program – fees, transportation, caregiver support? ☐ How far would they be willing/able to travel to participate in the program? ☐ What are their perceived barriers to participating in the exercise program? ☐ What (additional) resources or services would support their participation in the program? ☐ Are program materials and delivery available in their first language?

Tool 3 – Download editable file at **AfterStroke.ca/SRIM**

Exercise Program Comparison Template

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◀ Return to planning tools and resources list

Why is this important?

As you explore a number of exercise programs to determine a good fit for your needs, it is helpful to document and compare your findings across program options.

How to use this tool:

The table includes key factors and guiding questions; expand the table if you have additional questions that are important to your setting. Check available program support materials for information. Do not hesitate to reach out to the exercise program developers and talk with other teams who have delivered the programs you are considering. Use and adapt this template to suit your own setting and circumstances, as needed.

> “It is really great there is one table (in the Planner) that summarizes the components of Fit for Function, FAME and TIME™. This saves the reader quite a bit of time making it easy to compare features of each program to help determine which is the best fit.
>
> This tool provides some of the key questions that people using the Planner would want to know to help them decide on a program. It helps convey really quickly to the reader and to make comparisons easily between the programs: What are the similarities and differences? Which are stroke specific? Which have been validated in broader populations? What are the staffing ratios, max class sizes, training time for staff? Is there a cost for the license?”
>
> **- Physiotherapist**

	Program Option 1: [NAME]	Program Option 2: [NAME]	Program Option 3: [NAME]
Background information			
Who developed the exercise program? When?			
Is the program evidence-based? What information exists to show that this program is effective? Safe?			
Does the program meet best practice guidelines?			
How widely is the program used?			
Participant details			
Is the program designed specifically for people with stroke?			
Can the program be attended by people with mini strokes (transient ischemic attacks [TIAs])?			
Can the program be attended by non-stroke populations?			
What are the eligibility criteria to participate in the program?			
Program staffing			
Who can be an instructor for this program?			
What is the recommended certification for instructors delivering this program?			
What type of training is required for instructors?			
How is this training delivered?			
What training and support materials are available from the program developer?			
Are there any medical legal / liability considerations?			
Can caregivers and volunteers attend and assist?			
Is training available for attending caregivers?			
Can trained caregivers and/or volunteers be considered in the recommended instructor to participant ratio?			

(more)

Tool 3 > Exercise Program Comparison Template

	Program Option 1: [NAME]	Program Option 2: [NAME]	Program Option 3: [NAME]
Resources			
Is there a cost to purchase a program license?			
How much space is required to conduct the program?			
How much/what type of equipment is required?			
Program delivery			
What type of setting is the program usually delivered in?			
What is the recommended instructor to participant ratio?			
Is there a maximum class size?			
What is the recommended frequency of classes?			
What is the recommended duration of each class?			
Is enrolment designed as drop-in or prescribed X week session?			
Is the program flexible to allow different functional levels?			
Can the program be offered virtually? (if applicable)			
Ongoing support			
What type of ongoing support do the program developers offer for those running the program? For example: • Are they available for consultation? • Can they assist with adaptation of the program regimen for an individual participant or a participant whose status changes over time? • Do they conduct any program evaluation?			
Other questions (add rows below)			

Tool 3.1 – Download editable file at **AfterStroke.ca/SRIM**

Feasibility, Applicability, Acceptability, Equity and Affordability (FAAEA) Check

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Why is this important?

To ensure the exercise program is the best fit for your setting, it needs to be feasible, applicable, acceptable, equitable, and affordable.

How to use this tool:

Using the wealth of information gathered in Phase 1, Steps 1 and 2, consider the strength of each statement as it now applies to your plans for a program. These statements are linked to the national recommendations for best practice in post stroke community-based exercise [2]. Check further detail for each Recommendation listed in the Guide, Phase 1, Step 1.2. If you can agree with most, you are in a good position to proceed with planning. If multiple areas need further attention and resolution, consider if, how, and when you might be able to proceed more effectively with introducing a program. Use and adapt this assessment to suit your own setting and circumstances, as needed.

> (A need exists) "... to deliver programs that are affordable and tax-deductible because for example I still spend thousands of dollars a year on my therapy, 17 years later."
>
> **- Person with stroke**

> "What I like about this group is that they are really trying to uphold principles of equity; they have been creative and resourceful in obtaining sponsorships and are subsidizing participant fees for those who need funding support."
>
> **- Physiotherapist**

> "Our planning team completed the feasibility check together at one of our meetings. We talked through the items and found a key issue that remained unanswered, so it was a helpful tool that helped us to identify what we needed to address."
>
> **- Physiotherapist**

1. **We have determined a sufficiently large target population in our community to warrant introduction of the exercise program.**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

2. **We can ensure that participants have consulted with a qualified health-care professional before participating in any exercise program to ensure there are no conditions that require special consideration or would be contraindicative to participating in the exercise program (Recommendation 1)[A]**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

3. **We can ensure that a formal, standardized intake/screening and documentation process will be conducted to assess participant eligibility and a match between the selected program and participant. We also have processes in place to ensure that the exercise provider is aware of any concerns and recommendations identified through the screening process. (Recommendation 2)[A]**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

4. **The necessary expertise to safely and effectively implement and sustain the program is available in our community including committed health-care provider/partners to assist with training and consultation regarding program delivery. (Recommendations 3, 6.2)[A]**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

(more)

5. **We can provide specifically trained (and certified) instructors to deliver to the needs of people living with stroke, as well as trained volunteers and/or training for attending caregivers (Recommendations 6.1, 6.2)[A]**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

6. **We can provide a class staff-to-participant ratio which provides adequate instruction, supervision, safety, and support (recommended max. 1:4; Recommendation 3)[A]**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

7. **We have an appropriate facility/environment in which to deliver the program including accessible facilities, and barrier-free access to equipment and bathrooms. (Recommendation 7)[A]**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

8. **We have a documented and known emergency plan and adverse event protocol which includes access to in-house CPR and First Aid from qualified personnel, phone access to EMS; access to an Automatic External Defibrillator (AED) and access to a source of glucose (Recommendation 8)[A]**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

(more)

9. **Program evaluation processes can be put in place to monitor program delivery (e.g., referral and screening processes, compliance with exercise program and procedures), participant engagement, and program impact. (Recommendation 5)[A]**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

10. **There are no constraints, legislation, policies, or resources in our setting that would impede the implementation of the program recommendations.**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

11. **The exercise regimen incorporates standard exercise training principles including an emphasis on the practice of functional tasks to address the needs of people with stroke; the program is applicable to the participants identified in our community. (Recommendation 4)[A]**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

12. **The program is acceptable to all our program users.**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

(more)

13. **We have assessed equity, diversity, and inclusion considerations; All target users and stakeholders (participants, providers, partner agencies, technical support) are included in our planning process.**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

14. **We have assessed all direct and indirect program costs and have identified the necessary funding and/or sponsorship to manage initial and ongoing program expenses.**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

15. **Other:**

Strongly AGREE — Strongly DISAGREE

Comments or suggestions

[A.] Inness EL, Brown G, Tee A, Kelly L, Moller J, Aravind G, et al. Canadian stroke community-based exercise recommendations. Canada; 2021.

FAAEA: Feasibility items # 1-10; Applicability item #11; Acceptability item #12; Equity #13; Affordability item #14

Tool 3.1 – Download editable file at **AfterStroke.ca/SRIM**

Program Budget Worksheet

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Return to planning tools and resources list

Why is this important?

Program costs will need to be examined as part of your FAAEA check. Consider for example, the need for sufficient and appropriately trained staff; costs associated with your exercise venue including potential rental charges or necessary modifications to the space, heating or utility expenses, and the purchase of dedicated equipment; program licensing fees or provider insurance premiums; compensation for health partners or other professional support. Having a complete and accurate assessment of program costs will assist in your efforts to secure funding for the program.

How to use this tool:

This table (adapted from the TIME™ program) identifies a wide range of potential program costs. Check individual program requirements to determine space, equipment, and staffing recommendations. Remember to consider the costs for both start-up and ongoing program maintenance. Use and adapt this template to suit your own setting and circumstances by adding or deleting rows as needed.

"This is an excellent tool. I think a planning team would find it very helpful."

- Program Manager

"The budget planning worksheet was pretty good. We completed it and there was a bunch of stuff that we didn't need, but it was helpful to go down through the list and figure out what it is you do need."

- Physiotherapist

"I thought the budget template was really good for anybody who hadn't done a budget before."

- Fitness Professional

"I felt that all parameters of planning and implementation were considered, even in noting the pressures of extra costs that might be associated. This hit home as we had to increase the room temperature for our stoke clients as they didn't move quickly enough to keep warm."

- Fitness Professional

Budget planning worksheet adapted from TIME™ program materials.

University Health Network. Together in Movement and Exercise (TIMETM) program. 2020 [cited 2020 Apr 10]. Available from:

www.uhn.ca/TorontoRehab/Clinics/TIME or ers.snapuptickets.com/UHN/TIME

This is a sample budget (adapted from the TIME™ program) illustrating possible expenses. Check your individual program requirements. You may add or delete rows as necessary to tailor the spreadsheet for your program and setting. Ensure that you have considered both one-time/start-up costs and annual or recurring costs.
Note: A separate budget template is provided for forecasting costs related to the planning team.

PERSONNEL COSTS							
Item	**Description**	**Is this a one-time/ start-up cost or an annual/recurring cost?**	**Number of hours** (estimates included)	**Hourly rate** ($/hour)	**Total cost** ($)	**Funding source**	**Notes**
TRAINING OF INSTRUCTORS AND VOLUNTEERS							
Pre-requisite training such as CanfitPro, CPR							
Reviewing training manuals and e-learning materials			3				
Scheduling and preparation to arrange for training delivery in person/on-site			3				
Taking part in face-to-face workshop / training			5				
Additional training of volunteers			2				
Delivering classes	Ensuring staff to participant ratios are met (e.g., 1:4)						
Staff time to complete program evaluation activities	Data collection, analysis, reporting						
HEALTH PARTNER CONSULTATION (e.g., PT or Kinesiologist)							
Attending 2 classes during first session	e.g. 1 hour per class + 1 hour travel; 2 classes per program		4				
Check-in site visits and debriefing with staff for problem-solving	e.g. 1 hour per class + 1 hour travel + 0.5 hour debrief; 3 visits per program		8				
Consultation time	e.g. To answer instructor queries; 2 hours per program		2				
Time to support program evaluations							

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OTHER COSTS							
Item	**Description**	**Is this a one-time/start-up cost or an annual/recurring cost?**	**Available?**	**Buy or rent?**	**Estimated cost ($)**	**Funding source**	**Notes**
FACILITY							
Facility / room to offer program							
Insurance							
Adjustments for accessibility							
Utilities (e.g., AC, heat, light)							
Janitorial services							
EQUIPMENT							
Stackable chairs	e.g. 15-20 chairs, stable, flat seat, no wheels						
Potable or fixed ballet barres	e.g. 2 × 9 feet						
Stepper blocks	e.g. x 6						
Weighted hula hoops							
Dumbbells	e.g. 1, 3, and 5 pounds						
Resistance bands							
Mini exercise bike							
CD player or sound system							
Equipment maintenance							
EQUIPMENT							
Defibrillator							
Supply of juice							
Blood pressure cuff							

(more)

OTHER COSTS							
Item	**Description**	**Is this a one-time/start-up cost or an annual/recurring cost?**	**Available?**	**Buy or rent?**	**Estimated cost ($)**	**Funding source**	**Notes**
PROGRAM COSTS							
Program license							
Program and manuals							
MARKETING AND PROMOTION							
Website costs							
Social media costs							
Flyers							
Meetings, calls, presentations							
Professional networking							
ENROLMENT AND REGISTRATION							
Administrative support							
Participant membership subsidies/ co-payments							
PROGRAM EVALUATION							
Supplies for completing program evaluations (stationery, etc.)							
OTHER COSTS							
Transportation subsidies for participants							
Drivers for participants							
Translation of program materials							
				Total	**$**		

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Tool 3.3 – Download editable file at **AfterStroke.ca/SRIM**

Business Case Template & Sample

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Why is this important?

Some planning teams will need to persuade internal and external municipal or health authorities to view this exercise program as a priority worthy of funding and resources. A strong business case will help justify expenditures, obtain administrative approval, and negotiate the necessary support; it is often a key submission requirement in grant applications. Preparing a business case will ensure you have the necessary data - and confidence - needed to convince others of the need and value of your proposal.

How to use this tool:

The business case is a means to summarize the information and support the decisions you've made to date. Use the 'evidence' you gathered in Phase 1 (and will continue to gather in Phase 2) to complete the template. Your business case can be as simple or as comprehensive as your situation demands. A sample plan is provided. Use and adapt this template to suit your own setting and circumstances, as needed.

"This business case is great because it is short and to the point...It would make sense to me filling out the business case template first for a program and then based on the business case, if [management] feel it's appropriate, then we provide more details as needed."

- Program Coordinator

"I found the business case template really good. I did slightly change the names of the categories. This type of outline would be what I'm presenting to my manager... we're trying to give a summary of what we're planning to do and that we've determined it's probably going to be successful based on having gone through discussions of problems and solutions."

- Physiotherapist

Template

Cover

- Title, Subtitle, Author and Address/Contact information, Date

Table of contents

Executive Summary

- Brief description of problem (or opportunity) that program is intended to solve (address)
- Brief description of organization goals and how program relates to organizational mandate
- Brief description of each option considered
- Brief explanation of which option is recommended and why
- Description of resources, organizational capability, and timeframe required to deliver program
- Value statement: predicted benefit (return on investment) and when this will be achieved
- Statement outlining request (action, support, funding?)

The Problem (health-care issue/gap) Statement

- Simple statement outlining the issue that the program is meant to address and why this is important

The Business Objective Statement

- Simple statement defining how the proposed program aims to address the identified issue

Analysis of the Situation

- Background information: describe scope, urgency, impact of issue/problem; help reader understand the motives and objectives for introducing the program
- Environmental scan: provide regional data; target population, available resources
- Data and Methods: specify sources of data and method of analysis
- Financial analysis: include figures on program investment and operating costs, ROI, cost-benefit analysis and financial sustainability assessment (if available)

Alternative Solutions

- For each potential solution (exercise program option) identified, describe benefits (with supporting evidence), costs, feasibility, applicability, risk assessment, barriers and facilitators
- Also consider the implications of not taking any action; the 'do nothing' option

(more)

Recommended Solution

- Rank the alternatives: develop/use criteria, voting or scoring mechanisms; document decision process in the business case
- Provide rationale for program choice – focus on value, benefits, best fit within local context, impact on community health

The Implementation Approach

Provide a general outline of work needed to deliver the program, including:

- Scope – who/what is included, not included
- Main activities and deliverables
- Budget and overall timeframe
- Roles and responsibilities - project team and stakeholders
- Project governance and decision-making structure
- Any regulations or standards that need to be considered
- How project performance will be measured and reported

Required Funding and Support

- Clear statement of what is being asked of intended audience

Appendix

- Any relevant supporting documentation

Sample

Note: This sample is provided with permission from a study participant. The names of people, organizations, and places have been removed. In this case, the planning team aimed to form a partnership between the municipality and their regional physiotherapy services. Each planning environment is unique and should consider the partners and resources that best meet their needs.

Community-Based Stroke Exercise Program in [Name of community]

A collaboration between [Name of health authority] Physiotherapy and [Name of municipality] Recreation

[City, Province]

[Date]

Table of Contents

Executive Summary

Stroke Rehabilitation occurs on a continuum and each patient's needs are individual. The general progression of an individual following a stroke is Inpatient Rehabilitation → Adult Rehabilitation → Community Support Physiotherapy → Community-Based Exercise Program. Some individuals may transition from acute rehabilitation directly to a community-based exercise program depending on their need upon discharge from acute care. The population this program is targeting are those who have mild to moderate deficits from a cerebrovascular accident (CVA) and are not appropriate to participate in a general population community exercise program.

Problem Statement

There are currently no community-based exercise programs for individuals who have experienced a stroke in the [name of community] region. Therefore, there is no transition from formal Physiotherapy treatment into the community setting.

Objective

The objective of this program is to provide accessible exercise programming to the [name of community] region for individuals who have experienced a stroke by creating a partnership between the [name of municipality] and [name of health authority] Physiotherapy.

(more)

Local Analysis

There are on average [insert number] new CVA's per year at [name of local hospital] that are discharged into the community in the region. Upon discharge from formal Physiotherapy services, patients are prescribed a home exercise program with the goal of continuing to improve or maintain the gains they have made. Individuals may gradually discontinue these exercises for a variety of reasons, such as limited motivation or exercises becoming too easy. Additionally, some individuals require a general exercise program tailored to those who have experienced stroke, but do not necessarily require formal Physiotherapy treatment. A community-based exercise program that is tailored to this population and organized by a Physiotherapist would fill this current gap in services for individuals with stroke. This service is not currently being offered in the [name of community] region. This will also allow more efficient use of Physiotherapy services in the region as it will redirect some referrals and allow quicker discharge to cut down on wait times for Community and Adult Rehab programs.

The intended exercise program (TIME™) has been extensively researched and shows improvements in falls risk (Dean et al, 2000; Salbach et al, 2004; Pang et al, 2005; Marigold et al, 2005; Salbach et al, 2014; Sherrington et al, 2008; Stuart et al, 2009). This indicates the program could possibly assist in reducing falls and falls-related medical visits in the region. There are also benefits in quality of life, depressive symptoms, and independence – all of which could lead to reduction of health-care costs (Eng & Reime, 2014). These benefits stem from the exercise program itself but also from peer support.

The program will be in partnership between the [name of municipality] and [name of health authority] Physiotherapy staff. To maintain the program long term there will need to be commitment from both organizations to provide the necessary staffing, such as recreation staff to run the program and a Physiotherapist to oversee training and quality management. The goal is to have it offered at minimal cost to the participants to allow accessibility for all. Referrals to the program will be completed primarily by physicians or Physiotherapists and a screening will be completed by [name of municipality] Recreation staff to confirm eligibility. Eligibility criteria are based on the participant's physical abilities including lower and higher functional limit.

Implementation Approach

Currently there has been a planning team formed including all levels of Physiotherapy for stroke rehabilitation in [name of health authority] (Inpatient, Rehab, and Community) and 2 members of the [name of municipality] Recreation staff. This team was formed to discuss the needs of the stroke population and how these needs can be met through this program. The team is also connected to a research project using a planning guide to assist with development of the program.

A plan is underway to begin the first session of the community-based stroke exercise program in fall 2021. Referrals for this initial stage will be provided by [name of health authority] Physiotherapy staff. Ten to 12 participants will be screened through the [name of municipality] Recreation staff. One Physiotherapist will complete a 1-3 hour training of all recreation staff that will be involved in implementation of the program. A minimum of 3 instructors will be trained to meet the 4:1 participant to instructor ratio. This Physiotherapist will attend the first few sessions to observe and ensure successful implementation. Sessions will be completed 2 times per week for one hour, and the program will run for 10-12 weeks. The Physiotherapist will be available for consultation over the 10-12 week period and will complete on-site follow-ups as needed. Upon completion of the program, a satisfaction survey and additional subjective outcome measures will be completed by participants to assist in program evaluation. Upon assessment of these outcomes, a report will be completed stating the possible benefits of the program and the feasibility within the community.

(more)

Required Funding and Support

Initial purchase of 2-3 exercise steps and a blood pressure cuff will be required by the [name of municipality]. They will also be providing an accessible space to provide the program, staffing to implement the program and additional equipment that is already in place (i.e., chairs). Support from [name of health authority] will also be required for one Physiotherapist to provide consultative services to the program and training as needed. Once the program is fully implemented, this time commitment is expected to be minimal (approximately 1-2 hours per month).

References

Dean, C.M., Richards, C.L., Malouin, F. (2000). Task-related circuit training improves performance of locomotor tasks in chronic stroke: A randomized, controlled pilot trial. Arch Phys Med Rehabil, 81, 409-417.

Eng, J.J., Reime, B. (2014). Exercise for depressive symptoms in stroke patients: a systematic review and meta-analysis. Clin Rehabil, 28(8), 731-739. doi:10.1177/0269215514523631.

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Tool 3.4 – Download editable file at **AfterStroke.ca/SRIM**

Implementation Workplan Template

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Return to planning tools and resources list

Why is this important?

The preparation of a detailed work plan will ensure that critical elements are addressed and that your implementation planning process, including all decisions and actions taken, are documented and visible to everyone.

How to use this tool:

The implementation workplan addresses the complete planning cycle, Phases 1,2 and 3, including activities related to e.g., your initial proposal for an exercise program through its launch, delivery, an evaluation of the program and participant outcomes, and plans for sustainability. The Progress Checklists for each Phase of planning have been incorporated to help you track your activities and decisions. Use and adapt this template to suit your own setting and circumstances by adding activities, as needed.

> “For the municipality we kind of quickly do those assessments in our head and kind of have a good idea of our demographics, but really, the implementation plan nicely pulls everything together in one place.”
>
> **- Program Coordinator**

> “I think the implementation work plan can help keep you on track. I’ve done a few project management and quality improvement courses, and this supports a lot of that learning, just being systematic with respect to moving through the phases of development.”
>
> **- Stroke Rehabilitation Specialist**

Activities		Progress Check List	☑	NOTES: Decisions/ Actions	Assigned to:	Date Completed
Phase 1 – Step 1: Define the Call to Action						
1.1 Form the planning team; involve the community and identify key partners	1.1a. Define the team's terms of reference and create a project charter 1.1b. Determine decision-making approach	We have assembled a planning team which includes our stakeholders including key community partners and exercise program participants and provides the knowledge and skills we need to proceed with planning.				
		We have identified our champions, leadership and member roles and responsibilities, and decision-making processes for the planning team.				
1.2 Understand the evidence supporting exercise for people with stroke		We are familiar with the aims, strengths and benefits of exercise designed for people with stroke.				
		We are familiar with the sources of research evidence, best practice principles, and standards for exercise designed for people with stroke.				
		We are familiar with the delivery requirements for an exercise program designed for people with stroke including space, equipment, fitness instructor training, staffing requirements, and support from a health-care partner.				
Phase 1 – Step 2: Conduct a community scan						
2.1 Gather community information	Create an inventory and history of existing local programs and services	We have conducted a thorough community assessment to determine number and level of interest of eligible program participants (our 'target' population); opportunities for exercise: services/programs currently available; and community partner interests, priorities, attitudes, concerns.				
	Collect information about the local/target population including community awareness and attitudes towards a program					

(more)

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Activities	Progress Check List	☑	NOTES: Decisions/ Actions	Assigned to:	Date Completed
Phase 1 – Step 3: Select an exercise program and initiate implementation planning					
3.1 Assess program fit for our community	We have conducted feasibility applicability, acceptability, equity, and affordability (FAAEA) checks for an exercise program designed for people with stroke.				
	We have examined the cost implications including necessary budget for introducing and sustaining a program.				
3.2 Achieve agreement to proceed with planning (or not)	Based on our findings, we have reached consensus to proceed with the introduction of a program.				
3.3 If proceeding, firm up the business case	We have prepared a business case to negotiate necessary support with identified partner organizations including referral networks and program sponsors.				
3.4 If proceeding, begin developing the implementation workplan	We have documented our Phase 1 findings and started preparation of an implementation workplan.				

(more)

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Activities		Progress Check List	☑	NOTES: Decisions/ Actions	Assigned to:	Date Completed
Phase 2 – Step 4: Identify barriers and drivers to program implementation						
4.1 Assess the barriers and drivers related to the program, program users, and program setting	The Exercise Program	We have previewed potential exercise programs, completed a comparative assessment, and reached a preliminary decision on which program best meets our needs. We have considered barriers and drivers associated with our preferred program, including the following characteristics and factors:				
		History of the exercise program, supporting research evidence and adherence to established best practice guidelines for exercise designed for people with stroke				
		Availability of expertise and resources to meet stated delivery requirements including necessary training and supervision of fitness instructors				
		Level of flexibility; degree to which program can be adapted to meet our needs				
		Monitoring and evaluation processes for program and participants				
		Space and equipment requirements				
	The Program Users	Participant eligibility criteria and implications for stroke-specific or mixed classes				
		Participant readiness, receptiveness, and commitment				
		Fitness instructor training, motivation, skill/expertise, experience, confidence				
		Health partner belief in value of program; supportive leadership within community				
		Participant culture and language factors				

(more)

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Activities		Progress Check List	☑	NOTES: Decisions/ Actions	Assigned to:	Date Completed
	The Program Setting	Compatibility with provider organizational mandate, culture, and values				
		Organizational stability, administrative capacity; investment in program				
		Continuous funding supports				
		Health partner discharge planning and referral patterns				
		Participant recruitment and retention factors				
		Partnership and collaboration agreements; licensing and insurance requirements				
		Participant transportation needs				
		Other Barriers or Drivers?				
4.2 Confirm program choice						
Phase 2 – Step 5: Develop solutions tailored to specific implementation barriers						
5.1 Prioritize barriers and drivers		We have prioritized each identified challenge.				
5.2 Develop strategies and tactics (solutions) to address priority barriers		We have developed an action plan tailored to stakeholder interests and concerns, including:				
		Program strategies (outline plan)				
		User strategies (outline plan)				
		Setting strategies (outline plan)				
Phase 2 – Step 6: Plan for Evaluation						
6.1 Develop evaluation methods		We have developed an evaluation plan including:				
		6.1a defined indicators and methods for evaluating our implementation process and monitoring program use				
		6.1b. defined indicators and methods for assessing participant and program outcomes (impact)				
6.2 Assess sustainability capacity		We have completed a sustainability capacity assessment				

(more)

Activities	Progress Check List	☑	NOTES: Decisions/ Actions	Assigned to:	Date Completed
Phase 3 – Step 7: Implement exercise program					
7.1 Prepare to Launch	We have completed our launch-readiness check including:				
	Program funding is secured				
	Space, equipment, circuit stations (if applicable) are ready				
	Fitness instructors hired, trained, and scheduled				
	Licensing, insurance, and health partner agreements have been established				
	Marketing, promotion, and communications strategies are in place				
	Participant screening process is established				
	Participant eligibility/medical waivers process is in place				
	Enrolment/registration procedures are stablished				
	Participant/member fee structure is established				
7.2 Deliver the program	Program is being delivered as planned				
7.3 Celebrate the launch					
Phase 3 – Step 8: Evaluate, Adjust, Sustain					
8.1 Conduct evaluation in the Implementation period	We have activated our evaluation plan and are:				
	8.1a. Monitoring program use and collecting data on implementation process including program fidelity				
	8.1b. Collecting data on program and participant outcomes				
8.2 Adjust implementation plan	8.2a. Reviewing the data on a regular basis; sharing results with participants, staff, partners, and community; co-creating solutions; and responding swiftly to identified barriers to implementation				
8.3 Continue evaluation and adjustments in the Sustainability period	We are responding swiftly to identified barriers to program sustainability				
	We are co-creating solutions with participants, staff, partners, and community				

Tool 3.5 – Download editable file at **AfterStroke.ca/SRIM**

Planning Orientation Slide Deck

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Why is this important?

This slide deck may be used to facilitate team understanding of the implementation planning model and to generate team buy-in for the implementation initiative.

How to use this tool:

The slides are designed to be used to explain the Phases and Steps of the implementation planning process. Use the slide deck as is or add your own slides to produce tailored presentations for the implementation team, decision-makers, or other stakeholders.

Identifying Barriers & Drivers: Program

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Why is this important?

Planners are encouraged to systematically examine potential barriers (challenges) and drivers (facilitating or supporting factors) to the implementation of the selected/preferred program option. When introducing any change, what is often considered at the outset to be a simple adjustment to the current way of doing things can have much broader impacts as the full extent of the proposed change becomes clear.

How to use this tool:

The Stroke Recovery in Motion planning model provides an established framework* for identifying and addressing barriers and drivers to program implementation by grouping potential issues into three categories.

This worksheet outlines factors related to one category, attributes of the exercise program itself. You will have answers to most of these questions from the work you completed in Phase 1. Explore any issues that are not clear or present potential challenges. Rank the priority of each issue. Remember to consider possible assets; you will want to leverage any key advantages or local support for implementation. Use and adapt this tool to suit your own setting and circumstances by adding factors, as needed.

To ensure you've adequately heard and considered multiple perspectives, it is useful to have these assessments completed by different stakeholders, e.g. program participants, provider administrators, those responsible for program delivery including instructors, volunteers, and program managers or supervisors.

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* Graham ID, Logan J. Innovations in knowledge transfer and continuity of care. Can J Nurs Res. 2004;36(2):89–103.

The following factors associated with the **attributes of the exercise program** are known to influence implementation. Assess these factors as they relate to your selected program(s) to identify potential barriers (challenges to overcome) or drivers (supportive assets) to implementation. Rank the priority of each factor.

Attributes of the Exercise Program						
Factor	**Potential barrier** ☒		**Potential driver** ☑		**Not sure** (explore further)	**Priority** (rank 1-12)
1. Does the exercise program meet established training principles, standards and guidelines and include specific components to address the needs of people with stroke?		Does not meet guidelines		Meets guidelines		
2. What is the comparative benefit of this exercise program with other management options, measures, or program options for this community?		Less benefit		Greater benefit		
3. Is there a good fit between the exercise program and (local) target population? (feasibility and applicability for local community)		Poor Fit		Good Fit		
4. What is the degree of difficulty to implement this program? Can we maintain program 'fidelity' (i.e. deliver it exactly as designed)?		Difficult to implement and maintain fidelity		Easy to implement and maintain fidelity		
5. Do you have access to any required scientific or technical assistance with program elements? e.g. advice/support from program developer?		Minimal/no support		Good support		
6. To what extent can the program be adapted; what is the degree of flexibility allowed in implementation of the program?		Program not flexible		Program flexible		
7. How would you describe the adequacy of program training requirements including support for preparation of instructors, volunteers and/or attending caregivers?		Not adequate		Adequate		
8. How would you describe the adequacy of participant supervision?		Not adequate		Adequate		
9. Does the program include direction on how to monitor and measure the effectiveness and impact of the program?		No monitoring process or plan		Good monitoring process and plan		
10. Does the program provide/suggest a process for continuous evaluation?		No process		Effective process		
11. Are you able to address all commissioning requirements? e.g. certification, licensing, insurance, policies, other regulatory processes; safety and emergency procedures?		Not able to address		Can address all		
12. Are you able to address any required Partnership or Collaboration Agreements?		Not able to address		Can address all		
Other factors?						

Download editable file at AfterStroke.ca/SRIM

Identifying Barriers & Drivers: Program Users

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◀ Return to planning tools and resources list

Why is this important?

Planners are encouraged to systematically examine potential barriers (challenges) and drivers (facilitating or supporting factors) to the implementation of the selected/preferred program option. When introducing any change, what is often considered at the outset to be a simple adjustment to the current way of doing things can have much broader impacts as the full extent of the proposed change becomes clear.

How to use this tool:

The Stroke Recovery in Motion planning model provides an established framework* for identifying and addressing barriers and drivers to effective program implementation by grouping potential issues into three categories.

This worksheet outlines factors related to the category: program users. Program users include not only the intended participants but also those making the decision to offer the program, those engaged in program delivery, and those who may refer clients to the program. Use and adapt this tool to suit your own setting and circumstances by adding factors, as needed.

You will have answers to most of these questions from the work you completed in PHASE 1. Explore any issues that are not clear or present potential challenges. Rank the priority of each issue. Remember to also consider possible assets; you will want to leverage any key advantages or local support for implementation.

---

* Graham ID, Logan J. Innovations in knowledge transfer and continuity of care. Can J Nurs Res. 2004;36(2):89–103.

The following factors associated with exercise **program users** are known to influence implementation. Users include program participants/clients, fitness instructors, program managers, agency administration, health partners and community stakeholders. These factors relate to user awareness, attitudes, knowledge, skills, current practices, and concerns. Consider how these characteristics apply to your selected program(s) to identify potential barriers (challenges to overcome) or drivers (supportive assets) to implementation. If marking "not sure", explore further. Rank the priority of each factor.

Factors Associated with Exercise Program Users						
Factor	☒ **Potential barrier**		☑ **Potential driver**		**Not sure**	**Priority** (rank 1-12)
1. Some programs permit people with other balance and mobility challenges. Will your participants be limited to people with stroke or will you include clients with other health conditions/needs? Can you effectively manage a 'mixed' class?		Not able to accommodate a mixed class		Can accommodate a mixed class		
2. What is the local level of participant/client receptiveness and commitment? e.g. interest, awareness, knowledge, and perceived benefits of program		Minimal/no interest		Eager		
3. What is your anticipated participant/client (individual and family) attendance?		Limited attendance		High attendance		
4. Do you have a local program 'champion'(s)?		No local champion		Committed local champion		
5. How prepared are your staff to provide evidence-based exercise programs designed for people with stroke? e.g. level of expertise, experience, knowledge, and skills		Low level of preparation Minimal experience		High level of preparation Highly skilled		
6. How would you describe level of staff motivation, confidence, comfort level to deliver the program?		Not comfortable		Confident		
7. Are your program users aware and willing to change existing practice(s) e.g. health practitioner discharge planning and referral patterns		Low awareness/ willingness		Willing to change		
8. Do your participants, provider staff and partners believe in the value of this program; believe that the exercise program is effective for people with stroke, including credibility of the supporting evidence for this program?		Perceived as little/no value		Perceived as high value		
9. Do you have access to necessary clinical or technical assistance? e.g. health professionals/partners to assist with program adaptation, program fidelity		No/minimal access		Good access		
10. Do you have the support of your leadership and key stakeholders/partners?		No/Minimal support		Strong support		
11. Do you have a stable complement of staff? e.g. availability of trained program delivery staff, program manager		High turnover		Consistent staffing		
12. Can you accommodate diversity in your participant population? e.g. culture and language needs		Difficult to accommodate		Easily accommodated		
Other factors?						

Tool 4.1 – Download editable file at **AfterStroke.ca/SRIM**

Identifying Barriers & Drivers: Program Setting

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◀ Return to planning tools and resources list

Why is this important?

Planners are encouraged to systematically examine potential barriers (challenges) and drivers (facilitating or supporting factors) to the implementation of the selected/preferred program option. When introducing any change, what is often considered at the outset to be a simple adjustment to the current way of doing things can have much broader impacts as the full extent of the proposed change becomes clear.

How to use this tool:

The Stroke Recovery in Motion planning model provides an established framework* for identifying and addressing barriers and drivers to effective program implementation by grouping potential issues into three categories.

This worksheet outlines factors related to the category: organizational setting and systems, e.g. the structure, policies and processes, and cultural elements that might influence or govern the practices of program providers and possible community partners.

You will have answers to most of these questions from the work you completed in Phase 1. Explore any issues that are not clear or present potential challenges. Rank the priority of each issue. Remember to also consider possible assets; you will want to leverage any key advantages or local support for implementation. Use and adapt this tool to suit your own setting and circumstances by adding factors, as needed.

> "The assessing barriers tool includes barriers we have faced related to the organizational structure and would have helped us to have those important conversations or help put things on the table for discussion in a more neutral way. The tool would facilitate a more objective conversation and get at what the real needs and issues are."
>
> **- Program Coordinator**

* Graham ID, Logan J. Innovations in knowledge transfer and continuity of care. Can J Nurs Res. 2004;36(2):89–103.

The following factors associated with the **program setting** are known to influence implementation. These factors focus on the provider organization, relevant delivery systems, community partnerships, and include cultural, social, structural, and economic capacities and concerns. Assess these factors as they relate to your selected program(s) to identify potential barriers (challenges to overcome) or drivers (supportive assets) to implementation. If marking "not sure", explore further. Rank the priority of each factor.

Factors Associated with the Program Setting						
Factor	☒	**Potential barrier**	☑	**Potential driver**	**Not sure**	**Priority** (rank 1-12)
1. Is this program compatible with the mandate, culture, and values in our organization and amongst our community stakeholders and partners?		Poor match Potential conflict		Good alignment		
2. What is the level of organizational investment and prioritization for this program?		Low priority		High priority		
3. Do we have competing service responsibilities or programs? Consider time/cost/ staffing resources implications for other programs		Competition		No competition		
4. Do we have buy-in from our organization including relevant systems management, and from our partners?		Not convinced		Highly supportive		
5. Have key stakeholders been included in decision-making?		Limited engagement		Inclusive		
6. What is the current stress level within our organization? Consider level of trust, respect, cohesion – critical to implementing change		High level stress		Low level stress		
7. Is this program recognized by our funder/sponsor(s)?		No familiarity		Positive recognition		
8. Do we have a continuous source of funding/sponsorship to deliver this program? Consider e.g. staffing, training, administration, space, equipment expenses		No continuous funding		Stable funding		
9. Do we have the administrative infrastructure and capacity to manage this program? e.g. promotion, registration and pre-screening processes, fee management, space and equipment, staffing, training, supervision and safety, data management		Minimal infrastructure		Established, good infrastructure		
10. Can we address any necessary program commissioning requirements? e.g. medico-legal, risk management, emergency procedures, licensing, insurance, waivers and policies, other regulatory, partnership or collaboration agreements?		Difficult to accommodate		Easily accommodated		
11. Can we address participant/client recruitment and retention factors? e.g. discharge planning/referral patterns from institutional, family practice, private PT practice, or rehabilitation centre sources and ongoing enrolment capacity		Difficult to accommodate		Easily accommodated		
12. Have we considered participant transportation needs including availability of e.g. specialized transport services, volunteer drivers, reliance on family caregivers?		Difficult to accommodate		Easily accommodated		
Other factors?						

Solution Building Sample & Worksheet

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Return to planning tools and resources list

Why is this important?

This is the "exactly what will it take to get it done" step. The more tailored your strategies and tactics are for each barrier, the greater the likelihood of program success.

How to use this tool:

In Step 4, the planning team identified barriers and drivers to program implementation and prioritized those issues that needed attention. Planners can use the same framework to tailor solutions aimed at program, program user and program setting challenges. Some issues will cross all categories. A sample approach is provided to address a commonly expressed concern about managing participant safety. Use this worksheet together with the master implementation plan to ensure activities are assigned and completed.

Remember to consider any unique resources within your community; solution building includes both responding to challenges and leveraging community assets.

Use and adapt this worksheet to suit your own setting and circumstances, as needed. This tool was developed in response to study participant input. We welcome any feedback.

> "We wanted to make sure that our solutions were acceptable to people living with stroke and caregivers. Our planning team first used the barrier assessments in the Planner and identified a couple of items that we needed to action, which was good. My next step was to then have a nice one-on-one open conversation with our team's stroke advisor and caregiver about what they see as potential barriers and to learn about their ideas for solutions."
>
> **- Physiotherapist**

Review the implementation barriers (challenges) and drivers (assets) identified in your assessment of factors associated with the exercise **Program**, the **Program Users** and the **Program Setting**. Enter those issues you identified as having the greatest influence on successful program implementation (e.g. Top 5 priorities or as many as you determine require attention).

Develop solutions/action plans for each issue identified.

Solution Building Worksheet				
Barriers	**Implementation Strategy/Action(s) Required**	**Assigned To**	**Date**	**Decisions/Actions**
1. Identified Barrier: (Example) Participant Safety Priority: High Description of issue: • Participant and family concerns re: ability to participate safely in a community-based class • Fitness Instructor concerns re: confidence/comfort level to deliver program; anxiety re: how to manage adverse events, e.g. falls, medications; how to adapt program; how to safely supervise group • Physiotherapist/program developer concerns re: instructor level knowledge and skill; ability to adapt program regimen effectively and safely, maintain program fidelity • Provider Agency concerns re: safety and supervision of participants, institutional liabilities, confidentiality of participant health information	**Approach to Solution Building** • Start by outlining specific stakeholder concerns, i.e. exactly who is concerned about exactly what? (see example description, left) • Revisit your community and program assessments, e.g. your community scan, review of programs, feasibility assessment, identification and working agreements with partners, the business case, etc. You've already gathered most of the information you need to develop a strategy. And you may have already dealt with many of the noted challenges in your implementation planning decisions to date. • Consider this information now as it relates specifically to patient safety and focus your action plan on outstanding issues. See questions below. • Review the selected program/instructor training materials and certification requirements. How are the issues of concern addressed in the required training of instructors? • Contact the exercise program developer(s) to inquire about their experience in developing, delivering, and supporting the selected program, what to anticipate, and how other sites have addressed potential safety issues. • Locate and contact colleagues delivering similar programs to share best practices. What is their experience; how are they managing these (common) implementation challenges? • Review best practice guidelines for information on participant supervision and safety. **Consider** 1. What is the eligibility criteria for enrolment in the selected program: is your registration process clearly defined, understood, and shared by all stakeholders (e.g. participants and/or their referring health partner; instructors, program managers?). Are there exceptions – who will make these decisions, using what criteria?			

(more)

Barriers	Implementation Strategy/Action(s) Required	Assigned To	Date	Decisions/Actions
	2. Is medical authorization or a waiver required for participation? Who/how/when will this be managed? What information is needed re: e.g. medical conditions, medications (e.g. do participants know how and when to use their medications; are they required to bring any medication to class?) How will this information be shared, used, and where will it be kept? Are safeguards in place to keep this information confidential? 3. What is the participant screening process: who is qualified to conduct these assessments – how/when/where will screening occur? 4. What is the role of volunteers/caregivers who may attend with participant? Do they also require training? How will this be managed? Is your volunteer onboarding process appropriate or does it need to be modified for this program? 5. Will participant progress be monitored, evaluated, and documented; at what intervals? Where will those records be kept? Should instructors conduct an individual check-in at beginning of each class? If a participant reports a fall, is it safe to return to class; is a change to their exercise regimen required? What is the level of engagement with referring health partner(s)? Who will you call for advice? 6. What instructor training/certification is required to deliver the program, specifically the management of anticipated safety concerns? Is program-specific training provided? Does this training meet or exceed any existing provincial or agency requirements/mandates? Who provides the training? Can you conduct a trial class prior to launch? 7. Are you able to meet the recommended 1:4 instructor/staff to participant ratio? How stable/consistent is your staffing complement? What are the plans for refresher training and ongoing level of support to fitness instructors; are resources sufficient to meet associated staffing and training costs? 8. What emergency procedures, equipment and first aid training have been established at the provider agency? Are safety drills and refresher training routinely conducted? 9. How will ongoing communication be managed between key stakeholders, e.g. referring health partners, advisory/program specialists? 10. How will program outcomes be evaluated – are clearly defined measurement strategies in place; procedures for adverse event reporting? 11. What are your criteria for stopping or sustaining the program? 12. What policies are in place in the provider agency with respect to medical-legal liability, insurance, etc.?			

(more)

Barriers	Implementation Strategy/Action(s) Required	Assigned To	Date	Decisions/Actions
2.				
3.				
4.				
5.				
Drivers	**Implementation Strategy/Action(s) Required**	**Assigned To**	**Date**	**Decisions/Actions**
1.				
2.				
3.				
4.				
5.				

Evaluation Planning Matrix Template

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Why is this important?

Evaluation is the only way to know if an exercise program is being implemented as planned, whether it is being delivered as intended, how it is actually being used, and the outcomes and impacts it is delivering. These findings can be used to justify the existence of the program and help make a stronger case for continued or additional program funding. Participant outcome data can help gauge participant improvements and motivate continued participation in exercise.

An evaluation plan helps identify where specific follow-up interventions are needed to sustain the program.

How to use this tool:

The Evaluation Planning Matrix Template lists the key components of an evaluation in the columns. The rows represent the different types of evaluations: implementation and program use, outcomes, capacity for sustainability. Determine the type of evaluation(s) you are interested in undertaking and then complete the template. The completed template can be shared with administrators and stakeholders and used to keep the evaluation on track.

This tool was developed in response to study participant input. We welcome any feedback.

> "It's so much harder to evaluate at this stage when the fitness program is already so entrenched. It's so much harder now. It would be so much easier if I could reverse time and have that evaluation, at least that part of the program evaluation in place before we hired the fitness instructors."
>
> **- Program Coordinator**

The template was adapted from Bowen S. 2012. A Guide to Evaluation in Health Research: Canadian Institutes of Health Research. Available at: https://cihr-irsc.gc.ca/e/45336.html

Evaluation Planning Matrix							
Purpose of Evaluation	**Evaluation Questions**	**Evaluation Design & Methods**	**Indicators**	**Data Sources**	**Data Collection Methods**	**Evaluation Timeframe**	**Responsibility & Resources**
Implementation and program use							
Outcomes							
Capacity for sustainability							

Tool 6.1a – Download editable file at **AfterStroke.ca/SRIM**

Program Fidelity Checklist – Fit for Function Sample

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Why is this important?

Exercise program developers encourage maintaining program 'fidelity', i.e. monitoring whether the exercise regimen is being consistently delivered as designed to achieve optimal outcomes and ensure safety of the participants. Many programs include a fidelity checklist for program managers to review with their fitness instructors. Monitoring client screening processes, equipment maintenance and emergency procedures, management of the class structure and activities, including interaction with participants and their caregivers, will help keep your program on track. It is also important to check in with your instructors to ensure they have the necessary training and feel comfortable supporting participants who may have special needs.

How to use this tool:

This sample is an observation worksheet used by the developers of the Fit for Function exercise program*. You may want to tailor the tool to reflect your own setting and program choice. Consider who is in the best position to monitor a class, e.g. your program manager or health partner, and how you will manage any concerns that need attention and support. Adapt this sample to create a checklist which suits your own setting and circumstances, as needed.

> "I really appreciate the discussion on program fidelity - that is something that I will incorporate into practice right away."
>
> **- Program Coordinator**

*Fit for Function was developed by McMaster University (Dr. Julie Richardson and Dr. Ada Tang), Hamilton Health Sciences, and YMCA Hamilton, Burlington, Brantford.
Contact information: mobilityresearch.ca

Date _____ **Site** _____ **Examiner** _____

Fit for Function
Exercise Program Fidelity Checklist

Scoring

0 Did not demonstrate = this item was not demonstrated at all

1 Partially demonstrated = this happened to some extent, but not or all group members, all of the time (e.g., instructors facilitate discussion, but only among certain members of the group)

2 Demonstrated consistency through entire class = the item was demonstrated consistently and appropriately throughout the entire session

NA Not applicable

Item		Score
I. Program preparation		
Training Workshop	Exercise classes are provided by trained instructor(s)	
	Instructor attended a training workshop or certification	
Naming	The program is marketed for participants with stroke (and potentially, others)	
Screening	A screening process is in place	
Adverse events	Procedures are in place for emergency, including falls and cardiac events	
	Procedures are in place for reporting adverse events	
Health-care partner	Exercise classes are supported by a health-care partner (e.g. stroke physiotherapist provides consultation)	
II. Program parameters		
Frequency	Classes are operated at least two times per week	
Length	Classes last 45-60 minutes	
	Length of the program is at least 4 weeks	

(more)

Item		Score
III. Class structure		
	Attendance is taken	
Exercises	Exercises are undertaken to improve balance function	
	Exercises are undertaken to improve cardiovascular fitness	
	Exercises are undertaken to improve walking and mobility function	
	Instructor selects appropriate exercises for participants	
	Instructor selects appropriate level of exercises for participants	
	Instructor selects appropriate number of repetitions of exercises for participants (e.g., 3 minutes continuously, 3 sets of 10 repetitions)	
	Instructor encourages and facilitates good exercise form by verbal cues, tactile cues, and demonstration	
	Instructor progresses each participant weekly so exercises are always challenges	
Stay on track	Instructor addresses client issues but did not allow them to disrupt content agenda	
	Instructor modulates distractions (e.g. side bar conversations, interrupted by family members)	
Create a supportive and empathetic climate	Instructor avoids judgmental feedback on participants' contribution	
	Instructor responds emphatically and accurately to individual or group member behaviour (verbal, nonverbal)	
	Instructor engages participants in meaningful conversation when not instructing	

(more)

Item		Score
IV. Education		
Facilitator training	Education sessions are provided by trained facilitator(s)	
Attendance	Attendance is taken	
Manage the class	Facilitator ensures that the space and facilities are adequate for education	
	Facilitator involves family and caregivers if available	
	Facilitator allocates time appropriately	
Stay on track	Facilitator addresses client issues but did not allow them to disrupt content agenda	
	Facilitator modulates distractions (e.g., side bar conversations, interrupted by family members)	
Create a supportive and empathetic climate	Facilitator avoids judgmental feedback on participants' contribution	
	Facilitator responds emphatically and accurately to individual or group member behaviour (verbal, nonverbal)	
	Facilitator engages participants in meaningful conversation	

SPPB FAME Sample

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Why is this important?

An understanding of program and participant outcomes is fundamental to establishing program sustainability. Best practices for the evaluation of post-stroke community-based exercise programs include a variety of measurement strategies. Many are described in the guide.

How to use this tool:

The indicators you choose should be meaningful to your stakeholders, i.e. participants want to know how they are doing, and administrators want to know if they should continue to support delivery of the program. Your evaluation plan should also consider what is practical to be administered effectively in your setting and how any participant information collected will be managed.

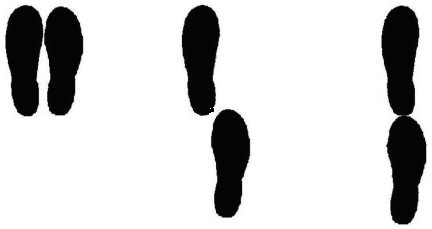
The Short Physical Performance Battery (SPPB), from the FAME* exercise program is one example of a participant evaluation. Instructions for administration are included with the tool. Further information is available from FAME.

*FAME. FAME – fitness and mobility exercise program. 2020 [cited 2020 Apr 10]. Available from: fameexercise.com

FAME
Fitness and Mobility Exercise Program

Short Physical Performance Battery

There are three balance tests, a walking test and a chair rise test. People can receive a maximum score of 12.



Balance tests: (Equipment – stop watch)
Explain 'We are looking at your standing balance. We want to know if you can stand for 10 seconds without holding with your feet in certain positions.

A. Side-by-Side balance test
Explain "Begin with feet together beside each other. I want you to try to stand with your feet together, side by side, for about 10 seconds. Please watch while I demonstrate. You may use your arms, bend your knees, or move your body to maintain your balance, but try not to move your feet. Try to hold this position until I tell you to stop". If successful, score 1 point and move to next balance task.

B. Semi Tandem
Repeat in semi tandem stand (heel of one foot placed by the big toe of the other foot). Explain "Now I want you to try to stand with the side of the heel of one foot touching the big toe of the other foot for about 10 seconds. You may put either foot in front, whichever is more comfortable for you. Please watch while I demonstrate". Demonstrate. If successful, score 1point and move to next balance task.

C. Tandem Stand (feet directly in front of each other)
Explain "Now I want you to try to stand with the heel of one foot in front of and touching the toes of the other foot for 10 seconds. You may put either foot in front, whichever is more comfortable for you. Please watch while I demonstrate". If holds for 10 seconds give a score of 2 points. Give 1 point if holds for 3-9.99 seconds

Walk test: (Equipment - Measuring Tape, stop watch and cone)
Measure out 4 meters. Place a cone at the end.
Explain "This is our walking course. If you use a walking aid when walking outside your home, please use it for this test. I want you to walk at your usual pace between the two cones Walk all the way past the cone before you stop. I will walk behind you. We will be doing this test two times".
For the lowest time; Score 1 point for more than 8.70 seconds, 2 points for 6.21-8.70 seconds, 3 points for 4.82-6.20 seconds and 4 points for <4.82 seconds

Repeated chair stands: (Equipment – chair 45cm and stopwatch)
Explain "I want to see how long it takes you to stand up and sit down as quickly as possible 5 times without stopping. After standing up each time, sit down and then stand up again. Keep your arms folded across your chest. Please watch while I demonstrate. I'll be timing you with a stopwatch"
Demonstrate. Start timer when they bend forward at hips. Count number out loud. Stope when they have straightened for the fifth time. Stop if they use their arms, get short of breath of if you are concerned for their safety or after one minute. Score 1 point if time is over 16.70 seconds, 2 points if 13.70-16.69 seconds, 3 points for 11.20-13.69 seconds and 4 points for <11.19 seconds.

FAME
Fitness and Mobility Exercise Program

Short Physical Performance Battery

Score Sheet

Detailed instructions and protocol can be found at fameexercise.com

1. Balance Tests – note if 0 points on 1A or 1B, end Balance Tests

A. Side-by-side-stand:		B. Semi-Tandem Stand:		C. Tandem Stand:	
Held 10 sec	❒ 1 point	Held 10 sec	❒ 1 point	Held for 10 sec	❒ 2 points
Not held for 10 sec	❒ 0 point	Not held for 10 sec	❒ 0 point	Held for 3 to 9.99 sec	❒ 1 point
Not attempted	❒ 0 point	Not attempted	❒ 0 point	Held for < than 3 sec	❒ 0 point
				Not attempted	❒ 0 point

D. Total Balance Tests (sum points)

2. . Gait Speed Test (sec) using 3 or 4-Meter Walk

Record the shorter of two times in seconds. If the participant was unable to do the walk: ❒ 0 points

For 3-Meter Walk:		Or For 4-Meter Walk:	
If time is more than 6.52 sec:	❒ 1 point	If time is more than 8.70 sec:	❒ 1 point
If time is 4.66 to 6.52 sec:	❒ 2 points	If time is 6.21 to 8.70 sec:	❒ 2 points
If time is 3.62 to 4.65 sec:	❒ 3 points	If time is 4.82 to 6.20 sec:	❒ 3 points
If time is less than 3.62 sec:	❒ 4 points	If time is less than 4.82 sec:	❒ 4 points

3. Repeated Chair Stand Test

Record time in seconds for participant to stand up from a chair 5 times without use of their arms.

Participant unable to complete 5 chair stands:	❒ 0 points
Unable to complete without using arms:	❒ 0 points
Completes stands in >60 sec:	❒ 0 points
If chair stand time is 16.70 sec or more:	❒ 1 points
If chair stand time is 13.70 to 16.69 sec:	❒ 2 points
If chair stand time is 11.20 to 13.69 sec:	❒ 3 points
If chair stand time is 11.19 sec or less:	❒ 4 points

Total Score: _____

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FAME
Fitness and Mobility Exercise Program

Short Physical Performance Battery

Below is a sample one page feedback form that can be provided to participants and is derived from the Short Physical Performance Battery.

Name: **Date**

Balance assessments	
	**Held for_____seconds**
	**Held for_____seconds**
	**Held for_____seconds**
Walking assessment	
	**4 Metres in_____seconds**
Chair stand assessment	
	**5 Chairs stands in_____seconds**

Program Sustainability Assessment

◀ Click to return to page 57 (Phase 2)

◀ Click to return to page 78 (Phase 3)

◀ Return to planning tools and resources list

Why is this important?

To continue program benefits, it is necessary to understand the factors that contribute to program sustainability, e.g. maintaining funding and ensuring a strategy for ongoing training and supervision of fitness instructors. Additional strategies may be needed over time to respond to changing health-care partnerships or emerging new evidence about exercise techniques, to ensure client retention and continued enrolment, to address staff movement or manage changes within the leadership and mandate of an organization. Assessing your capacity to maintain the proposed program is a continuous exercise.

How to use this tool:

Although this tool (PSAT) has been positioned in Phase 2, program planners will find it a useful assessment activity at several decision points in the planning cycle including:

- Phase 1: to determine the feasibility of launching and maintaining the proposed program
- Phase 2: to identify potential program, program user, or organizational barriers and drivers
- Phase 3: to evaluate program impact and detect areas that need additional support

Note: PSAT outlines the purpose and instructions for use of the tool (next page).

You may wish to adapt this assessment to suit your own setting and circumstances, as needed.

> "This (sustainability assessment tool) is something we would have used. I definitely would have made more time or pushed the team for more time to do that sustainability piece. I wish we had focused on sustainability more at the beginning"
>
> **- Program Coordinator**

Permission to include this assessment provided by: Center for Public Health Systems Science, Brown School at Washington University in St. Louis. MO

Center for Public Health Systems Science, Washington University in St. Louis. PSAT - Program Sustainability Assessment Tool. 2021 (accessed October 21, 2021). Available from: sustaintool.org/psat

Program Sustainability Assessment Tool v2

What is program sustainability capacity?

We define program sustainability capacity as *the ability to maintain programming and its benefits over time*.

Why is program sustainability capacity important?

Programs at all levels and settings struggle with their sustainability capacity. Unfortunately, when programs are forced to shut down, hard won improvements in public health, clinical care, or social service outcomes can dissolve. To maintain these benefits to society, stakeholders must understand all of the factors that contribute to program sustainability. With knowledge of these critical factors, stakeholders can build program *capacity* for sustainability and position their efforts for long term success.

What is the purpose of this tool?

This tool will enable you to assess your program's current capacity for sustainability across a range of specific organizational and contextual factors. Your responses will identify sustainability strengths and challenges. You can then use results to guide sustainability action planning for your program.

Helpful definitions

This tool has been designed for use with a wide variety of programs, both large and small, across different settings. Given this flexibility, it is important for you to think through how you are defining your program, organization, and community before starting the assessment.

Below are a few definitions of terms that are frequently used throughout the tool.

- **Program** refers to the set of formal organized activities that you want to sustain over time. Such activities could occur at the local, state, national, or international level and in a variety of settings.
- **Organization** encompasses all the parent organizations or agencies in which the program is housed. Depending on your program, the organization may refer to a national, state, or local department, a nonprofit organization, a hospital, etc.
- **Community** refers to the stakeholders who may benefit from or who may guide the program. This could include local residents, organizational leaders, decision-makers, etc. Community does not refer to a specific town or neighborhood.

Program Sustainability Assessment Tool v2

The name of the program or set of activities I am assessing is:

_____

In the following questions, you will rate your program across a range of specific factors that affect sustainability. Please respond to as many items as possible. If you truly feel you are not able to answer an item, you may select "NA." **For each statement, circle the number that best indicates the extent to which your program has or does the following things.**

Environmental Support: Having a supportive internal and external climate for your program

								Not able to answer
1. Champions exist who strongly support the program.	1	2	3	4	5	6	7	NA
2. The program has strong champions with the	1							
3. The program has leadership support from within the larger organization.	1	2	3	4	5	6	7	NA
4. The program has leadership support from	1							
5. The program has strong public support.	1	2	3	4	5	6	7	NA

Funding Stability: Establishing a consistent financial base for your program

	To little							Not able
1. The program exists in a supportive state economic climate.	1	2	3	4	5	6	7	NA
2. The program implements policies to help	1							
3. The program is funded through a variety of sources.	1	2	3	4	5	6	7	NA
4. The program has a combination of stable and	1							
5. The program has sustained funding.	1	2	3	4	5	6	7	NA

Program Sustainability Assessment Tool v2

For each statement, circle the number that best indicates the extent to which your program has or does the following things.

Partnerships: Cultivating connections between your program and its stakeholders

	To little						To a very	
1. Diverse community organizations are invested in the success of the program.	1	2	3	4	5	6	7	NA
2. The program communicates with community	1							
3. Community leaders are involved with the program.	1	2	3	4	5	6	7	NA
4. Community members are passionately	1							
5. The community is engaged in the development of program goals.	1	2	3	4	5	6	7	NA

Organizational Capacity: Having the internal support and resources needed to effectively manage your program and its activities

								Not able to answer
1. The program is well integrated into the operations of the organization.	1	2	3	4	5	6	7	NA
2. Organizational systems are in place to support	1							
3. Leadership effectively articulates the vision of the program to external partners.	1	2	3	4	5	6	7	NA
4. Leadership efficiently manages staff and other	1							
5. The program has adequate staff to complete the program's goals.	1	2	3	4	5	6	7	NA

Program Sustainability Assessment Tool v2

For each statement, circle the number that best indicates the extent to which your program has or does the following things.

Program Evaluation: Assessing your program to inform planning and document results

	To							Not able to answer
1. The program has the capacity for quality program evaluation.	1	2	3	4	5	6	7	NA
2. The program reports short term and	1							
3. Evaluation results inform program planning and implementation.	1	2	3	4	5	6	7	NA
4. Program evaluation results are used to	1							
5. The program provides strong evidence to the	1							

Program Adaptation: Taking actions that adapt your program to ensure its ongoing effectiveness

								Not able to answer
1. The program periodically reviews the evidence base.	1	2	3	4	5	6	7	NA
2. The program adapts strategies as needed.	1							
3. The program adapts to new science.	1	2	3	4	5	6	7	NA
4. The program proactively adapts to changes in	1							
5. The program makes decisions about which components are ineffective and should not continue.	1	2	3	4	5	6	7	NA

Program Sustainability Assessment Tool v2

For each statement, circle the number that best indicates the extent to which your program has or does the following things.

Communications: Strategic communication with stakeholders and the public about your program

								Not able to answer
1. The program has communication strategies to secure and maintain public support.	1	2	3	4	5	6	7	NA
2. Program staff communicate the need for the	1							
3. The program is marketed in a way that generates interest.	1	2	3	4	5	6	7	NA
4. The program increases community awareness	1							
5. The program demonstrates its value to the public.	1	2	3	4	5	6	7	NA

Strategic Planning: Using processes that guide your program's direction, goals, and strategies

								Not able to answer
1. The program plans for future resource needs.	1	2	3	4	5	6	7	NA
2. The program has a long-term financial plan.	1							
3. The program has a sustainability plan.	1	2	3	4	5	6	7	NA
4. The program's goals are understood by all	1							
5. The program clearly outlines roles and responsibilities for all stakeholders.	1	2	3	4	5	6	7	NA

If you would like more information about how to use this tool with your program or would like to learn about our sustainability workshops and webinars, visit http://www.sustaintool.org. August 2013

Readiness Checklist – TIME™ Sample

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Return to planning tools and resources list

Why is this important?

After months of preparation, your planning team will be eager to announce a program launch date. By this stage you will have established a firm basis of support amongst all interested parties, formed critical relationships and referral patterns with relevant health partners, set in motion your promotion and recruitment strategy, prepared the necessary facilities and equipment, conducted instructor, staff or volunteer training, and established plans to evaluate program and participant outcomes. Using a checklist will help you confirm you've addressed the critical components of your plan.

How to use this tool:

This 'Readiness Checklist' sample from TIME™* outlines key elements specific to the launch and delivery of the TIME™ exercise program. You may use it as an example and/or develop your own checklist, tailored to reflect your local context and program decisions.

> "Our municipal partners completed this checklist. If we were to do it again, I would consider having one of the physios and the City staff do this checklist together and actually go in the building and go through it instead of just doing it by memory."
>
> **- Physiotherapist**

* University Health Network. Together in Movement and Exercise (TIME™) program. 2020 [cited 2020 Apr 10].

Available from: ers.snapuptickets.com/UHN/TIME

The following lists the equipment and resources to help recreation centres get ready for running TIME™. TIME™ is a licensed program suitable for people with balance and mobility challenges related to any underlying condition. It is a group exercise class for 12 participants, although this is modifiable depending on space and resources. The exercise program is a 3-station circuit, with 4 participants at each station, and a unison seated warm-up and cool-down.

The foundation of the TIME™ program is local relationships between recreation and health-care professionals to implement and sustain a successful program. They share their expertise, solve problems, and work together to optimize the results for class participants. The health-care partners are usually physiotherapists or kinesiologists from nearby health-care organizations. Contact between the partners is maintained by phone or email and visits to the program, frequently in the initial stages but gradually reducing as the fitness instructor confidence increases in running the class. This partnership with local health-care organizations is also helpful in promoting participant referrals.

Item	Status (yes/no)	Comments
License		
TIME™ Trademark License Agreement has been signed and submitted.		
TIME™ Toolkit received after approval of license.		
Site Features		
The recreation centre is wheelchair accessible (building entrance and inside)		
Automated external defibrillator(s) available in the building in case of emergency		
A wheelchair-accessible washroom must be easily accessible to the participants of the program (ideally near the exercise room)		
Personnel		
A Recreation Coordinator / Community Recreation Partner has been identified to administer the program and screen participants.		
At least 2 Fitness Instructors with the following qualifications have been identified: 1. Group fitness instructor certifications from: CanFitPro™ Fitness Instructor Specialist, YMCA-Fitness Leadership, Ontario Fitness Council (OFC), American Council on Exercise (ACE), or equivalent (eg. Yoga, Pilates). Other qualifications can be considered on a case-by-case basis. 2. Excellent communication and leadership skills 3. Exhibits empathy, enthusiasm and a genuine interest in working with people with disability A 4:1 ratio of participants to instructors-plus-volunteers is required. For groups greater than 10, 2 instructors are required.		
Fitness instructors have completed TIME™ Training (e-learning and a face-to-face workshop led by health-care partner/ physiotherapist, total 5.5 hours. All training materials are provided in the toolkit.)		
Volunteers if available at the centre have been identified.		
Volunteers have completed TIME™ Training – Training guidelines provided (90 min.)		

Item	Status (yes/no)	Comments
Participant Documentation		
Each person who registers in the TIME™ program must sign a Participant Waiver & Consent Form, provided in the toolkit		
Equipment and Material Resources (for class size of 12)		
A multi-purpose room to conduct the exercise program that accommodates 12 participants, their caregivers (if attending) and 3-4 instructors/volunteers (at least 30 feet x 25 feet)		
Time to schedule a 1-hour exercise class, twice per week with a 15-minute equipment set up and take down time. Note: TIME™ participants often prefer a time slot that is late morning or early afternoon (e.g. 11:00-12 noon or 1:30-2:30 pm)		
18 sturdy, stackable chairs include 4 chairs with armrests for those who need them		
Hand supports for balance must be provided. Options include: 1. Fixed and/or portable ballet barres* are preferred as hand support (at least 8-10-foot length), minimum 2 barres (at least one 10-foot barre preferred) 2. 18 chairs used for warm up can be stacked up to use as handholds during standing exercises		
At least 6 Reebok ® Steps or similar sturdy steps and appropriate number of risers		
Miscellaneous exercise props: Examples: Pool Noodles, Balls, paper plates Hula-Hoop (minimum 10)		
One (aerobic equipment (recumbent bicycle, NuStep®, arm ergometer, etc.) OPTIONAL		
Shopping Bags with weights/items ~ 3 lbs. x 4, OR		
Laundry Baskets with weights/items x 4		
1 and 2 lbs. cuff weights (8) OPTIONAL		
Tennis/Badminton racket and ball x 4 OPTIONAL		
Miscellaneous: Flip chart paper with colored markers or Post-it notes		
Access to a water hydration source (jug with water and cups is preferred)		
Juice boxes		
MP3/CD player, speakers, music		

Tool 7.1 – Download editable file at **AfterStroke.ca/SRIM**

Participant Screening FFF & Time™ Samples

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◀ Return to planning tools and resources list

Why is this important?

Participant screening is an integral component of exercise programs designed for people with stroke. Best practice guidelines [2] recommend that a formal screening process be conducted by the exercise provider to ensure a match between the program and the participant and to ensure that the participant meets program eligibility. Screening processes include a range of procedures including individual participant intake interviews, a review of health information from the physician/ other referring health-care providers as well as a review of functional ability and the need for other considerations.

How to use this tool:

Programs may provide recommendations and include a sample waiver in their training materials (e.g. Fit for Function program sample) or a participant questionnaire (e.g. TIME™ program sample). Municipal recreation facilities often use a standardized form such as the Physical Activity Readiness Questionnaire for Everyone (PAR-Q+) [63] and Physical Activity Readiness Medical Examination (ePARmed-X+) [63]. The Canadian Society for Exercise Physiology (CSEP) also provides a "Get Active Questionnaire" [64] which a participant can use with a fitness health professional to discuss readiness to participate in a program.

> "When I was reading Phase 3 and thinking about the medical approval, I was wondering, do we just take people's word for it that they have physician approval to participate? Do we actually get them to sign forms? So, the fact that you included an example of the medical authorization form was perfect because not only did it answer my question, it just gave me something really practical that we could use."
>
> **- Program Coordinator**

Healthcare Partner Logo

Fit for Function Community Stroke Wellness Program

Medical Authorization

Fit for Function is a program for individuals who have had a stroke. It includes a modified group fitness class two days per week, as well as fitness centre exercise and education one day per week. The program is supervised by a YMCA kinesiologist and a physiotherapist.

Functional exercise classes	Community-Based Exercise Program for Persons Living with Stroke (1 hour, 2x/week) • Warm-up • Task-Oriented Strengthening and Cardiovascular Training • Mobility and Balance • Cool Down
Independent gym exercise	Supervised drop-in sessions at the fitness centre (1 hour, 1x/week)
Education sessions	Weekly sessions based on the Heart and Stroke Foundation's *Living with Stroke* program

To refer your patient to this program, please complete the attached Medical Authorization Form.

Healthcare Partner Logo

Fit for Function Community Stroke Wellness Program

Medical Authorization

Participant's Name:	DOB:
Address:	
City:	Phone #:

Please check one and provide details if required:

❑ I am not aware of any contraindications or concerns toward participation in this program.
❑ The applicant can participate in the program, but I urge caution because:
❑ The applicant can participate in the program, but should **not** engage in the following activities:
❑ The applicant is not advised to participate in the program because:

This patient has my approval to begin an exercise program with the recommendations or restrictions stated above.

Physician's signature Date

Physician's name (print) Phone

Please give this form to your patient, or send by fax to:
(Provide YMCA contact and fax number)

Sample Participant Screening Form (TIME program)

Note: This sample has been used with permission from a Stroke Recovery in Motion study participant. Names of people, organizations, and places have been removed.

Name: _____

Date: _____

1. Lower Functional Limit:

Yes	No	
☐	☐	a) Are you currently experiencing balance and mobility limitations resulting from a stroke?
☐	☐	b) Are you able to walk 10 metres unassisted, with or without a walking aid?
☐	☐	c) Are you able to balance while exercising in standing with only the support of the back of a chair?

2. Upper Functional Limit:

Yes	No	
☐	☐	a) Are you able to walk more than 20-30 minutes without a seated rest?
☐	☐	b) Are you able to manage environmental barriers (curbs, ramps, and stairs) with relative ease?

3. Additional Screening Criteria:

Yes	No	
☐	☐	a) Are you able to access bathroom facilities and perform own personal care independently?
☐	☐	b) Are you able to understand and follow directions?
☐	☐	c) Will you be attending with a caregiver or family member who can assist you, if you are unable to perform the above?

If participants answer yes to all question 1, no to all question 2, and yes for a & b or c of question 3, then they are appropriate to partake in the TIME program once the referral form has been completed by an appropriate health professional.

Participant Appropriate for TME Program: **YES** or **NO**

Additional Comments:

_____

_____

_____

_____

Score on ASBCS*: Pre: _____ Post: _____

Referral Received: **YES** or **NO**

*Activities-Specific Balance Confidence Scale