GUIDANCE FOR SERVICE PROVIDERS, PROFESSIONALS AND PARTNERSHIP AGENCIES

Person-centred activities

For people with respiratory and cardiac conditions and stroke

British Heart Foundation SCOTLAND

British Lung Foundation Scotland

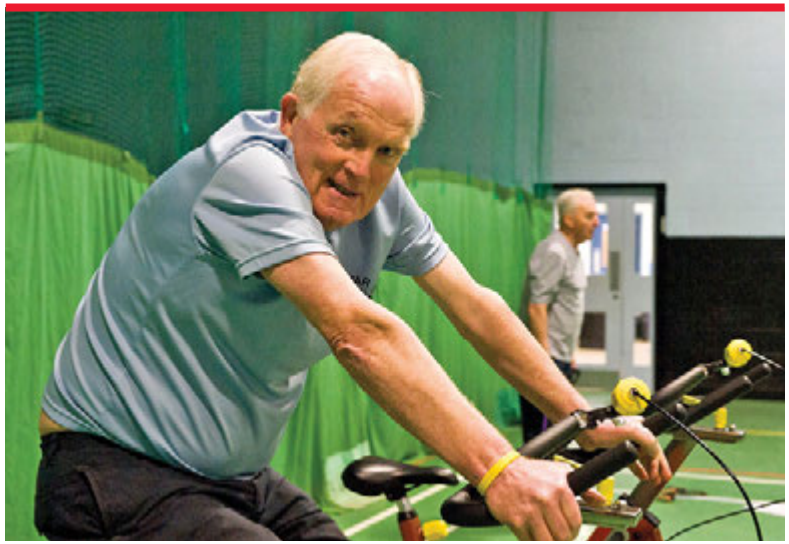
Chest Heart & Stroke Scotland

1. Introduction

In this section:

- What is the purpose of this resource?
- Who is this resource for?
- Where does the information come from?
- What is included in the resource?

Introduction



LONG-TERM CONDITIONS, OFTEN REFERRED TO AS CHRONIC DISEASES, LAST A YEAR OR LONGER, LIMIT WHAT A PERSON CAN DO, AND MAY REQUIRE ONGOING MEDICAL CARE.

A GLOSSARY OF KEY TERMS IS PROVIDED IN SECTION 12.

What is the purpose of this resource?

The purpose of this resource is to support the improvement of physical activity/exercise maintenance service provision, and its delivery and pathways, to maximise outcomes for patients with long term health conditions (LTCs) in Scotland.

LTCs, including stroke, cardiac and respiratory conditions, represent a significant burden to individuals, the healthcare system, and society and the economy more generally. In the UK as a whole, it is estimated that 60 per cent of deaths and 80 per cent of GP consultations are attributable to LTCs. People with LTCs are twice as likely to be admitted to hospital, and stay disproportionately longer. LTCs are more common in older people, and among those from socially and economically disadvantaged backgrounds. In Scotland, nearly half of all adults are believed to have an LTC; in the over-70s, this rises to more than three-quarters.[1]

There is strong evidence that physical activity positively contributes to the prevention and management of a range of LTCs, including respiratory, stroke and cardiovascular conditions.[2] However, taking up and maintaining physical activity and exercise can be challenging for people with LTCs. Exercise programmes are not always that easy to find, and identifying a class or session that provides the right level of exercise for an individual's circumstances is an additional difficulty. People also need to be sufficiently motivated and knowledgeable to self-manage their physical activity in the longer term.

Introduction

Who is this resource for?

This resource is intended for people (practitioners, managers, or others) who are designing or already running exercise maintenance or physical activity interventions. It provides practical, evidence-based information to help with the development and refinement of post-clinical LTC pathways, and more specifically post-rehabilitation physical activity and exercise maintenance services.

Where does the information come from?

The resource draws on the extensive work of the PARCS project (Person-centred Activities for people with Respiratory and Cardiac conditions and Stroke), a collaboration of healthcare professionals, experts and leading charities. The PARCS project has carried out a range of investigations and activities to identify models of good practice in the fields of physical activity and exercise maintenance, along with the necessary practicalities of delivery such as data monitoring, training and business case development.

THE PARCS PROJECT HAS INVOLVED SEVERAL STREAMS OF WORK, INCLUDING:

- a scoping exercise of 14 Scottish Health Boards to identify and characterise current service provision
- meetings with, and questionnaires completed by a range of stakeholders including MCNs, HCPs, GPs and service providers
- meetings with, and questionnaires completed by people with LTCs in Scotland to hear their experiences of physical activity and exercise maintenance
- a review of delivery models in other parts of the UK to identify good practice
- an assessment of the economic impact (costs and benefits) of exercise maintenance.

The PARCS project has been advised throughout by advisory groups with representation from Managed Clinical Networks, clinical leads, leisure services, NHS Health Scotland, Chest Heart & Stroke Scotland, British Heart Foundation, British Lung Foundation, the Scottish Stroke Allied Health Professions Forum, academics and service users.

Introduction

What is included in the resource?

- A proposed **national framework and ideal participant pathway** for ongoing physical activity and exercise maintenance after formal clinical rehabilitation. It is designed to support people with LTCs, with a particular focus on those with cardiac or respiratory conditions or who have had a stroke.
- **Models of current good practice**, drawing on evidence from across Scotland.
- An explanation of how physical activity/exercise maintenance programmes can **ensure a quality service**.
- Examples of **creative service design** from across Scotland.
- A guide to **building a business case** for a new physical activity/exercise maintenance programme, including details on the **costs and benefits of delivery**.
- A discussion about the need for **specialist instructor training**.
- Guidance about **referral data** to ensure that an individual's relevant details are appropriately shared with, and monitored by, physical activity/exercise maintenance programmes.
- Suggestions for **screening processes** to ensure that decisions are based on what is most appropriate to an individual's needs and abilities.
- Ideas on approaches to **service promotion**.
- A **glossary of terms**.
- A list of sources for those who require **further information**.

2. Proposed national framework

& ideal participant pathway

In this section:

- Introduction
- Proposed national framework
- Proposed participant perception of an ideal model

Proposed national framework & ideal participant pathway

The PARCS project has proposed an 'ideal' participant pathway. This is within the context of a national framework for ongoing physical activity and exercise maintenance after formal clinical rehabilitation, and is also based on current best practice. It is designed to support people with LTCs, with a particular focus on those with cardiac or respiratory conditions or who have had a stroke.

The framework and pathway are set out on **page 9**. While the framework provides the detail required by service deliverers, in contrast the participant pathway is designed to be as simple and as straightforward as possible. This is likely to improve the chances of people taking up and engaging with physical activity/exercise maintenance, and ultimately increase those who can move on to self-management.

The proposed national framework shows the activities within, and transition between healthcare and community-based physical activity/exercise maintenance, specifically:

- the health interface (red) which includes primary, secondary and community services, and their private provider equivalents. These services should be addressing lifestyle factors either as strategies for primary prevention (eg, identification of 'at risk' individuals) or secondary prevention (i.e. those with an established condition). Participants may progress through diagnosis (if not already diagnosed) and/or treatment
- a specialist phase (amber) which represents where physical activity is likely to require specialist instruction, advice, and supervision. This may be condition-specific or general physical activity. It will be for individuals who need initial support with behaviour change and where risk/needs assessment is required, see **section 8**
- an exit to maintenance phase (green) which encompasses those activities that allow an individual to progress to self-managing their physical activity. This may include mainstream leisure services (eg, swimming), community activities (eg, walking groups), and independent activity (eg, gardening)
- peer support (purple) would ideally be facilitated across all tiers from the health interface to exit/maintenance. Peer support can be particularly helpful in encouraging patients to take up physical activity/exercise maintenance especially if contact is made during clinical rehabilitation

> "I got an overwhelming amount of information at the time but nothing much after that"

Proposed national framework & ideal participant pathway

- signposting and referral (blue) to groups, classes and activities by healthcare professionals will be dictated by professional standards and procedures. A single point of referral from the healthcare interface into specialist support is regarded as important to ensure ease of access for participants. Self-referral into the pathway would be possible through an appropriate screening process involving liaison with an individual's GP if required, and an assessment of their needs and abilities, see **section 9** and **section 10**.

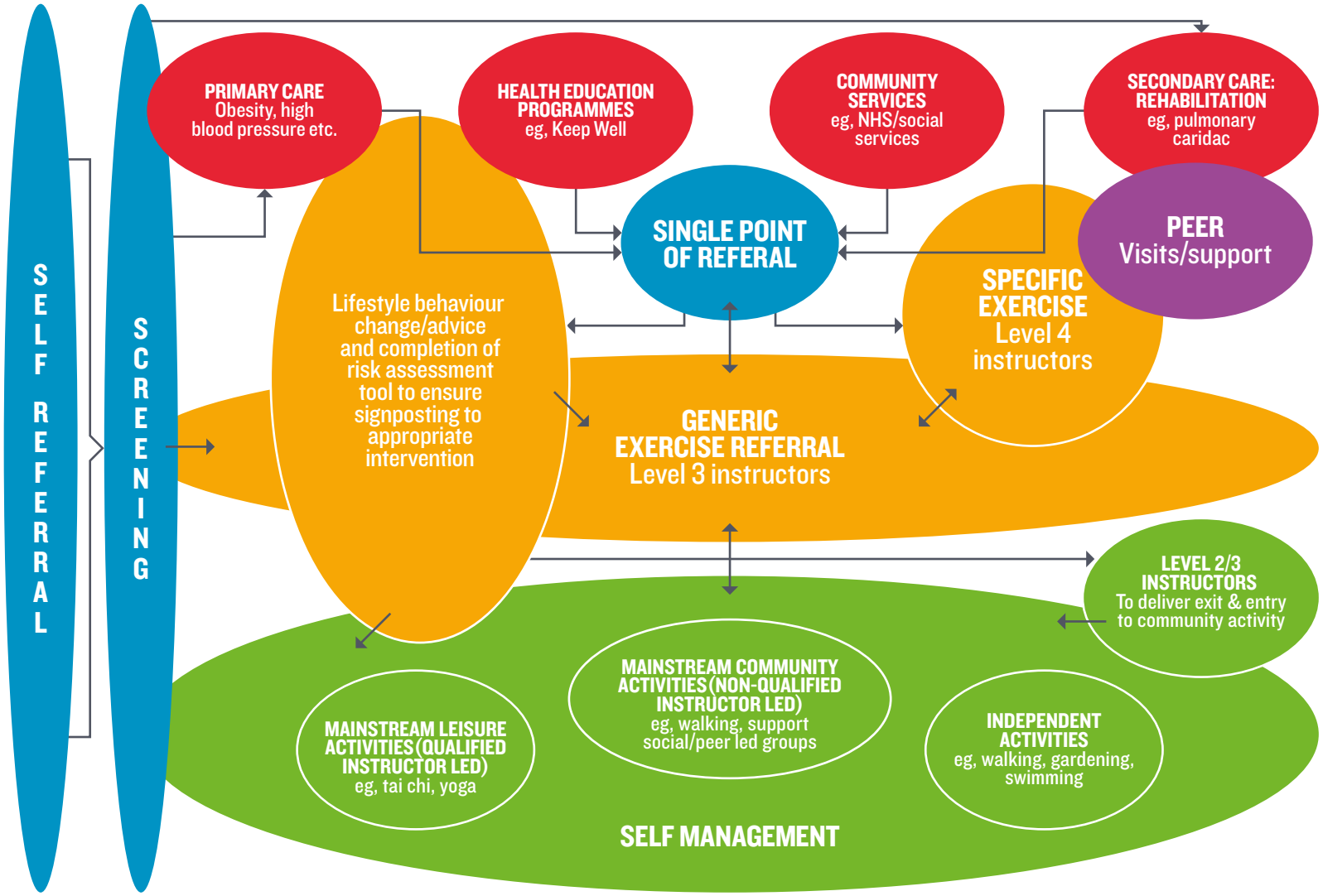
The **ideal participant pathway** represents the participant's view of the exercise referral and maintenance journey, and is characterised by its simplicity. The health interface includes any diagnosis or treatment required by an individual (this will vary from person to person). Participants do not 'see' the specialist phase: this may occur within a clinical rehabilitation environment, or through specialist instructors within leisure services and as a result will not be regarded as an additional tier in the pathway by participants. Participants then move on to self-management and maintaining their own wellbeing, of which physical activity is an important component.

The pathway is intended to be a flexible one, with an ability to respond to an individual's changing needs, for example a change in their condition (positive or negative) as represented in white on the pathway diagram.

Proposed national framework & ideal participant pathway

Proposed national framework for the transition from health to community based activity in the prevention and management of chronic conditions

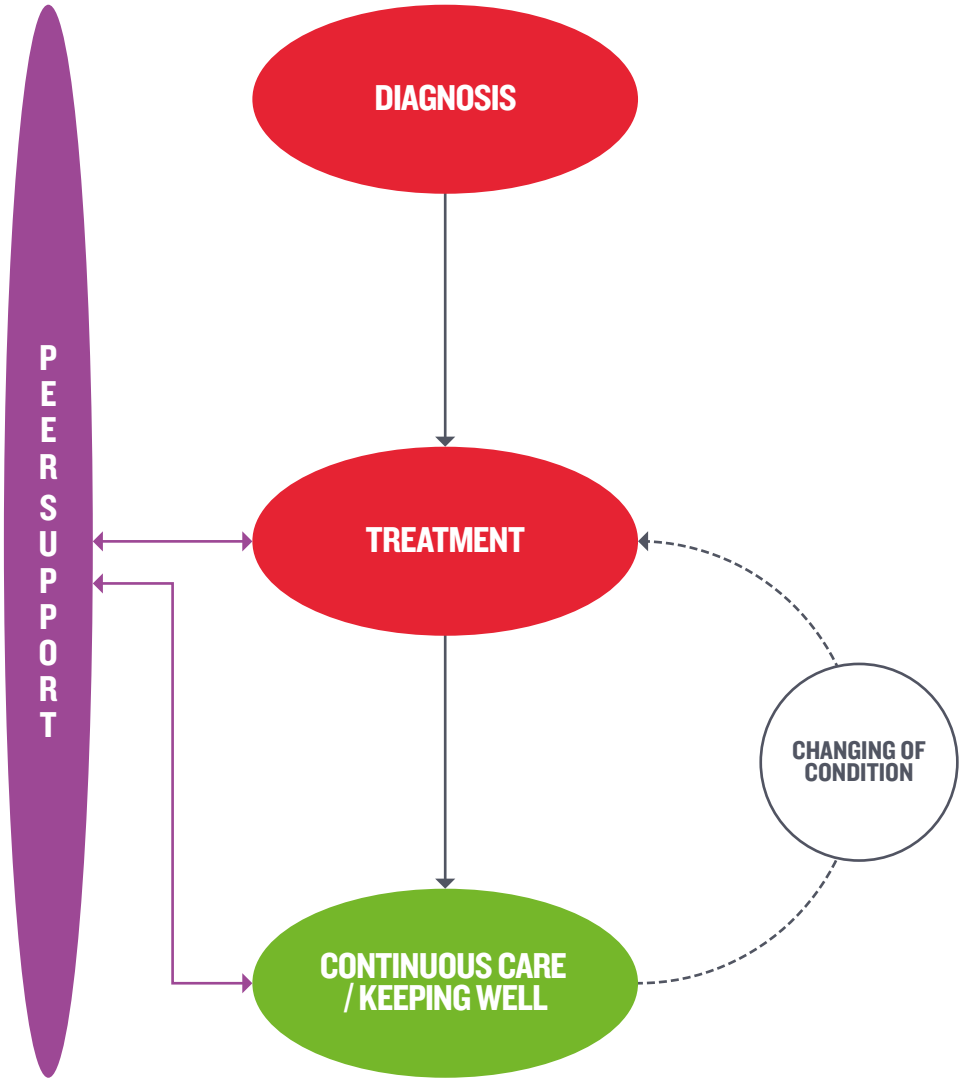
Adapted with pemission by Sarah Florida-James & Richard Forsyth – from Wales NERS – Jeanie Wyatt-Williams – adapted from Brigend's Model by Melanie Andrews – ABMU Health Board



KEY | HEALTH INTERFACE e.g. NHS or private | SPECIALIST INSTRUCTOR SUPERVISED EXERCISE / ACTIVITY | EXIT TO MAINTENANCE

Proposed national framework & ideal participant pathway

Participant perception of an ideal model of service delivery from entry to community based activity in the prevention and management of chronic illnesses



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3. Models of good practice

In this section:

- Introduction
- Why do the models differ?
- Maintenance class level guide
- Examples of participant routes
  - Rural model
  - Semi-rural model
  - Urban model

Models of good practice

The current provision of physical activity/exercise maintenance varies considerably across Scotland, but the PARCS project has identified many examples of what successful physical activity/exercise maintenance pathways currently look like. In general, where the pathway from diagnosis and/or treatment, through rehabilitation and on to exercise maintenance is coherent and seamless, there is a much greater chance that people will remain engaged and progress to physical activity as part of self-management. Similarly, if the pathway is person- rather than service-focused, engagement is likely to be higher.

On **pages 14–16** example models are provided for physical activity/exercise maintenance pathways in rural, semi-rural and urban locations. Rather than providing a large number of examples of specific individual services, these models instead represent a summary of what currently works well within different geographical regions. They are not 'ideal' models, but they do provide a useful indication of the current pattern of existing activity across Scotland.

Why do the models differ depending on location?

The PARCS project suggests that the contexts are different, especially geography. In urban models, the patient journey is more likely to begin in a clinical setting. Peer support, while important in all pathways, tends to be relied upon more in rural locations, where the reach of, and access to, formal health services and single points of referral may be more limited.

Models of good practice

While the detail may differ from service to service, the basic elements of a good service and pathway remain broadly the same in all geographic locations:

- where possible, a single point of referral or service co-ordinator at Community Health Partnership (CHP) or local authority region
- a collaborative approach to delivery, funding and governance, which recognises the importance of communication and cooperation across the range of service providers involved in the pathway, and helps to ensure a person-centred approach to delivery
- entry to the rehabilitation pathway from different entry points:
  - secondary care, such as following any necessary, condition-specific clinical rehabilitation
  - primary care, for example as a result of a GP review of an existing LTC
  - peer support, for example through a local stroke group
  - self-referral with appropriate medical screening
- if referral does not begin in a clinical setting, health services may nevertheless play a screening role, helping to determine whether someone is medically fit for exercise, and whether the exercise regime is appropriate to their needs and abilities
- general LTC maintenance classes run by specialist instructors who are trained across condition areas and deliver tailored exercise at different functional levels (see text box)
- links to other menu-based maintenance and self-management options, like walking or peer support groups, with a view to providing people with ongoing support and progression to supported self-management.

MAINTENANCE CLASS LEVELS

Instructor-led exercise maintenance classes are designed to match participants' functional capacity, rather than their condition, so people with different conditions will exercise together.

The different levels of exercise can be broadly described as follows:

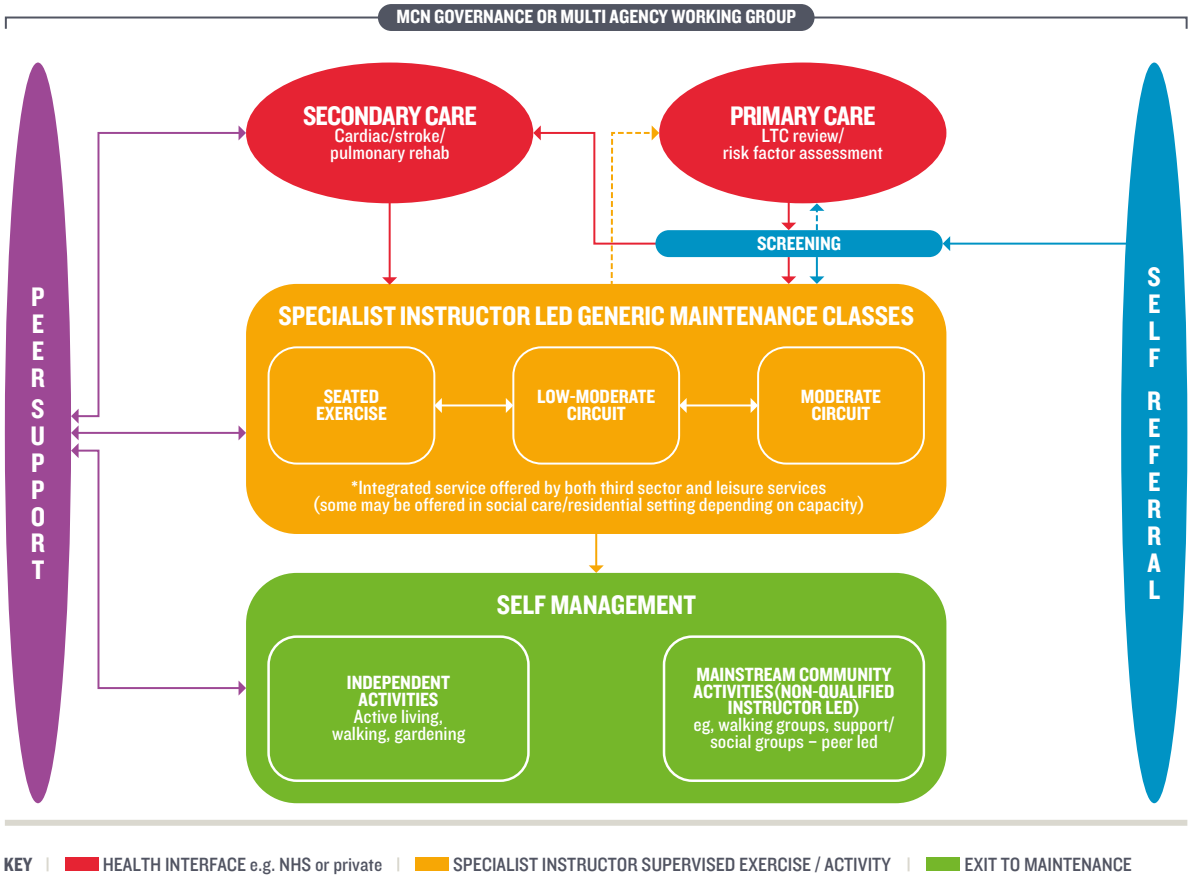
- **Seated exercise:** for participants who are able to walk slowly but who may have problems maintaining their balance when standing and use mobility aids, and who may have breathing difficulties.
- **Low level exercise:** for participants who have a degree of mobility (with or without mobility aids), but who may struggle with some movements and activities, and who may have breathing difficulties.
- **Low-to-moderate level exercise:** for participants with independent mobility but who may still have some difficulty carrying out daily activities.
- **Moderate level exercise:** for participants who are mobile, who do not require mobility aids, and who have little or no difficulty carrying out daily activities.

Models of good practice
Examples of participant routes through the three pathways

RURAL MODEL:

Person A is 59 years old. She had a stroke four years ago and now wants to become 'more active'. A friend at a local support group tells her about a local exercise class and she refers herself. After being medically screened, Person A starts to attend the class with her carer and begins to increase her levels of activity, and her confidence. She finds it a great way to meet new people and stay active with others. There are other exercise opportunities in the local community but some of these, like the walking group, are not suitable because of her complex needs. She continues to attend her support group for advice and peer support.

RURAL MODEL FOR THE TRANSITION FROM HEALTH TO COMMUNITY BASED ACTIVITY IN THE PREVENTION AND MANAGEMENT OF CHRONIC CONDITIONS



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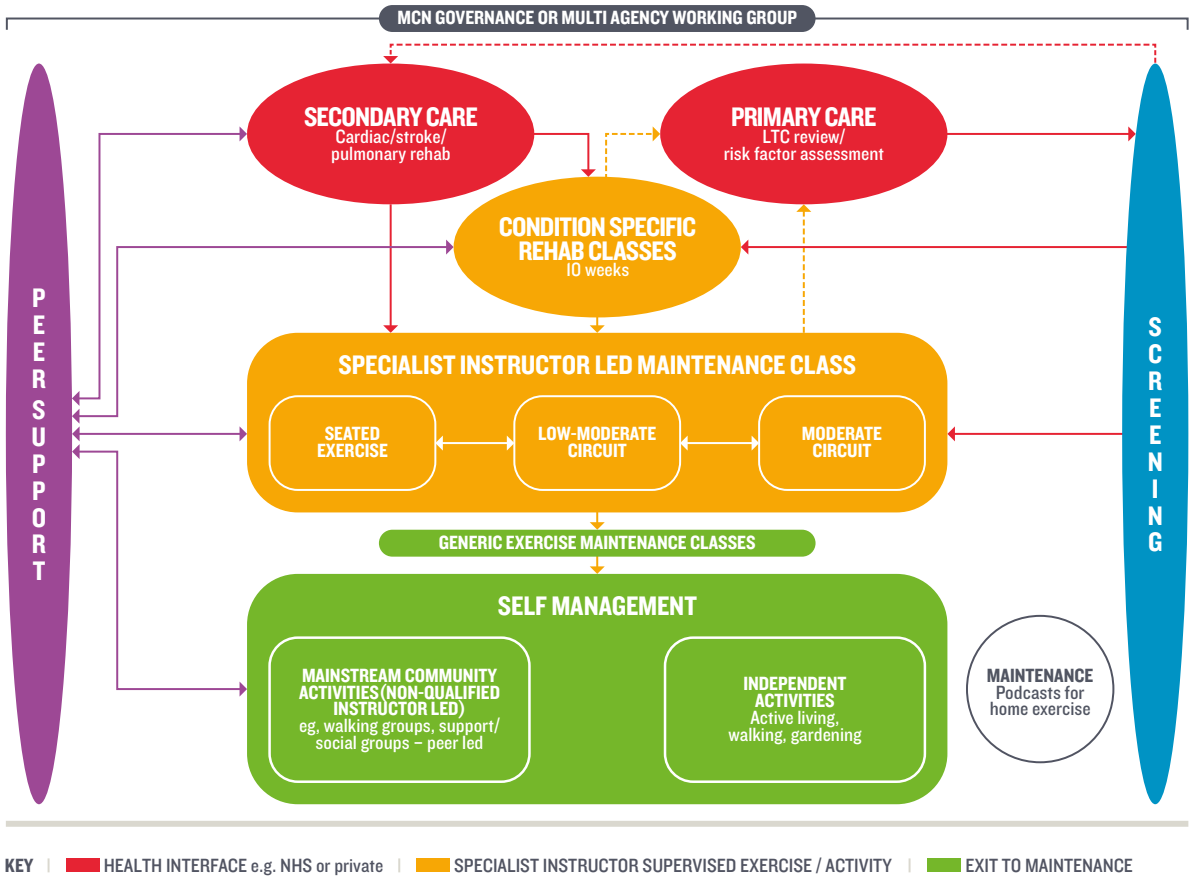
Models of good practice
Examples of participant routes through the three pathways

SEMI-RURAL MODEL:

Person B, a 62 year-old man, had a heart attack and has been referred by his hospital to cardiac rehabilitation. During an education session, which is held as part of the cardiac rehab programme, the local cardiac support group explains how they can support patients following their discharge from cardiac rehab. Person B is keen to be involved in community-based activities in his local area and becomes a member of his local group. On discharge, the cardiac rehab physiotherapist refers him to a local exercise maintenance class. He also attends the local cardiac support group and goes walking with some of its members on a weekly basis.

SEMI-RURAL MODEL FOR THE TRANSITION FROM HEALTH TO COMMUNITY BASED ACTIVITY IN THE PREVENTION AND MANAGEMENT OF CHRONIC CONDITIONS

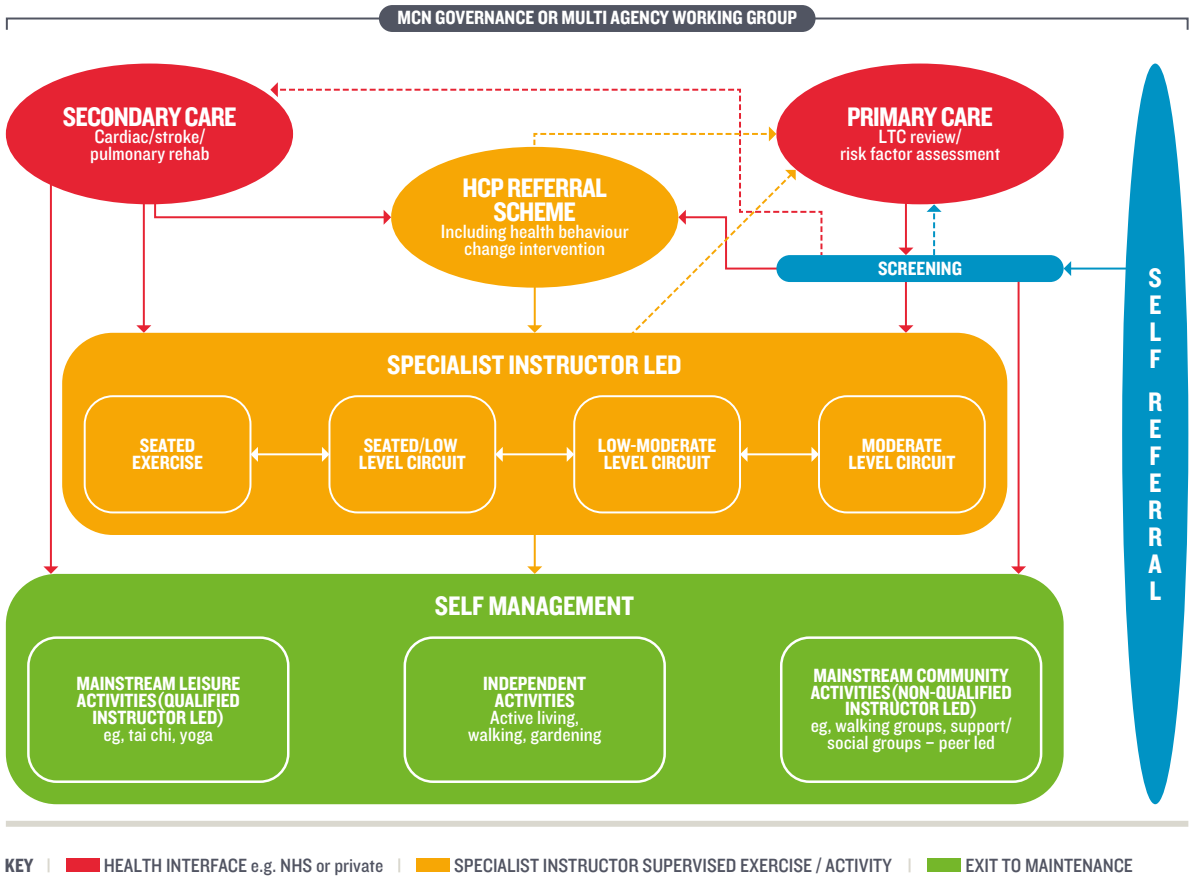


Models of good practice
Examples of participant routes through the three pathways

URBAN MODEL:

Person C is a 51 year-old man who was diagnosed with COPD three years ago. Following an exacerbation of his condition, he visits his specialist nurse. She gives him some advice about managing his condition and refers him to pulmonary rehabilitation. On completing the rehab programme at his local hospital, he is referred to an exercise maintenance class at his local leisure centre. Later on, he is signposted to a generic, function-based class led by a specialist instructor

URBAN MODEL FOR THE TRANSITION FROM HEALTH TO COMMUNITY BASED ACTIVITY IN THE PREVENTION AND MANAGEMENT OF CHRONIC CONDITIONS



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4. Ensuring a quality service

Ensuring a quality service

Service quality will be critical if the service is to be trusted by its users and other partners.

NHS Scotland's Healthcare Quality Strategy identifies five internationally-recognised dimensions of quality which can help to ensure quality of delivery.[3]

SAFE

- Content is designed in collaboration with healthcare professionals to maximise the appropriateness of sessions for participants.
- Appropriate training for instructors to ensure participant safety; good training also helps instructors to support participants with confidence.
- A standardised referral process to screen potential participants and decide whether an individual is safe for the proposed level of exercise.
- A good dialogue is maintained between the service/instructor and healthcare professionals (especially clinical rehabilitation staff) in order to maintain a level of condition knowledge and keep open a means of communication for any issues that arise.

PERSON-CENTRED

- Prospective participants are involved in development and design to help ensure that the service meets their needs.

EQUITABLE

- The service is tailored to the needs of local users, and is open to all who pass the health screening and have the relevant conditions.
- For both new and existing services an Equality Impact Assessment (EQIA) should be carried out to help ensure access is equitable for all potential participants.[4]

TIMELY

- Referral processes and pathways are swift and efficient.

EFFECTIVE

- The service is based on evidence of what works (eg, service evaluations).
- Standardised referral processes.
- The right data is collected about participants for efficient referral and to help monitor service delivery/effectiveness.
- Data is also collected to allow the evaluation of a service's performance and effectiveness.
- A clear pathway from clinical rehabilitation, through exercise maintenance, and with clearly-defined strategies that lead participants on to self-management in the community.

5. Creative service design

In this section:

- Introduction
- Examples of creative service design

Creative service design

There are a number of successful rehabilitation and exercise services that already exist across Scotland.

The examples on the next two pages demonstrate some of the ways in which services have been creatively designed to successfully meet the needs of their users. Not all of them are directly relevant to exercise maintenance, but they hopefully provide inspiration for those currently developing new delivery models, and will encourage service developers to think creatively about how to encourage people to raise their levels of physical activity/exercise.

USING TECHNOLOGY TO EXTEND THE REACH OF EXERCISE SERVICES THE E-PULMONARY REHAB PROJECT

The need

People with COPD can struggle to access exercise services: just travelling to a session can be exhausting.

The service

This project provides COPD patients with a tablet computer pre-loaded with exercises for them to complete at home. The results are relayed back to a physiotherapist who monitors their progress.

Evidence of success

The project reports improved self-management, and a reduction in unnecessary hospital admissions.

Further details

- **Using technology to extend the reach of exercise services**
  Website
- **Telehealth Innovation – Pulmonary Rehab**
  Video

IMPROVING WELLBEING THROUGH ENGAGEMENT WITH THE ARTS TAYSIDE HEALTHCARE ARTS TRUST (THAT)

The need

To offer menu-based options to improve the health and wellbeing of people with LTCs through creative engagement with the arts.

The service

THAT provides a range of participatory arts programmes, working with a wide variety of groups with LTCs (but especially stroke) in a number of different settings (eg, in Stroke Rehabilitation Units, or with/through voluntary and community groups).

Evidence of success

Participants rate the programmes highly, and report improved mood, confidence and socialisation.

Further details

- **Improving wellbeing through engagement with the arts**
  Website

A SERVICE THAT RESPONDS TO USERS' NEEDS SILVER DEAL ACTIVE (NOW REVITALISE)

The need

To improve access to physical activity among older people in social housing and sheltered accommodation.

The service

Older people are encouraged to increase their physical exercise through free, regular coach-led activity. In addition to simple exercise sessions, the service also offers social events and opportunities to try out other activities such as dance and aqua aerobics. The service deliberately and actively tailors its activities to meet the specific needs and demands of its users.

Evidence of success

Around three-quarters of users have reported being more physically active as a result and/or had improved mobility.

Further details

- **A service that responds to users' needs**
  Website/report
- **Revitalise**
  Website

Creative service design

LINKING UP WITH OTHER LOCAL SERVICES MYACTION

The need

Promotion of long-term self-management for patients at risk of cardiovascular disease, as well as their carers and families.

The service

MyAction provides tailored physical activity, dietetic advice and specialist nursing and medical support to patients at risk of cardiovascular disease, their carers and families. Service users direct and design the services they need in partnership with staff, and the programme ties in with a range of local social and well-being support activities run by third sector and community organisations.

Evidence of success

The service reports a 35 per cent reduction in smoking; more than half achieve their physical activity goals; and an average 4kg weight loss among overweight and obese patients.

Further details

- **Evidence base**
  Journal
- **Implementation in Scotland**
  PDF document

EMPOWERING PATIENTS TO SELF-MANAGE MOVING ON TOGETHER

The need

Addressing the psychological issues that may impede a person's ability to self-manage.

The service

This group programme focuses on providing patients with the psychological mechanisms to improve their self-management, such as goal setting, action planning and symptom management.

Evidence of success

Users reported that they took more of an active role in the management of their conditions; got more from their medical appointments; and improved their self-confidence. Evaluation evidence demonstrates that the service generates cost savings by reducing the burden on mainstream health services.

Further details

- **Empowering patients to self-manage**
  Website

SHAPING CARE TO IMPROVE SELF-MANAGEMENT – COSMIC TRAINING

The need

The importance of ensuring that patients with LTCs can help to shape their own care and self-management.

The service

COSMIC (Champions of Self-Management in Care) workshops are organised by Voices Scotland (Chest, Heart and Stroke Scotland) and provide two days of training for those living with, or caring for someone with LTCs. The workshops cover self-management principles, as well as how individuals can comment on, and influence, self-management and wider health and social care policy.

Evidence of success

An independent evaluation found that 90 per cent of participants went on to spend time on involvement activities, and 40 per cent became representatives on MCN committees or forums.

Further details

- **Chest Heart & Stroke Scotland – Cosmic Training**
  Website

6. Building a business case

In this section:

- Preparing the background
- Describing the service
- Finalising your business case
- Working in partnership
- Effective resourcing
- Options for service provision

Building a business case

Creating a business case is the best way to start planning a new physical activity/exercise maintenance service. It will ensure that the service is appropriate for its future users; is well-designed; and convinces relevant partners and commissioners that it is workable and a worthwhile investment of their time (and money).

The business case should seek to answer the following questions:

- Why is the service needed in this local area?
- What is the proposed service model?
- How will service users benefit?
- What are the costs of implementing the service?
- What savings might the service generate, and for whom?

PREPARING THE BACKGROUND

1. CHECK THE PROCESS BEFORE YOU BEGIN

Seek the agreement of any relevant people, like line managers, and be certain of any specific submission processes and deadlines.

2. CONSIDER YOUR AUDIENCE

Decide who else needs to be involved or consulted in the design process, and identify who has the most to gain or lose from your proposal. Find out who will review the business case when it's complete.

3. CONSIDER POSSIBLE PARTNERS

This sort of service lends itself to partnership working across health, leisure services, local authority and the voluntary and community sector. Include any key partners in the design process. Being sensitive to both shared and differing operating priorities.

4. PLAN THE FORMAT OF YOUR BUSINESS CASE

This may need to follow a standard format, dependent on the decision-making process. If not, think about the basics you need to cover, and seek advice if you need it.

5. DESCRIBE WHY THE SERVICE IS NEEDED

Identify any gaps that the service is trying to address, and how the new service will fit and/or complement existing local provision. Use the frameworks in this resource to help.

6. SET THE SERVICE IN THE NATIONAL AND LOCAL CONTEXT:

Link the bid to nationally agreed priorities, including national service frameworks and Scottish Intercollegiate Guidelines Network (SIGN) guidelines, and explain how they link to local priorities. Take into account the priorities of Managed Clinical Networks and other local planning networks and teams (such as health, social care and leisure provision).

> “It’s not just the physical benefits, I feel better mentally as well, more upbeat, more positive”

DESCRIBING THE SERVICE

7. APPRAISE THE OPTIONS

Describe the different ways to address the issue, drawing on current best evidence. Be realistic about what is achievable in the proposed timeframe and budget. For each option, describe it in detail, including: internal and external factors; a breakdown of pros and cons; risks and how they would be managed; costs and potential savings; funding requirements; timescale. Explain which is the preferred option and the reasons why. Explain the consequences of doing nothing.

8. EXPLAIN HOW PARTICIPANTS WILL BENEFIT

Use historical data about prevalence, admissions, readmissions, and what currently happens to service users. Also provide data about the projected uptake of the service, and the likely health and social benefits to participants. Ensure that the data are consistent with your proposed service development, so that they support your case.

9. WORK OUT THE FINANCES

You may want help and advice for this. Most financial information falls into two categories: revenue and capital. Exercise maintenance services predominantly require revenue funding, unless equipment is needed. Don’t forget to include incremental cost increases for future years’ budgets. HR, Payroll and Finance should be able to advise. Remember to highlight potential cost savings, either immediate or future (invest to save principle). The next sections should help with working out the finances.

10. CONSIDER THE IMPACT ON OTHER SERVICES

Explain how your service might affect other services in the same area. Think about whether they might fit together or integrate.

11. ESTIMATE TIMESCALES

Set realistic timescales for implementation of the service. Actions like recruiting and training staff, and locating appropriate venues tend to take longer than you think. Remember that implementation might be affected by the financial year.

Building a business case

FINALISING THE BUSINESS CASE

12. CHECK YOUR DRAFTING

Check for spelling, grammar and readability. Avoid using unnecessary jargon – it can obscure your message. Be concise and to the point. Use short, crisp sentences and bullet points. Explain any abbreviations. If you are not using a template, break the text into numbered sections so your business case is easy to read. Include a contents page.

13. WRITE THE EXECUTIVE SUMMARY

Briefly summarise your business case. Some busy readers may only read the executive summary, so make your case succinctly.

14. PUT DETAIL IN APPENDICES

This is the place for any other information that supports the bid, but doesn't fit elsewhere (or provides too much detail for the majority of your audience).

15. DO FINAL CHECKS

Verify final figures with your finance team and obtain the necessary sign-offs.

Building a business case

WORKING IN PARTNERSHIP

Delivering physical activity/exercise maintenance successfully in the community requires a partnership approach; one that will involve working with, or alongside, a range of different individuals and organisations. The following list provides some examples, but is not exhaustive:

In the NHS:

- Managed Clinical Network groups/ sub-groups
- Clinical Leads, eg, for heart disease.
- Health Improvement Leads, eg, for long term conditions.
- Primary care, eg, GPs or practice nurses.

Beyond the NHS:

- Local authority and leisure services, eg, Active Health Coordinators.
- The voluntary sector, eg, Chest Heart & Stroke Scotland, patient support groups and patient representatives.
- Partnership working depends on maintaining a high level of communication and information sharing. **Section 9** provides some ideas on the type of data that may need to be collected and shared between healthcare professionals and specialist training instructors.

EFFECTIVE RESOURCING

Starting a service takes money, but other resources will also be needed. Partnerships and relationships with other organisations will be helpful here.

- **Funding:** consider trying to secure joint funding with other bodies, such as local authorities, the NHS, and voluntary organisations
- **Training for instructors**
- **Venue:** suitable venues will need to be found identifying and securing suitable venues
- **Deciding on the cost of classes/sessions**
- **Training for volunteers:** third sector and community organisations may be able to help

Building a business case
Options for service provision

Deciding on the right physical activity/exercise maintenance service will involve weighing up a number of delivery options, such as where to hold the classes, how large they should be, and who should run them.

The tables on the next two pages provide the pros and cons for some of these options. The final decision is likely to depend on local factors: availability (eg, of trained instructors or suitable venues); cost; and the specific needs of local users.

VENUE

Leisure centres

Offer purpose-built facilities that provide access to equipment and exercise spaces that can be used for a range of different physical activities, with or without specialist instructors. These venues may help to expose participants to the variety of physical activity opportunities available to them, such as exercise classes, which will allow them to continue their progress independently. However, leisure centres may be off-putting or intimidating to people who have never exercised before.

Community venues (eg, community centres, church halls)

Are friendly and not intimidating for those who are new to exercise. They may also be relatively easy for most people to get to. However, venue facilities may be quite basic, and instructors may have to bring all the necessary exercise equipment with them.

Hospital premises (eg, physiotherapy room, cardiac rehabilitation suite)

Provide purpose-built facilities and a range of equipment in an environment that may be reassuring to some people. In particular those who are new to exercise, have more recently had acute medical problems, or who are fearful of the risks they may be facing by engaging in physical activity. This may not be a long term solution for participants – a hospital may remind them of their condition and suggest that ongoing support is 'medical' in nature.

Transport, whatever the venue, will need to be taken into consideration. Can all participants get to the venue, including those who require public transport? This may be particularly crucial for services in rural areas, or where venues are located out of town centres.

> "It would have to be nearby and I don't drive. Even then the weather can put me off walking"

Building a business case
Options for service provision

TYPE OF PROVISION

One-to-one provision

Such as personal training, provides support that is tailored to the particular needs of the individual. It may therefore be more suitable for those with complex needs, or as a step on the way to group sessions for those not quite ready. It is easier to schedule one-to-one sessions around an individual's other commitments. However, it's expensive to deliver, compared to group sessions **(see section 7)**, and tends to be heavily gym based, which may not suit everyone. One-to-one support also lacks the social aspect of group sessions which many people value and find helpful in motivating them to continue with their exercise.

Group sessions

Are more cost-efficient, and can provide support to a much larger group of people than one-to-one provision. They can bring additional social benefits to individuals, as well as offering a variety of different exercises and activities. A range of sessions is likely to be required in order to meet people's differing needs, for example in the types of exercise that are appropriate for individuals, and timings to suit people's availability. Such a range is only likely to be sustainable if there is enough demand for the service.

CONDITION

Single condition services (eg, only cardiac patients)

Allow specific focus to be placed on the needs and abilities of those people with a particular condition. Participants in group sessions are more likely to have shared experiences of living with their conditions, and it might particularly appeal to those who have only recently been diagnosed or who are still building their confidence. Whether this is an option may depend on demand – whether there are sufficient numbers of people in the service's locality to make provision cost-efficient – especially if a range of different activities and time-slots are being offered.

Multi-condition

Services are more likely to generate sustainable numbers of participants and they can usually provide more variety of sessions and exercises, including opportunities for progression. However, this may leave less scope to focus on condition-specific issues. Linking with condition specific support groups may help to address this. It will also require training for instructors across a variety of conditions and a greater breadth of skills, knowledge and expertise to appropriately tailor exercise interventions, eg, advising on (and monitoring) different exercise options and intensity levels for participants with a range of different conditions.

7. Cost and benefit calculations

In this section:

- Costs of delivery
- Employ trainers or use freelancers?
- Cost savings from exercise maintenance

Cost and benefit calculations
Costs of delivery

The PARCS project has identified the likely costs of instructors and venues for exercise maintenance classes in Scotland as of March 2014. These are average costs based on Scottish data, and are provided to help with cost estimates when building a financial or business case for a new service. When building a business case, it's important to check current prices and staffing costs in the local delivery area.

It should be noted that for the sake of simplicity, these costs assume that a trainer is employed full time and will be spending all of their time delivering training sessions (eg, five group sessions a day), which may not be realistic in practice. But it does provide a starting point for considering the costs of delivering the service.

Annual salary for a physical activity referral trainer. The advertised salary for a full-time post.	**£23,000**
Salary plus 'on costs'. This adds 30% additional costs to the basic salary to take into account those additional costs that will need to be covered by the employer (eg, National Insurance, etc.). This represents the full cost of employing the trainer to the employer.	**£29,900**
Trainer's hourly rate. What the trainer 'costs' the employer for every hour they work . It is based on a 37 hour work week and 6 weeks' annual leave. *Calculation: Annual salary plus on costs ÷ 46 ÷ 37*	**£17.57**
Trainer cost for instructing a one-hour group class. This assumes that a trainer will need to be paid one and a half hours to deliver a one-hour class, in order to allow time to assess participants before class (eg, check no change in condition or contraindications to exercise); complete paperwork and data collection; and to set up before and tidy up after a session. *Calculation: Hourly rate x 1.5*	**£26.35**
Venue hire (per session). The cost of hiring a suitable venue for an exercise maintenance class, for example a leisure centre or community hall.	**£40.00**
Cost per group class. The combined cost of venue hire and the trainer's time (assuming no other delivery costs, and no subsidies for participants). This is the amount that will need to be covered by session fees for the service to break even. *Calculation: Trainer cost for one-hour group plus venue hire.*	**£66.35**

EMPLOY TRAINERS OR USE FREELANCERS?

Employing staff, such as appropriately qualified leisure centre instructors, will be more cost-effective if high numbers of classes and activities are planned (i.e. you can cover more of their salary through session income). It is less flexible (and more expensive) if the service has to accommodate low or fluctuating demand, although within some organisations it might be possible to give the trainer other roles when demand is low.

Freelance instructors offer a more flexible alternative, as they are paid per session. But they are more expensive than employed staff if they work full time or close to it.

Cost and benefit calculations
Costs of delivery

The PARCS project found that class sizes for exercise maintenance sessions varied from 5 to 25 people. Class sizes are determined by participants condition(s)/functional ability.[5]

The table shows how the cost of delivery per participant reduces as class size increases (the figures are based on the 'basic' model of a class costing £66.35 to deliver).

The research also showed that most participants pay a contribution towards their exercise class: on average, £2.50 per class per person. The net cost of delivery per person is also shown on in the table, demonstrating the remaining cost that would need to be covered from other sources, if participants each paid £2.50 per session.

Class size	Total delivery cost per participant	Net delivery cost per person (less £2.50 contribution)
5	£13.27	£10.77
10	£6.64	£4.14
15	£4.42	£1.92
20	£3.32	£0.82
25	£2.65	£0.15

HOW MANY PEOPLE MIGHT TAKE UP EXERCISE MAINTENANCE CLASSES?

The information from the PARCS project suggests that up to 12.45 per cent of people with a new diagnosis or event and who are eligible for exercise maintenance will want to take part. This rises to 40 per cent for people who have recently completed a programme of rehabilitation.

WHAT MIGHT INCREASE SERVICE COSTS?

There are many reasons why the 'basic' model provided in this resource may need to be supplemented with consideration of other costs, for example:

- Employing a dedicated coordinator to act as a single point of contact for assessing and directing people into the most appropriate class, although in some cases this may be part of a wider existing role, such as leisure services manager, in which case the additional cost may be limited.
- Services where an individual has a fitness assessment before being directed to the most appropriate class. This may be undertaken by the session trainer, in which case the cost implications will be less.

Cost and benefit calculations
Cost savings from exercise maintenance

Caring for people with LTCs places significant resource demands on the NHS (and the wider Scottish economy).[6] Physical activity/exercise maintenance delivers cost savings by improving the overall physical fitness of people with LTCs, and thereby increasing their capacity to self-manage and stay fit.

The evidence suggests that this leads to a reduction in the number of hospital readmissions among those adhering to physical activity/exercise maintenance (compared with non-participants) and thereby reduces the associated costs to the NHS.[7]

These cost savings can be set alongside the costs of delivering a physical activity/exercise maintenance scheme to provide a clearer indication of the 'net' cost of delivery to the healthcare system as a whole (i.e. delivery costs minus savings), and may help to make the case for a new service.

It is important to note that an exercise maintenance service may not be able to prove quantifiably that it saves the health service more than it costs to run, due to the limits of the evidence available. It might be expected that health cost savings would extend beyond the single hospital readmission metric, for example through a reduction in medical prescriptions; and there will be wider benefits – economic and social – such as allowing people with LTCs to return to work earlier than would otherwise be the case, and improving their general quality of life.

The data available for identifying cost savings from exercise maintenance in Scotland is limited, and the calculations require a number of assumptions to be made. Savings will vary from location to location and condition to condition. There is not enough data to provide cost savings for stroke, but there is for cardiac and pulmonary conditions.

Cost and benefit calculations
Cost savings from exercise maintenance

WHAT ARE THE SAVINGS FOR CARDIAC CONDITIONS?

Exercise maintenance leads to an approximately 5.75 per cent reduction in cardiac readmissions a year. This is based on the assumption that 12.45 per cent of eligible people adhere to the programme. Local area figures for cardiac readmissions will vary and are available from the Information Services Division (ISD) of NHS Scotland. This section shows the range of admission costs across Scotland, based on the Scottish Tariff. To calculate the potential annual cost savings in a given area, use the formula below, replacing the number of readmissions with those where the exercise maintenance service is operating. The example shows the number of cardiac readmissions for Scotland as a whole and just the midpoint cost for illustrative purposes, i.e. a national exercise management programme for cardiac patients might be expected to generate £361,000 a year in savings to the NHS as a result of reducing readmissions. The figure in red should remain the same for all calculations.

> **"I would've had more hospital admissions if I hadn't kept active"**

As well as these reductions in cardiac readmissions, physical activity/exercise maintenance ensures that the benefits of prior cardiac rehabilitation are sustained. There is evidence that many patients lose the positive outcomes of cardiac rehabilitation within 6 to 12 months of the programme finishing if they do not continue to exercise. The cost savings might therefore be larger than stated using the calculation, but these additional savings cannot be quantified due to lack of data.

Current cost range for a cardiac admission*

Condition group	Coronary Heart Disease
Lower end of range	£1,829.00
Upper end of range	£5,087.00
Midpoint	£3,458.00

*based on the Scottish Tariff produced by ISD annually

CURRENT NUMBER OF READMISSIONS
1,189

x READMISSION REDUCTION RATE
5.75%

x MIDPOINT COST
£3,458

= COST SAVINGS
£361,000

Cost and benefit calculations
Cost savings from exercise maintenance

WHAT ARE THE SAVINGS FOR PULMONARY CONDITIONS?

The calculation for people with pulmonary conditions is different because of the available data. Again, it is based on an assumption of 12.45 per cent of eligible people adhering to an exercise maintenance programme. The normal readmission rate provided below takes into account that people with a pulmonary condition who are admitted to hospital will, on average, be admitted more than once in a given year. Exercise maintenance is expected to lead to a 30–40 per cent reduction in admissions among patients with pulmonary conditions. Local area figures for people with pulmonary conditions will vary and are available from ISD. The table shows the range of admission costs across Scotland, based on the Scottish Tariff.

The example below shows the number of admissions for Scotland as a whole using just the lower 30 per cent reduction rate and the midpoint cost for illustrative purposes, i.e. based on these figures, a national exercise management programme for patients with pulmonary conditions might be expected to generate £1.64m a year in savings to the NHS as a result of reduced readmissions. The figures in red are those that should remain the same for all calculations.

Current cost range for a pulmonary admission*

Condition group	COPD
Lower end of range	£1,482.50
Upper end of range	£3,182.50
Midpoint	£2,332.50

* based on the Scottish Tariff produced by ISD annually

NUMBER WITH CONDITION
115,974

x EXERCISE MAINTENANCE TAKE-UP ADHERENCE
0.1245

x NORMAL ADMISSION RATIO
0.162

x REDUCTION RATE
0.3

x MIDPOINT COST
£2,332.50

= COST SAVING
£1.64M

THESE COST SAVINGS CALCULATIONS ARE OFTEN BASED ON A RANGE OF FIGURES, FOR EXAMPLE, READMISSION COSTS ARE PROVIDED WITH HIGH, LOW AND MID-POINT FIGURES.

For this reason cost savings also tend to be expressed as ranges - where figures are not precise, it's important to demonstrate the cost savings as a range too, and not just use the figures that represent the service's benefits in the best light.

8. Specialist instructor training

Specialist instructor training

The PARCS project found that the skills, expertise and availability of specialist instructors working with people with LTCs varied considerably across Scotland and between Health Boards. While some had instructors trained to support people with a range of LTCs, others were only able to provide some condition-specific instruction, or for a limited number of exercise levels.

Ideally, a national framework would be underpinned by a standardised approach to specialist instructor training where instructors would be trained to support all conditions. Some Health Boards currently ensure this sort of provision through a mixture of in house training from NHS staff and externally provided, condition-specific courses, but not all and there is no standardisation across Health Boards. If developed, a generic LTC course might be expected to cover the core principles of condition-specific courses, incorporating current best evidence and guidelines, best practice, and established Level 4 instructor qualifications pathways for clinical conditions.

In practice, there remain a number of key challenges that face specialist instructor training:

- **Cost-effective delivery:** training providers expect a minimum number of trainees to make any training course viable, and consideration needs to be given on the location of training to ensure its availability to all parts of the country. At present, training often occurs elsewhere in the UK, rather than Scotland.
- **Course content:** deciding which condition areas to cover in training courses, given potentially differing regional needs, and finite time and financial resources.
- **Trainee expectations:** training instructors work with a range of different exercise/activity providers, such as leisure services and the third sector. Training expectations and course affordability may vary.
- **Training standards:** having to work with different training standards dependent on the training provider (eg, academic institutions and professional organisations).
- **Training duration:** the length of time it takes for someone to complete training, get certification and begin to deliver classes.
- **Instructor recruitment and retention:** the need for standardisation of pay bandings for instructors, as well as additional training and career development – currently instructors often remain on the same pay banding with no prospects for career development. Without consideration of their career and pay, there is a risk that fully trained instructors might move on to other jobs and roles with their newly-acquired training.

9. Referral data

In this section:

- Introduction
- Data fields and key considerations

Referral data

However referrals are made within the framework, it's important that the right information is collected and shared appropriately between referrers and service delivers about participants. The PARCS project has found that multiple referral forms and data requirements can act as barriers that put off services from referring individuals to exercise maintenance.

Referrers should be fully aware of the absolute contraindications to physical activity[8] and medically screen the participant against this criteria to ensure it is 'safe' for the participant to undertake physical activity.

In addition, service deliverers must have a clear and concise participant inclusion criteria in place to help referrers to assess suitability prior to completing a referral to exercise maintenance. The inclusion criteria is not a repetition of the contraindications to physical activity/exercise maintenance; the two should be complementary, ensuring that referred participants are assessed both in terms of safety and suitability.

The tables on **pages 39–42** provide suggestions on the data that should form the basis of referrals and communication between healthcare professionals and specialist training instructors.

They cover eight core areas:

- personal details of the patient
- details of the referrer or referring service
- risk factors, such as smoking or alcohol intake
- the patient's general medical history
- the patient's cardiac history (if applicable)
- information about any rehabilitation the patient is undergoing
- the patient's medication
- data protection issues, including patient's consent.

In addition to the information received at the point of referral, a specialist instructor must confirm with the participant that the information is still accurate and that no changes to their medication or health status have occurred post referral.

This review of the participant should take place prior to their first participation, and on an on-going basis as long as they continue to participate in exercise maintenance. When starting exercise maintenance, additional records such as next of kin and emergency contact details may be requested.

Referral data

PATIENT DETAILS

- Name
- DOB
- Address
- Postcode
- Telephone or email
- CHI (Community Health Index) Number
- Gender
- Ethnic Origin
- Interpretation/ communication support
- Reason for Referral

KEY CONSIDERATIONS

- **Patient contact details:** Address and one additional method of contact. This may be telephone or email.
- **Demographic data fields:** Gender, age, postcode, ethnic origin.
- **Interpretation/Communication support:** Is the class/programme fully accessible to patients who require an interpreter or additional support? Has the programme/service undertaken an Equality Impact Assessment (EQIA)?[9]
- **Reason for Referral:** Mapping of participant goals, requirements and expectations
- **Participant tracking:** CHI number - track/monitor participant outcomes throughout their engagement with the programme and beyond. May be used to evidence the long term impact of the service/programme.

REFERRER DETAILS

- Name
- Title
- Address
- Postcode
- Tel No
- Practice Code

KEY CONSIDERATIONS

- Record referrals from source (for the service to monitor regular/rare referrers). Data can be used to identify referral gaps and target service promotion
- Service feedback of participant progress/goals to referrer
- Clinical support to service provider (designated HCP(s) overseeing participant's medical care)

RISK FACTORS

- Smoking status
- Raised Cholesterol
- Hypertension
- Physically Inactive
- Excess Alcohol
- Family History of CVD
- BMI
- Diabetes (NIDDM/IDDM)

KEY CONSIDERATIONS

- Exercise considerations/implications
- Key questions to be asked at time of consultation
- Create risk factor profile for participant
- Create service user profile – align to adherence/attrition rates. This evidence may be used to facilitate service redesign
- Opportunity to identify/signpost participant to additional support services – smoking cessation, weight management/healthy eating services

Referral data

GENERAL MEDICAL HISTORY

- Stroke (CVA/TIA)
- Epilepsy
- Ortho/Musculoskeletal conditions
- Respiratory conditions - COPD/Asthma
- Claudication
- Depression / Anxiety
- Diabetes
- Other – social history (eg, isolation)

KEY CONSIDERATIONS

- Exercise considerations/implications/adaptations. This may include additional detail on: activity history, the impact on a person's mobility and walking ability, coordination, muscle tone (in people with stroke), balance, range of motion, visuospatial function, functional abilities, communication, cognition and levels of pain.
- Key questions to be asked at time of consultation – additional detail to signpost participant into suitable activity/level of activity.
- Assess suitability – inclusion/exclusion criteria (this should be applied by the referrer at time of referral. However changes to medication or medical status between referral and uptake may affect suitability)
- Risk stratify participant.
- Social history can assist in signposting the participant to additional social support (eg, local support groups) and help identify suitable activity (independent or group based).

CARDIAC HISTORY (IF APPLICABLE)

- Myocardial Infarction (MI)
- Coronary Artery Bypass Graft (CABG)
- Percutaneous Coronary Intervention (PCI)
- Implanted Cardioverter Defibrillator (ICD) / Pacemaker
- Heart Failure
- Angina
- Arrhythmia
- Previous Investigations

KEY CONSIDERATIONS

- Cardiac medical history (including dates) – assess suitability/risk stratify patient.
- Exercise considerations/implications/adaptations.
- Key questions to be asked at time of consultation – additional detail to signpost participant into suitable activity/level of activity.

Referral data

REHABILITATION INFO (IF APPLICABLE)

- Referring Service
- Contact Details
- Number of attendances
- Ability to self monitor
- Rate of Perceived Exertion (RPE)
- Training Heart Rate
- Functional capacity/ability

*list stroke/cardiac/pulmonary specific measurements/ considerations

KEY CONSIDERATIONS

- Designated contact point within clinical rehabilitation service.
- Assess suitability/signpost appropriately based on previous exercise history and/or clinical rehabilitation assessment.
- Exercise safety – knowledge of training heart rate/ability to self monitor.
- Ensure participant exercise capacity is maintained/progressed post clinical rehabilitation.
- Physical activity measurement/tools used to monitor progression/exercise capacity and functional ability post rehabilitation discharge (may include walk test, range of motion, balance, motor control, cognition).

MEDICATION

- Diuretic
- Anti-coagulants
- B-blocker
- Insulin
- Calcium Channel Blocker
- Lipid Lowering
- ACE inhibitor
- B agonist inhaler
- Anti-arrhythmic
- GTN Spray
- Other (which may have exercise implications)

KEY CONSIDERATIONS

- Exercise considerations/implications.
- Key questions to be asked at time of consultation (with regard to medication changes/titration, adherence, usage and side effects).

Referral data

DATA TRANSFER/ PARTICIPANT AGREEMENT

- Participant signature
- Agreement of data transfer to partnership agencies
- How the data will be used and why

KEY CONSIDERATIONS

- Local data protection/transfer considerations.
- 'Housing' the data locally – feeding back to referring services .
- Economic analysis – impact of service/programme.
- Ability to track and monitor participant engagement/progress throughout their journey.
- Reporting procedures/mechanisms.

10. Potential screening for self referral

Potential screening for self referral

> “I feel better and I’m more active than before I had the heart attack”

Referral into, and ongoing engagement with exercise maintenance requires appropriate screening procedures to ensure that any decision is based on what is most appropriate to an individual’s needs and abilities – their safety is paramount. Following a self-referral, the physical activity screening process is essential and intended to act as a ‘gateway’ to sign-posting people into the most appropriate tier of the physical activity pathway, matching individuals as far as possible to the most appropriate physical activity for them. This process should include communication with an individual’s GP where necessary. Ongoing monitoring by instructors will ensure that activities and exercises remain safe and appropriate for an individual participant.

PARQ+ is a revised and evidence based version of the Physical Activity Readiness Questionnaire, an ‘exercise’ screening tool developed by the Canadian Society for Exercise Physiology. It is based on the premise that being physically inactive is more dangerous than physical activity for people with all but the most chronic health conditions.

Thus safely screening participants into physical activity rather than excluding them is paramount. The PARQ+ therefore could serve as a robust and valid screening tool for participants who self-refer into exercise maintenance services across Scotland. The initial version of this questionnaire comprises of seven general health questions, and a series of follow-up screening questions for people who indicate they have a pre-existing medical condition (eg, cancer, heart disease, respiratory disease, stroke, musculoskeletal condition).

At the present time the older version of PAR-Q is used by most exercise instructors to screen self-referrers or other potential service users. If there is an indication of a medical condition that might affect an individual’s ability to safely commence exercise the self-referrer is recommended to seek medical clearance from their GP prior to commencing exercise. This process can often act as a barrier to becoming more active either because the GP refuses to give medical clearance due to uncertainty about the potential exercise prescription or concerns about the qualifications of the exercise instructor and their competency to manage the self-referrer’s medical condition.

Subsequently it can send a message to the potential service user that exercise could be potentially dangerous for someone with their medical condition.

The British Heart Foundation National Centre (BHFNC) for Physical Activity and Health is leading a project to clinically evaluate and validate the PARQ+[10]. The first phase of the project has been to develop a series of clinical screening questions which can be used for the validation process, these questions have been developed using the Delphi consensus model. Once a final set of validation questions have been agreed ethical approval will be sought to undertake a validation study with patients.

The validation process is expected to be completed by Autumn 2015. In addition to having a clinically validated and evidence based screening tool, clear definitions of what constitutes an unstable condition will be provided, eg, unstable diabetes, which will assist the specialist instructor/ service in making an informed decision about a participant’s safety to commence physical activity and hopefully removing areas of ambiguity within the screening process.

11. Service promotion

Service promotion

There are a number of different ways in which physical activity/exercise maintenance services can promote themselves and encourage individuals to participate. Three examples are provided here.

LIVING IT UP
portal.livingitup.org.uk

Living it Up is a three year programme aiming to empower people to improve their health and well-being. Initially aimed at the over 50's, the programme is expected to be of benefit to other people living with LTCs.

Managed on behalf of the Scottish Government by NHS 24, Living It Up operates in five areas of Scotland: the Western Isles, Forth Valley, Lothian, Moray and Highland/Argyll & Bute.

Living It Up encourages the development of new health and wellbeing projects, and actively promotes co-design: creating services with local people to ensure that the result is what the community wants and needs.

ACTIVE SCOTLAND
activescotland.org.uk

Active Scotland is a database of local and national physical activity infrastructure. Run by NHS Health Scotland, is intended to help primary care staff and allied health professionals to signpost patients to physical activity programmes, sessions and opportunities. This includes public, private and voluntary sector-led activities working in communities, schools and workplaces.

Searching for an activity involves inputting a postcode or location, which any visitor to the website can do. New activities and programmes can be submitted to Active Scotland for inclusion in the database via the website.

ALISS
aliss.org

ALISS (A Local Information System for Scotland) is a web-based resource run by the Health and Social Care ALLIANCE Scotland on behalf of the Scottish Government. It is designed as a search tool for health and wellbeing resources in Scotland – anyone can search the resource database by location and activity using the website. Signing up for an account allows individuals and organisations to add their own activities to the database.

12. Glossary

Glossary

Allied Health Professional (AHP) (eg, Physiotherapist, Occupational Therapist).

British Association for Cardiovascular Prevention and Rehabilitation (BACPR)

Cardiac Rehabilitation (CR)
The sum of activities required to influence favourably the underlying cause of the coronary heart disease, as well as the best possible, physical, mental and social conditions, so that they (people) may, by their own efforts preserve or resume when lost, as normal a place as possible in the community.

Cardiovascular disease (CVD)
A general term that describes a disease of the heart or blood vessels.

The Community Health Index (CHI)
Number is the national unique number for any health communication related to a given patient. Everyone in Scotland who is registered with a GP practice has their own unique CHI number.

Chronic Obstructive Pulmonary Disease (COPD)
Another chronic lung condition, which is characterised by restricted airways leading to breathing difficulties, persistent coughing and abnormal sputum production.

Community Health Partnership (CHPs)
Are established by NHS boards at a local level to bridge the gap between primary and secondary healthcare, and between health and social care. CHPs are expected to coordinate the planning and provision of a wide range of primary and community health services in their area

Coronary Heart Disease (CHD) or Ischemic Heart Disease (IHD)
Coronary heart disease is a disease of the blood vessels supplying the heart muscle.

Exercise or exercise training
Is defined as a subset of physical activity that is planned, structured, repetitive and performed with the intention of improving or maintaining one of more components of physical fitness. Physical fitness is defined as a set of physiological qualities that link to the ability to perform and tolerate certain physical activities.

Exercise Maintenance (EM)
For this project refers to follow on exercise or physical activity opportunities delivered in the community after formal clinical/ NHS rehabilitation is complete. (It is acknowledged that not everyone may have entered or completed rehabilitation).

Exercise referral schemes (ERS) aim to identify inactive adults in the primary-care setting. The GP or health-care professional refers the patient to a third-party service, with this service taking responsibility for prescribing and monitoring an exercise programme that is tailored to the individual needs of the patient.

General Practitioners (GP)
General medical practitioner.

Health Care Professionals (HCP)
Any clinical professionals involved in a patient's diagnosis, treatment and care, including: doctors in hospital and community settings (eg, consultants and general practitioners (GPs), nurses in hospital and community settings (including specialist nurses), allied health professionals (AHPs) in hospital and the community.

Journey
Is the stages a patient proceeds through and their experiences from symptoms/diagnosis to exercise maintenance, the healthcare professionals they encounter at each stage, the care and treatment they receive, the information they are provided and the decisions they make about their next steps.

Long Term Conditions (LTC)
health conditions that last a year or longer, impact on a person's life, and may require ongoing care and support.

National Exercise Referral Scheme (NERS) Wales
A Welsh Assembly Government (WAG) funded scheme which has been developed to standardise exercise referral opportunities across all Local Authorities and Local health Boards in Wales.

Managed Clinical Networks
(MCN) linked groups of health professionals and organisations from primary, secondary and tertiary care, working in a co-ordinated manner, unconstrained by existing professional and Health Board boundaries, to ensure equitable provision of high quality clinically effective services throughout Scotland.

Glossary

National Occupational Standards (NOS)
Are statements of the standards of performance individuals must achieve when carrying out functions in the workplace, together with specifications of the underpinning knowledge and understanding.

Pathway
The agreed (locally or nationally) stages to be followed in the care and treatment of patients who have a LTC or cardiac, respiratory or stroke condition.

Person-centred Activities for Respiratory and Cardiac conditions and Stroke (PARCS) Project

Physical activity (PA)
Is defined as 'any bodily movement produced by skeletal muscles that require energy expenditure[1]. There are many types of physical activity that include leisure, sport and occupational activities, and also active living such as walking, housework and gardening.

Pulmonary Rehabilitation (PR)
Can be defined as 'an interdisciplinary programme of care for patients with chronic respiratory impairment that is individually tailored and designed to optimise each patient's physical and social performance and autonomy. Programmes comprise individualised exercise programmes and education'.

Register of Exercise Professionals (REPs)
Is an independent, public register which recognises the qualifications and expertise of health-enhancing exercise instructors in the UK. REP's provides a system of regulation for instructors and trainers to ensure that they meet the health and fitness industry's agreed National Occupational Standards.

REPS level 3
The Exercise Referral Instructor (Level 3) role includes designing, monitoring, adapting and implementing exercise programmes for individual clients with a range of medical conditions this includes Respiratory Conditions: Asthma and Chronic obstructive pulmonary disease (COPD). Musculoskeletal Conditions, Cardiovascular Conditions, Hypertension, Hypercholesterolemia, Psychological/Mental Health Conditions, Metabolic/ Immunological Conditions, eg, Diabetes Type 1 and Type 2 and obesity.

REPS level 4
The knowledge and skills required to work safely with patients with specific, often chronic and complex, medical conditions. To deliver exercise to pathology specific groups of people considered to be at moderate to high risk (i.e. excluding high risk who would be exercising in the medical setting) of an event when partaking in physical activity, eg, cardiac, falls, stroke, respiratory conditions. The specialist exercise instructor is able to demonstrate that they have met the Level 4 National Occupational Standards in one or more medical areas. Specialist exercise professionals are working within the healthcare sector and are also providing an interface between clinically-led exercise and community-based exercise programmes by designing, delivering, monitoring and evaluating structured, individualised physical activity programmes for clients. Additionally, they have a range of appropriate knowledge and skills that are aligned with current evidence-based, best practice guidelines regarding the affects of exercise on the specific condition(s) for which they are qualified to work. Specific medical areas covered by the specialist exercise instructors include: cardiac rehabilitation, falls prevention, stroke, cancer and chronic respiratory disease.

Service user
Anyone who is a patient or other user of health and/or social services.

Stroke
Strokes are usually acute events and are mainly caused by a blockage that prevents blood from flowing to the heart or brain. The most common reason is a build-up of fatty deposits on the inner walls of the blood vessels. Strokes can be caused by bleeding from a blood vessel in the brain or by blood clots.

Stroke Rehabilitation (SR)
Restoration of function after stroke and minimisation of long term disability after stroke.

Support Group
A third/voluntary sector group created to support people with a specific condition; these groups may be affiliated to one of the charities involved in PARCS or not, and generally offer a range of services and support to its members which may or may not include PA/exercise.

Third Sector
Comprising of community groups, voluntary organisations, charities, social enterprises, co-operatives and individual volunteers.

13. Further information

In this section:

- References
- Strategies, guidelines and websites
- About the partners

Further information
References

1. Managing Long Term Conditions: Audit Scotland, 2007

2. Exercise for life – Physical activity in health and disease. Recommendations of the Sport and Exercise Medicine Committee Working Party of the Royal College of Physicians June 2012

3. The Healthcare Quality Strategy for NHS Scotland: The Scottish Government, 2010

4. For more detail on EQIAs:
   - Scottish Government
   - UK Partnership Agreement

5. Further guidance on the ratio of instructors to stroke survivors can be found in Best Practice Guidance for the Development of Exercise after Stroke Services in Community Settings: Best et al, University of Edinburgh 2010

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

7. Let's make Scotland more active a Strategy for Physical Activity, physical activity task force (2003)

8. Best Practice Guidance for the Development of Exercise after Stroke Services in Community Settings p 19/20 and British Association of Cardiac Rehabilitation – phase IV Instructor Training Module, 4th Edition p 150

9. For more detail on EQIAs:
   - Scottish Government
   - UK Partnership Agreement

10. British Heart Foundation National Centre
    Contact Kim Buxton
    k.e.buxton@lboro.ac.uk

Further information
Strategies, guidelines and websites

STRATEGIES

- A Route Map to the 2020 Vision for Health and Social Care
- Heart Disease Improvement Plan 2014
- Long Term Conditions Collaborative; Improving Care Pathways
- Stroke Improvement Plan 2014

GUIDELINES

- National Occupational Standards; Instruct exercise and physical activities with referred patients

WEBSITES

- British Association for Cardiovascular Prevention & Rehabilitation
- British Heart Foundation
- British Lung Foundation
- Chest Heart & Stroke Scotland
- Register of Exercise Professionals (REPS categories)
- Skills Active Scotland

Further information
About the partners

BRITISH HEART FOUNDATION

The British Heart Foundation saves lives through pioneering research, patient care and vital information.

For over 50 years we've pioneered research that's transformed the lives of people living with heart and circulatory conditions.

Our work has been central to the discoveries of vital treatments that are changing the fight against heart disease.

But so many people still need our help.

Join our fight for every heartbeat in the UK. Every pound raised, every minute of your time will help make a difference to people's lives.

What you can do for us
We rely on donations to continue our vital work. If you would like to make a donation to the British Heart Foundation, please call our donation hotline on 0300 330 3322, or visit bhf.org.uk/donate

Thank you for supporting our fight.

Heart Helpline
0300 330 3311*
For information and support on anything heart-related.
**A similar cost to 01 and 02 numbers*

THE BRITISH LUNG FOUNDATION

One person in five in the UK is affected by lung disease. Millions more are at risk.

We are the UK's lung charity and we're here for every one of them.

Lung disease can be frightening and debilitating. We offer hope and support at every step, so that no one has to face it alone.

We promote better understanding of lung disease and we campaign for change in the nation's lung health.

And we fund vital research, so that new treatments and cures can help to save lives.

We are the British Lung Foundation. Leading the fight against lung disease.

British Lung Foundation Scotland
Suite 103-104 Baltic Chambers
50 Wellington Street
Glasgow G2 6HJ

BLF Helpline
03000 030 555
9am – 5pm, Monday – Friday
Whether you have a lung condition or care for someone who does, get in touch.
We're here to help.

CHEST HEART & STROKE SCOTLAND

Chest Heart & Stroke Scotland is Scotland's Health Charity. We improve the quality of life for people in Scotland affected by chest, heart and stroke illness, through medical research, influencing public policy, advice and information, and support in the community.

We invest more than £1 million in medical research at any one time, funding state-of-the-art research studies in all of Scotland's university medical schools. We also fund research from nursing and health professionals, ensuring that our research is focused on the real needs of patients.

How you can help us
To maintain and expand our vital work we rely almost entirely on the continuing generous support of the Scottish public, business and community organisations.

Visit chss.org.uk/donate or call us on 0300 1212 333 to find out how you can help us help those who need us most.

Get involved
Our Voices Scotland programme aims to build a national network of people affected by chest, heart and stroke conditions to help them have their say in NHS service planning and design. Contact us through chss.org.uk/chss-campaigns-projects-patient-involvement

Advice Line
0808 801 0899
Free from landlines and mobiles
For confidential advice and information from CHSS Advice Line Nurses.

Volunteering Information
Freephone 0800 169 5139