



DELIVERY GUIDE

WHO IS THE GUIDE FOR?

NHS staff managing or providing cardiac rehabilitation services who wish to deliver the REACH-HF home-based cardiac rehabilitation programme for people with heart failure.

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1. About this guide

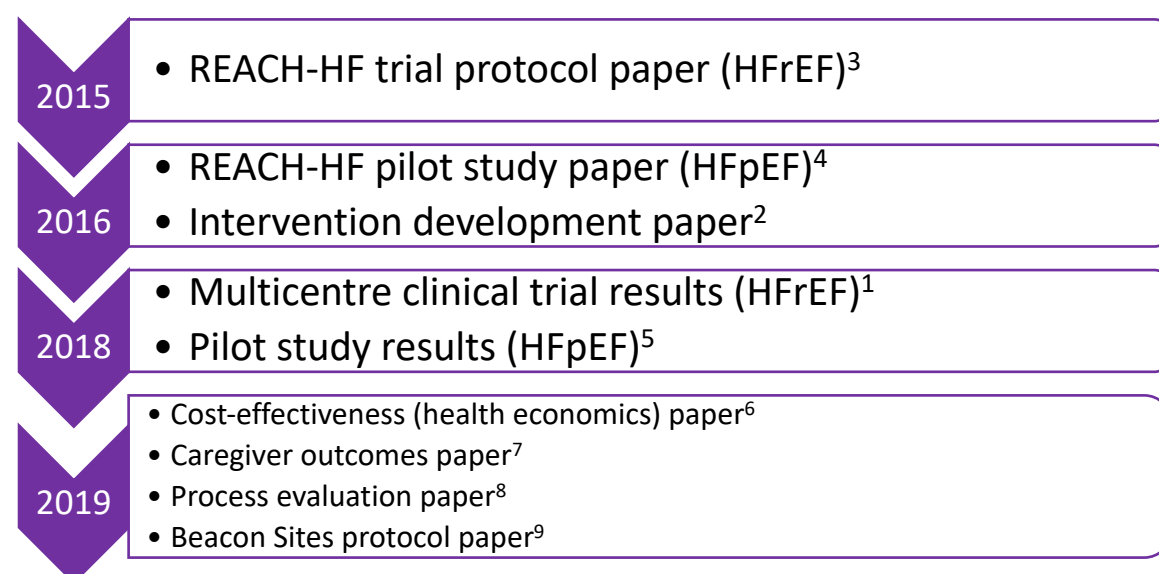
This service delivery guide is intended for teams that want to set up the Rehabilitation Enablement in Chronic Heart Failure (REACH-HF) home-based cardiac rehabilitation programme for people with heart failure within their existing service. This guide has been designed following interviews with healthcare professionals working in four National Health Service (NHS) cardiac rehabilitation centres in England and Northern Ireland in 2019. These 'Beacon Sites' were early adopters of the REACH-HF programme, piloting its roll-out in the NHS.

The guide builds on knowledge from the REACH-HF Facilitator Training Pack (part of the REACH-HF training course) but emphasises the practicalities of implementing the REACH-HF programme. Chapter one briefly describes the programme and outlines the advantages of home-based cardiac rehabilitation for people with heart failure. Chapter two outlines the necessary steps for adding REACH-HF into your service and for monitoring progress.

1.1. What is REACH-HF?


REACH-HF is a new home-based, evidence-informed cardiac rehabilitation programme for people with heart failure and their caregivers (family or friends), to help them manage their condition. The REACH-HF trial showed that the programme significantly improved the quality of life of patients with heart failure 12 months after the start of the programme¹. The effects on quality of life (5.7 points on the Minnesota Living with Heart Failure Questionnaire) were similar to those found with centre-based programmes and over 90% of patients completed the programme.

The REACH-HF patient and caregiver materials are designed to be used with the support of a trained REACH-HF facilitator (typically, but not limited to, a specialist cardiac nurse or physiotherapist with prior experience in delivering cardiac rehabilitation). The programme, in its current format, was established in 2015². Below is a brief publication history listing key scientific papers, outlining the evidence base underpinning the REACH-HF programme. You can access these papers in full on the REACH-HF website: <http://sites.exeter.ac.uk/reach-hf/reach-hf-publications/>



The programme has been designed to be delivered over 12 weeks, with a recommended three face-to-face contacts with a REACH-HF facilitator taking place in the REACH-HF participant’s home, and follow-up telephone contacts in between. ‘Real world’ programme implementation, especially during the COVID-19 pandemic, has called for alternative modes of delivery. These have included: combined centre- and home-based delivery (e.g. baseline and end-of-treatment assessments conducted in clinics, with home visits and/or phone support in between) and an entirely remote delivery model, where all sessions (including assessments) were conducted by telephone.

The REACH-HF programme has four core elements:



REACH-HF Manual	<ul style="list-style-type: none"> • Including a choice of chair-based exercises or progressive walking training
Progress Tracker	<ul style="list-style-type: none"> • An interactive booklet to encourage learning from experience
Family and Friends Resource	<ul style="list-style-type: none"> • A manual for use by the caregiver
Facilitation from a healthcare professional	<ul style="list-style-type: none"> • Person-centred counselling • Tailoring to meet patient and caregiver needs

1.2. Benefits and costs of home-based cardiac rehabilitation

Treatment of heart failure costs the NHS around £2 billion per year, with most of the cost associated with hospital admissions. Cardiac rehabilitation saves and improves lives, and reduces hospital re-admissions. Unfortunately, only 52% of cardiac patients take up the offer of cardiac rehabilitation. Uptake is even lower in patients with heart failure, with less than 20% being referred for cardiac rehabilitation, and even less (<10% overall) taking up the offer. The NHS Long Term Plan aims to increase the proportion of eligible patients with cardiovascular disease accessing cardiac rehabilitation to 85% by 2028, with a 33% target for people with heart failure.

The National Institute for Health and Care Excellence (NICE) has recommended that offering alternative modes of delivery of cardiac rehabilitation (for example home-based programmes) might reduce barriers to treatment for people that would otherwise not attend traditional centre-based provision. Offering home-based rehabilitation programmes, like REACH-HF, may therefore help to meet the ambitious aims of the NHS Long Term Plan. The ongoing need for a comprehensive, effective, and cost-effective home-based cardiac rehabilitation programmes became particularly apparent during the COVID-19 pandemic.

The health economics analysis of REACH-HF compared home and centre-based options and found the costs of home and centre-based delivery to be similar. The cost of the REACH-HF programme (estimated at £418 per patient including travel time, management and all NHS overhead costs) falls within the NHS England tariff of £477 per patient for cardiac rehabilitation. Our cost-effectiveness modelling suggested that the REACH-HF programme is a cost-effective addition to healthcare provision for people with heart failure (costing, on average, £1720 per quality-adjusted life year (QALY) gained). This is well below the typical threshold applied by NICE for approving the commissioning of clinical treatments in England (£20-30,000 per QALY).

1.3. What does REACH-HF look like in practice?

In the two out of four Beacon Sites which were already delivering a centre-based programme for people with heart failure, the REACH-HF programme was offered as an additional option, which enabled the choice of participation in either the centre-based rehabilitation programme or REACH-HF. This approach has several advantages. Some patients prefer to attend centre-based programmes. For example, they might not feel motivated enough to exercise by themselves at home, have safety concerns, or just enjoy getting out of the house every week and meeting other people with heart failure in a supportive environment. Others may struggle to attend the hospital or rehabilitation centre due to poor mobility, lack of transport or a busy lifestyle. Some feel uncomfortable in group situations and may prefer more individually-tailored advice. Since there are many reasons why patients may prefer centre-based or home-based rehabilitation programmes, offering a choice of models may improve adherence.

In some existing Beacon Sites, REACH-HF facilitators travelled to participants' homes for face-to-face contact sessions, while others delivered most face-to-face contacts (including initial assessments) at a rehabilitation centre. Services that continued delivering cardiac rehabilitation during the COVID-19 lockdown relied solely on remote delivery. Those services offered extended phone/video assessments, during which REACH-HF facilitators used the titration method (see training pack) for establishing patients' starting point for the exercise programme, followed by regular (weekly then fortnightly) review phone calls.

In some teams, home visits were delivered by a single facilitator, and in others by a pair. Our experience is that a single, trained and experienced facilitator can normally deliver the programme, although, for training purposes, it may help for more junior staff to be accompanied until competence is established.

During the early stages of delivery, REACH-HF facilitators may need to support the participant in using technology to access the chair-based and relaxation exercises (setting up the DVD player, using the DVD and/or relaxation CD, or setting up access to the online exercise videos). In the case of remote delivery, this process involves talking the participant through the set-up process over the phone.

To streamline the set-up process, and get participants exercising as soon as possible, some Beacon Sites decided to post out the REACH-HF resources to patients with their clinic invite letters. The usual clinic invite letter also asked patients to familiarise themselves with the REACH-HF manual and to try out the DVD or access the REACH-HF chair-based exercises via the web link. This initial investment (the cost of posting the manual) can save facilitator and patient time, as it helps the patient decide if the REACH-HF programme is right for them, as well as allowing them to start exercising straight after their assessment appointment. Patients that do not want to proceed with REACH-HF return the manual at their assessment appointment. In the case of remote implementation, facilitators from the existing Beacon Sites posted the REACH-HF manuals or delivered them to patients' homes in person (observing social distancing measures).

1.3.1. The REACH-HF Pathway

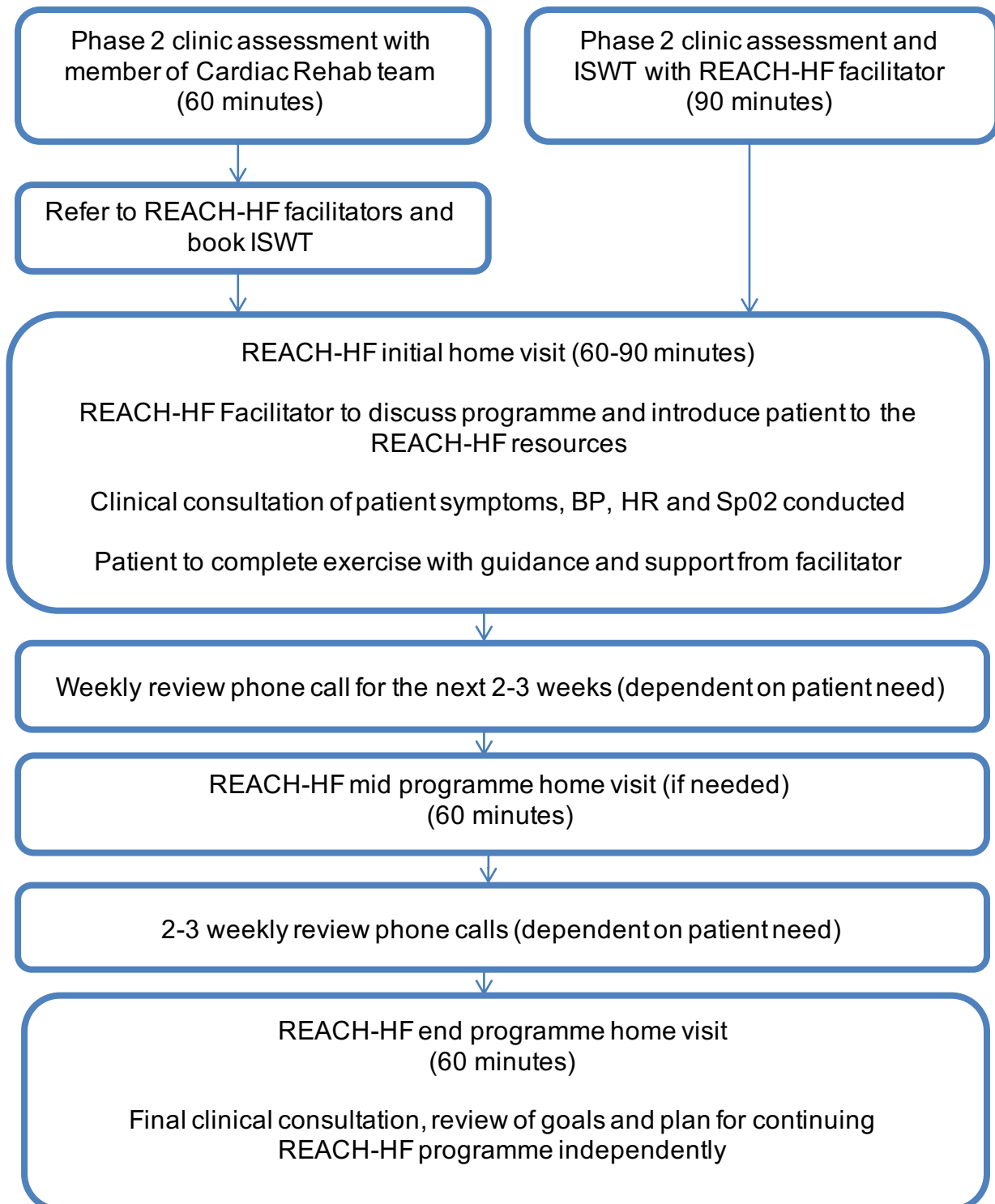
The REACH-HF participants enrolled in the programme typically receive five to six hours of clinical input delivered over 12 weeks. This includes a mixture of face-to-face and telephone contacts with at least one, but usually two or three home visits. Early Beacon Sites that did not have the capacity to offer regular home visits to all participants prioritised visits for participants who were frailer or had complex comorbidities (based on clinical judgement of support needs). The REACH-HF participants receiving exclusively remote delivery benefitted from the same amount of clinical input offered via an in-depth phone/video assessment, and weekly (at the beginning of the programme) or fortnightly (later in the programme) follow-up phone calls.

Feedback from the initial Beacon Sites highlighted that participants who were elderly, frail, or had comorbidities might require more face-to-face appointments to ensure adequate exercise monitoring and support. Some of these participants also struggled to attend centres for baseline and end-of-treatment assessments. Where an exclusively remote implementation model is used, such participants might require additional follow-up phone calls.

Below you will find a worked example of a standard REACH-HF pathway. Additional pathways adapted for remote delivery and combined delivery (social distancing and PPE) can be found in Appendix 1 and 2 respectively.

Wirral Cardiovascular Rehabilitation

REACH-HF programme pathway



1.3.2. Equipment required

Below you will find a list of the equipment needed to deliver REACH-HF:

- ✓ Access to phone (or video appointment technology if applicable) and quiet/private consultation space.
- ✓ Several DVD players that can be hired out to participants who do not have a DVD player available and cannot access chair-based exercises on the REACH-HF web link.
- ✓ Equipment to conduct Incremental Shuttle Walk Test (if applicable): instructions and audio recording to conduct the test, scoresheets, audio device (CD/MP3 player/mobile phone/tablet/laptop), two cones, one measuring tape, 10m string and a stopwatch. Instructions and audio recording for the test can be purchased and downloaded onto a portable device (e.g. mobile phone/tablet/laptop) from University Hospitals of Leicester, see link below:
<https://www.leicestershospitals.nhs.uk/aboutus/departments-services/pulmonary-rehabilitation/for-health-professionals/incremental-shuttle-walk/>
Please note that exercise capacity can also be assessed using the 6 Minute Walk Test or the titration method (during remote delivery, or in cases where exercise capacity tests are not available).
- ✓ Services that routinely collect such measures might need to source: portable heart rate, pulse oximeter, validated blood pressure and blood sugar monitors (please note that none of these are compulsory for the successful delivery of the REACH-HF programme).

1.3.3. Does REACH-HF offer the right fit for your patient?

An important finding from the early Beacon Sites was the need for a good fit between patient and programme. The flowchart in Appendix 3 gives the criteria for accepting patients onto the programme and lists questions that can be used to find the best fit between the patient's preferences and the different cardiac rehabilitation options that might be available within your service.

2. Setting up REACH-HF

Introducing a new programme into any service is an opportunity to practice a whole-team approach to communication and decision-making. Teams that include and involve all relevant healthcare professionals, managers, and support staff in the roll-out of a new intervention avoid many teething problems and cope better with any problems that arise. So keep talking – start with discussing the big picture, such as reasons why there is a need to introduce home-based cardiac rehabilitation into the service. But also consider the details, such as who will be posting out the clinic appointment letters. Why not book a regular REACH-HF implementation team meeting? Successfully introducing REACH-HF into your service is a team effort!

2.1. Preparation phase

Careful preparation for the roll-out of REACH-HF is time well spent. This allows the organisation and the team to reflect on how they want to engage with the programme, and how things will have to change as a result of introducing REACH-HF.

The infographic below breaks down the set-up process into seven tasks.



REACH-HF SERVICE DELIVERY GUIDE

Home-based cardiac rehabilitation for patients with heart failure

PROGRAMME RESOURCES

- Heart Failure Manual
- My Progress Tracker
- Family & Friends Resource
- Chair-based exercises DVD
- Relaxation CD



IMPLEMENTING THE PROGRAMME

Below you will find the necessary steps for adding REACH-HF into your service and for monitoring progress. It is, of course, possible to work on more than one step at a time!



1) MAKE THE CASE



Introducing any new innovation starts with a need. A well-defined vision for the future service that includes the opinions of the wider team is a must. This 'mission statement' will become a driving force behind the innovation and help to keep everyone on the same page.

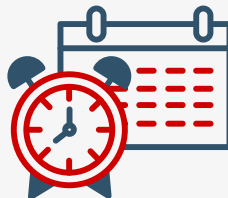
2) GET THE TEAM ON BOARD

Innovation is a team effort. Getting people on-board from the outset will create less resistance and tension during the roll-out. Having an appointed REACH-HF champion will help drive it forward.



Contact the REACH-HF team:
reach-hf@exeter.ac.uk

3) CONSIDER THE BEST TIMING



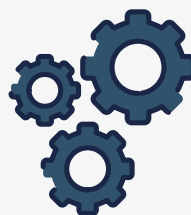
Timing is crucial in ensuring successful roll-out. Choosing the time to start wisely will reduce the burden of an additional workload on the individuals delivering the programme and the wider team.

4) GATHER RESOURCES

Introducing any new intervention requires resources - staff, time and money. When a new programme is introduced, the team will have to adapt to incorporate new working practices.



5) ADAPT OR DEVELOP SYSTEMS



Implementing any new intervention into a healthcare team requires designing new systems of work or amending the existing ones. Good planning of such systems will avoid frustration and problems later down the line.

6) MAKE THE MOST OUT OF THE TRAINING

The decision who to train is an important one. This will influence the early success of the programme and the enthusiasm and feedback from the initial roll-out will have a knock-on effect for future implementation.



7) DELIVER, MONITOR, EVALUATE



As the programme is rolled out, you can help it to develop and evolve by monitoring and evaluating progress. Evaluations can also be used to support the case for future funding.

Contact the REACH-HF team:
reach-hf@exeter.ac.uk

2.2. Delivery phase

Hopefully, the careful planning that went into the launch of the programme will result in a few obstacles during the delivery phase. The seven tasks involved in introducing the REACH-HF programme are described in more detail (with suggested discussion points and recommendations for each) in a table below.

1. Making the case for REACH-HF

Useful questions to ask:

- ❖ Why does the service need to implement home-based cardiac rehabilitation for people with heart failure?
- ❖ What cardiac rehabilitation is currently available for people with heart failure?
- ❖ Will REACH-HF be provided as an additional service or an alternative to existing provision (e.g. centre-based)?
- ❖ What are the benefits to patients of offering REACH-HF? What are the benefits to the service?
- ❖ How does the service want to respond to the NHS Long Term Plan in regards to cardiac rehabilitation provision for people with heart failure (see section 1.2)?

Recommendations:

- Prepare a good case for introducing REACH-HF into the service.
- Open communication with all relevant staff and incorporate the additional feedback into the final 'mission statement' document.

2. Getting the team on-board

Useful questions to ask:

- ❖ Are members of the team on-board with the programme? Do they see the value of REACH-HF?
- ❖ How much capacity does the service have?
- ❖ How is the team's morale?
- ❖ Is the team used to dealing with changes? Are they open and receptive to them?
- ❖ Has there been any recent clinical or administrative changes in how the service is being run or delivered?
- ❖ Who wants to be involved? Who should be involved?
- ❖ Who else, outside of your team, needs to be involved?

Recommendations:

- Keep the team spirits high and ensure that no animosity is directed towards the chosen innovators and/or the programme itself. Monitor staff morale and attitudes and address any resistance through discussion and actions to address any concerns.
- Make an honest assessment of the capacity available for the REACH-HF roll-out. Start at a level appropriate to the available resources. It's better to start small than to overstretch the service and fail.
- Low morale can be overcome by increasing communication between management and front-line staff in regular staff meetings and consultations and attempting to find out the causes of the resistance and apprehension.
- Evaluate how you have implemented changes previously and decide what worked well.
- Appoint REACH-HF champions.

- Appoint a REACH-HF team - a group of people that will be involved in the initial roll-out of the programme.
- Consider referral sources: e.g. hospitals, GPs, community teams. Identify referrers who can become REACH-HF champions.
- Heart failure nurses are an important source of referrals. For services that do not ordinarily look after people with heart failure, it is a good idea to bridge the gap and increase the interdisciplinary working between cardiac rehabilitation and heart failure teams. Consider identifying a heart failure nurse that will become a REACH-HF champion in the heart failure team. If the resources allow, consider training the champion heart failure nurse to deliver the programme and offer support to the REACH-HF roll-out team.
- Open a channel of communication between service managers, lead clinicians from cardiac rehabilitation and heart failure teams and the local specialist service manager.
- If there is no rehabilitation provision for people with heart failure, the cardiac rehabilitation team will have to work closely with the local cardiology consultants (to ensure safe clinical practice and ongoing support from senior clinicians).
- Consider a pathway for advanced psychological support and nutrition input if one is needed.
- Support from senior management is a crucial part of introducing a new intervention into the service, especially if additional resources will be required to get the project off the ground. Involve the local head of department in a strategic role. It will allow for smoother implementation and increase the chances of the programme being included in any future service plans.
- Does your NHS trust have a dedicated programme and transformation team? If so, it may be helpful to involve it in the initial set-up of processes and procedures. If such team is not available, the senior management team should take on this role.
- Ongoing consultations between managers and front-line staff are essential for a successful launch.

3. Considering & choosing the best timing

Useful questions to ask:

- ❖ Are there any current staff shortages (long-term sickness, study leave or recent redundancies)?
- ❖ Is it a good time during the year to introduce REACH-HF?

Recommendations:

- Following discussions with all the relevant staff (front-line staff, managers, clinical leads, HR) - decide on the most optimal timing to introduce the REACH-HF programme in your service.

4. Gathering the resources

Useful questions to ask:

- ❖ Who will pay for the REACH-HF training?
- ❖ Where will the additional staff capacity come from? Will new staff be recruited?
- ❖ Are there additional funds to deliver the programme on a day-to-day basis (cost of the manual and travel)?
- ❖ How will any potential gaps in resources be managed?
- ❖ Who will take on any additional administrative burden?
- ❖ Is the distribution of new tasks/workload perceived as fair and acceptable?

Recommendations:

- For existing staff that will be offering REACH-HF agree on the amount of the acceptable adjustment to their usual duties, or working hours.
- Create a plan to cover the cost of delivering the programme.
- Be realistic about the resources required to integrate REACH-HF with your ongoing service delivery.
- Add REACH-HF to an existing commissioning structure or create a new business case for the additional service delivery.
- Provide the team with opportunities to voice their concerns about changing tasks/workloads.
- Create a well-defined and realistic plan that accounts for changes in workload across the service.
- Communicate with the team about how the changes can be best managed.

5. Adapting or putting new systems in place

Useful questions to ask:

- ❖ From operational, clinical, and systems points of view, what needs to happen before the first REACH-HF sessions can be delivered?
- ❖ What is the NHS trust's policy and insurance for lone working (if applicable)?
- ❖ If applicable, will home visits be conducted by individuals or pairs?

Recommendations:

- Operational: identifying suitable assessment sites, identifying patients' cohorts and referral sources, agreeing which data to capture and record, agreeing on any key performance indicators, creating sufficient project plans and risk logs, as well as identifying roles and responsibilities (ranging from who will be delivering the new treatment to who will look after the additional administrative burden).
- Clinical: patient criteria need to be agreed and, for services not ordinarily looking after people with heart failure, communication with heart failure specialist nurses and consultants may need to be established.
- Systems: the IT department may need to adapt the patient record system. You may need templates for referrals and patient communications, as well as to capture the required clinical data, document REACH-HF assessments and clinical notes from the follow-up sessions. The REACH-HF facilitators may need a 'prompt system' for booking REACH-HF intake and end-of-treatment assessments. The REACH-HF facilitators may need to develop a diary system to keep track of home visits and follow-up phone calls, as well as the participants' progress on the programme.

6. Making the most out of the training

Useful questions to ask:

- ❖ Is it possible to upskill all staff who could deliver REACH-HF?
- ❖ What is the team's experience of facilitating self-management and exercise programmes for people with heart failure?
- ❖ Who is the most suitable to attend the REACH-HF training? Who has the most enthusiasm for the programme and the experience and capacity to deliver it?

Recommendations:

- Allow equal opportunity for members of the team to participate in the REACH-HF training.
- Create fair and transparent criteria and a rationale for the selection of individuals to attend the REACH-HF training.

- Manage any possible disappointments of individuals that were not invited – discuss opportunities for any future training or other ways for these individuals to stay involved in the REACH-HF project.
- Consider training a multidisciplinary mix of healthcare professionals – for example, including a community cardiac specialist nurse, an exercise physiologist or physiotherapist and a heart failure specialist nurse (with experience in exercise prescription). Having a broad skills-mix in the delivery team will help staff to support each other and address a wider range of patient needs.
- Consider setting up regular REACH-HF peer-to-peer learning sessions to allow the REACH-HF facilitators to discuss difficult cases, hone their skills building on their REACH-HF training.
- If exercise prescription experience is lacking for some staff, consider starting with the BACPR Physical Activity and Exercise in Heart Failure training course: https://www.bacpr.com/pages/page_box_contents.asp?PageID=836
- Choose staff that are motivated, enthusiastic and see the value of the REACH-HF programme.
- Allow enough time before the training to complete the pre-training learning reading/activities and enough time following the training to digest the new information. The newly trained staff could prepare a short presentation about REACH-HF to be presented to the whole team.
- Spend some time following the training discussing as a team how you see the practicalities of delivering the REACH-HF programme and what will work best in the contexts of your service.
- Ensure training is timely (avoid having a big gap between training and delivery) – delivering REACH-HF requires skills and these will diminish without practice.
- Once the programme is in place, use the knowledge and skills of experienced staff to help newly trained staff to learn/gain experience (e.g. using shadowing of delivery for the first few patients).

7. Setting up monitoring and evaluation

Useful questions to ask:

- ❖ How can the roll-out of the REACH-HF programme be monitored and evaluated?

Recommendations:

- Make time for reflection. Evaluate the process of the roll-out itself and involve all relevant staff.
- Collect regular feedback from the REACH-HF facilitators and the REACH-HF participants.
- Use national audit (NACR) data to evaluate patient outcomes and other key metrics (e.g. throughput, uptake, completion).
- Think about collecting different level data: participants' outcomes and feedback, enrolment and the popularity of the programme, treatment attrition and completion rates and facilitators feedback.
- If you do not ordinarily report to the National Audit of Cardiac Rehabilitation (NACR) – put a system in place to monitor participants' outcomes.
- Schedule regular review/feedback meetings to identify and address any concerns or barriers about delivering the service.

2.3. Maintenance phase

It is good to develop tools for evaluating effectiveness, usefulness, or impact of the new programme, as well as finding opportunities to reflect on the roll-out process itself. The maintenance phase is an ongoing process since the landscape of healthcare delivery is always changing, staff move on, and other innovations and ideas arise over time. Ongoing monitoring and feedback will help to keep REACH-HF working well as time goes on, and/or help it to develop and adapt to changes in circumstances.

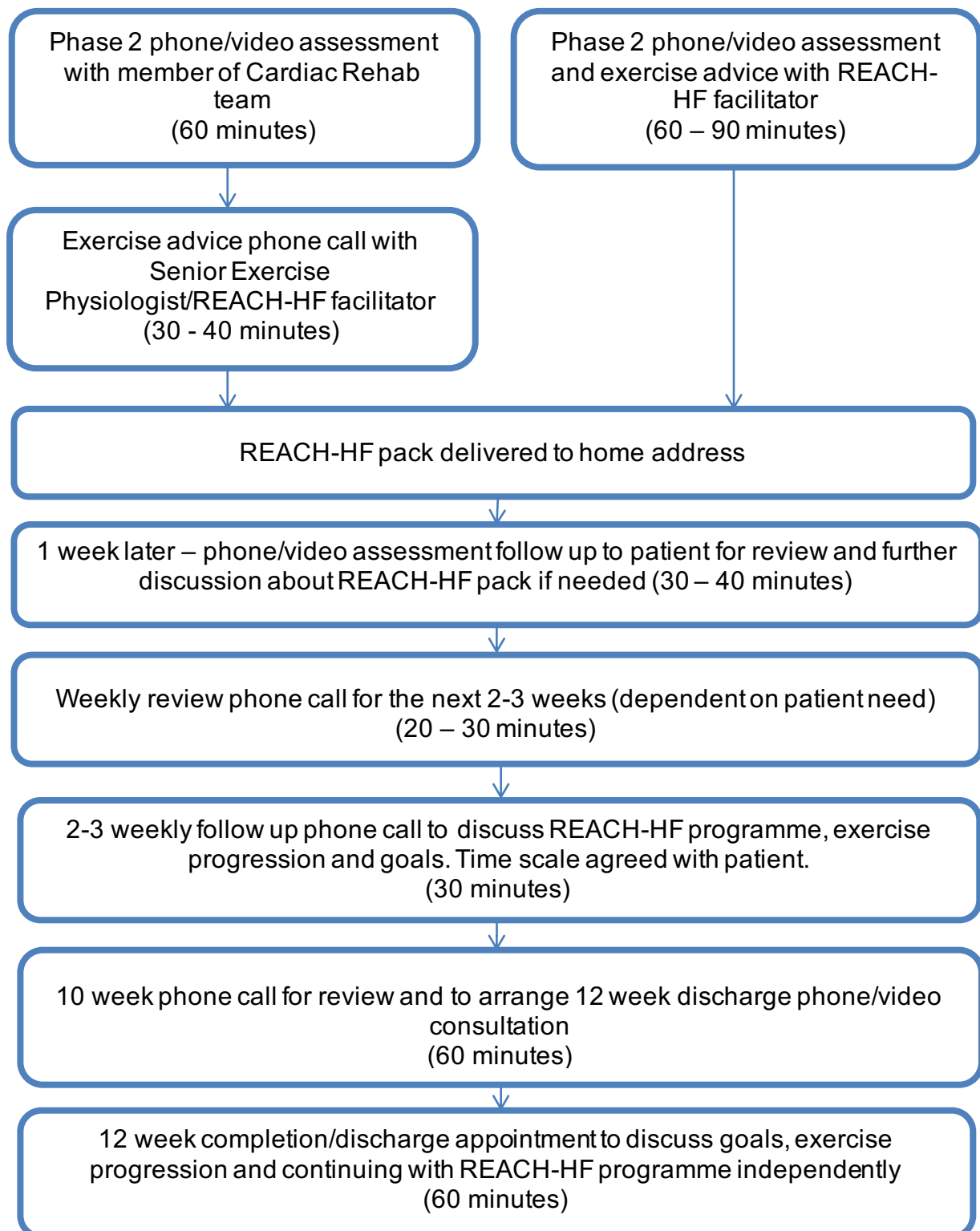
To be able to maintain programme delivery, it is important to establish an ongoing funding stream. This may be a good time to present an updated service model to your Clinical Commissioning Group (CCG) or start considering ways of sourcing additional targeted funding (e.g. under the NHS Sustainability and Transformation Plans). Such targeted funding may start to be available from 2021 as the NHS is planning to allocate £28 million over five years to improve access to cardiac rehabilitation for cardiac patients. This is part of the NHS Long Term Plan to increase uptake of rehabilitation by patients with heart failure from 8% to 33%.

Thank you for taking the time to read this implementation guide. We hope you will find REACH-HF to be a useful addition to your cardiac rehabilitation service delivery. If you have any implementation problems, please do get in touch with your REACH-HF trainers or the REACH-HF team: reach-hf@exeter.ac.uk

References:

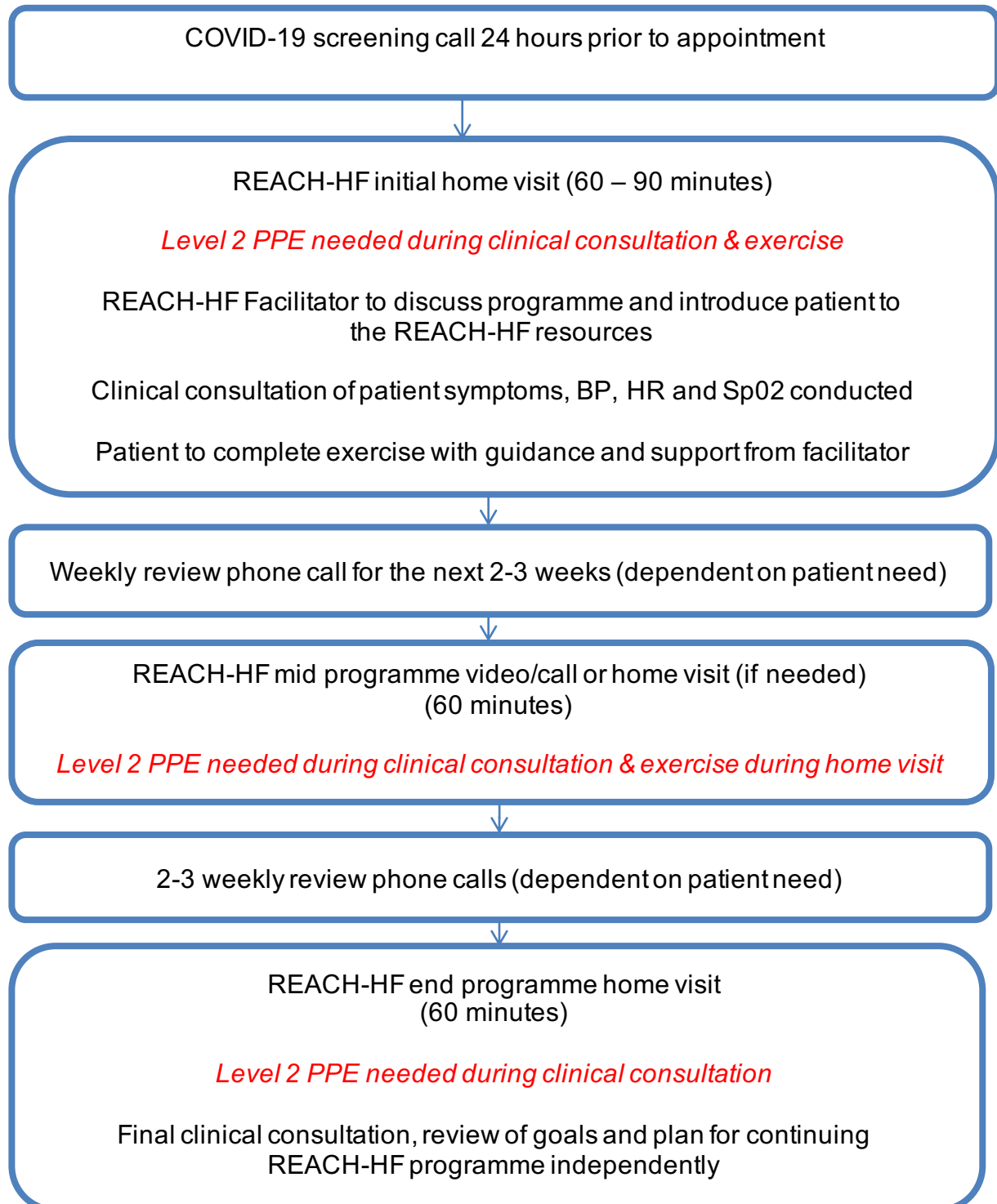
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Wirral Cardiovascular Rehabilitation
REACH-HF remote delivery pathway

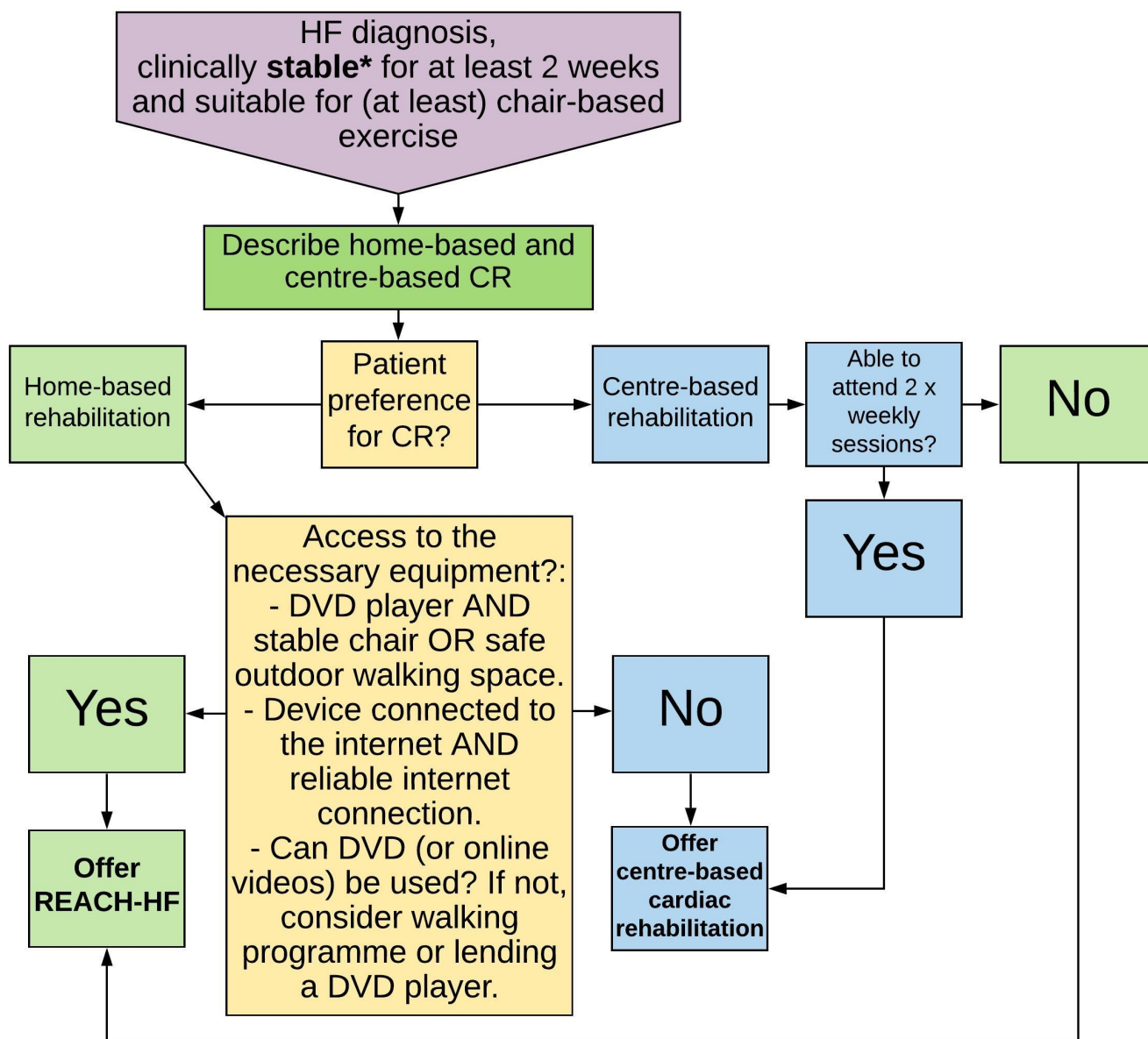


Wirral Cardiovascular Rehabilitation

REACH-HF combined delivery pathway (social distancing and PPE)



Appendix 3 – patient criteria and selection tool



* **Stable** refers to being medically stable (i.e. not having uncontrolled decompensation or a cardiovascular crisis) and able to engage in light to moderate exercise. It is acceptable to include patients who are still in the process of having titration of their medications, as long as they don't have any other clinical contraindications to engage in exercise