Aneurin Bevan Health Board

Cardiac
Rehabilitation Service
Protocol
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1 Statement
This protocol provides guidance on: The Provision of Cardiac Rehabilitation Services which is a quality requirement for local cardiac rehabilitation services in support of The National Service Framework for Cardiac Disease (2009). The process encourages other NHS organisations to share best practice and prevents local duplication of services.

2 Executive summary
This protocol emphasises the importance of providing a consistently high standard of clinical care and self management education to patients with heart disease. It must be used in conjunction with the relevant NSF’s (1) and guidelines (NICE (2005) (2), European (2008), (3) British Association of Cardiac Rehabilitation (2008) (4)).

2.1 Scope of the protocol
To include information for all ABHB employees providing and advising on CR.

3 Aim
The aim of the protocol is to underpin the provision of CR - a service that;

‘influences favourably the underlying cause of the disease, as well as achieving the best possible physical, mental and social conditions, so that those affected may, by their own efforts, preserve or resume when lost, as normal a place as possible in the community. Rehabilitation cannot be regarded as an isolated form of therapy but must be integrated with the whole treatment of which it forms only one facet’ (4).

4 Intent
The provision of a service that supports the patient and carer through the CR pathway (please see Appendix 1 {process map} and Appendix 3 – 6 {from referral to long term maintenance}).

An Integrated Care Pathway (ICP) document follows the patient through this process.

4.1 Inclusion criteria
This protocol applies to adults residing within the catchment area of ABHB newly diagnosed with;

- Acute Coronary Syndromes
- Post Revascularisation (to include post CABG & post primary, rescue and elective PCI
- Angina
- Heart Failure
- Prehab (pre-CABG/ elective PCI)
- Valve and other cardiac surgery
• Specialised Interventions (e.g. ICD Implant, transplant)

Not all cardiac rehabilitation centres offer services to the entire patient group listed. Please refer to section 5.

4.2 Exclusion criteria
Adults diagnosed with the following are excluded from the exercise component;

• Severe aortic stenosis
• Unstable angina
• Exercise induced arrhythmia
• Aortic Aneurysm >4cm
• Orthostatic BP drop >20mmHg
• Resting systolic BP > 200mmHg
• Resting diastolic BP > 110 mmHg
• Uncontrolled heart failure
• Uncontrolled diabetes
Does the patient have an appropriate condition?
- Acute Coronary Syndromes
- Post Revascularisation (to include post CABG & post primary, rescue and elective PCI)
- Angina
- Heart Failure
- Prehab (pre-CABG/ elective PCI)
- Valve and other cardiac surgery
- Specialised Interventions (e.g. ICD Implant, transplant)

Yes

Is the patient willing to attend CR?
(Discuss benefits, current activity level and motivation)

No

CR - Provide appropriate health education and reassess motivation at next contact i.e. visit/ telephone

No

CR - Assess and follow-up treatment strategy, consider referral for education and support. Refer for exercise when condition stable
Others - As above and seek advice from local CR

Yes

Is the patient free of the following contraindications to exercise?
- Severe aortic stenosis
- Unstable angina
- Exercise induced arrhythmia
- Aortic Aneurysm >4cm
- Orthostatic BP drop >20mmHg
- Resting systolic BP > 200mmHg
- Resting diastolic BP > 110 mmHg
- Uncontrolled heart failure
- Uncontrolled diabetes

No

CR - 1) home visit dependant on local resource/ telephone support
2) Assess recovery status progress dependant on need
3) Refer to local heart failure nurse for advice
4) Assess clinical status refer for specialist advice as required. Follow-up by telephone, when stable enter into CR
Others - Seek advice from local CR team

Yes

Does the patient fill all remaining criteria?
1) Able to travel
2) Post acute event
3) Newly diagnosed heart failure
4) Clinically stable

No

CR - Assess and follow-up treatment strategy, consider referral for education and support. Refer for exercise when condition stable
Others - As above and seek advice from local CR

Yes

Refer to local CR team Telephone/ referral form/ letter or fax
Supply patient with the contact number

CR – cardiac rehabilitation specialist
4.3 CR Phases – CR is divided into four phases.

- Phase 1 – whilst in hospital patients are referred to the CR team within two working days of diagnosis; once seen the patient and family are entered onto the CR pathway and issued with the relevant contact number, advice and support.

- Phase 2 – patients discharged from hospital and those patients referred from primary/tertiary care patients are contacted by a member of the CR team within 7 working days from date of discharge. The premise is to enquire on progress and offer advice and support. Arrangements for ongoing management are agreed.

- Phase 3 – following a comprehensive assessment (as outlined in the Integrated Care Pathway) and in partnership with the patient a progressive menu driven CR plan is agreed (to include exercise/health education – self management/psychological support and stress management). Patients have the choice to either attend a hospital/community facility or have a home programme. Transport where available is offered to enable attendance.

- Phase 4 – patients are encouraged to maintain their learned health behaviour by independently keeping active/undertaking regular exercise; attending community classes providing long term maintenance or attending the National Exercise Referral Scheme.

4.4 Chronic disease management

Referenced against the NSF quality requirements and utilising the CR framework the service operates, where possible, within the chronic disease management programme as outlined in Table 1.

| Table 1. Chronic disease management – referenced against NSF quality requirements and evaluation method |
|-------------|-------------|-----------------|-------------|-------------|
| **Population** | **Management Limiting Angina/ACS/MI/Heart** | **NSF standards and Quality requirements** | **Evaluation** |
| Status: Issue 1 (Interim) | Issue date |
| Approved by: | Review date |
| Owner: | Expiry date |
| Number: ABHB/ | |

Appendix 3
Appendix 4
Appendix 5
Appendix 6

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<table>
<thead>
<tr>
<th>Level 4</th>
<th>High Risk Case Managed Services</th>
<th>People requiring frequent admissions for one or more chronic condition. Often one disease receiving priority but others are causing management complications.</th>
<th>CR Specialist Case Management</th>
<th>In patient support/self care education Close links with palliative care/social services/ tertiary care Rapid response Tailored pharmacotherapy Direct link to Cons Cardiologists</th>
<th>Relevant to Standard 4 Managing the care of patients with chronic HF. Standard 6 Providing cardiac rehabilitation and Cross cutting interventions</th>
<th>Audit</th>
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<tbody>
<tr>
<td>Level 3</td>
<td>High Risk Management: Network based CCM services</td>
<td>People who are beginning to have their everyday life impacted on by their condition and those who have had one or more admissions to hospital that need to be planned against for the future</td>
<td>CR Specialist Nurse Services/ Outreach clinics/ MDT support Individual needs approach Inpatient education/ nurse led clinic for high risk patients/ home visits Community nurse led clinics Telephone contact Symptom recognition and close monitoring Enabling self management Individualised exercise programme Titration of drug therapies Direct link to cardio respiratory investigations Direct link to Cons Cardiologists</td>
<td>Audit</td>
<td>Compliance to national data base CCAD PPI</td>
<td></td>
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<tr>
<td>Level 2</td>
<td>Population Management</td>
<td>People in early stages of chronic conditions who can have their disease progression delayed by good management, education and empowerment</td>
<td>Community Based Services</td>
<td>Specialist Nurse supported Rapid Access Chest Pain Clinic/ Heart Failure clinic Exercise programme Self- care education – Heart plan, Heart Failure/Angina Plan Tailored pharmacotherapy Links with Practice nurses /District nurses Heart Start training</td>
<td>Audit</td>
<td>CCAD PPI</td>
</tr>
<tr>
<td>Level 1</td>
<td>Primary Prevention and Health Promotion</td>
<td>People identified at risk of chronic conditions – whole population and all ages</td>
<td>Health Improvement</td>
<td>Long term maintenance – community classes Education of health professionals Education to patient groups/ charities/ public forums/ schools Patient support groups</td>
<td>Record of provision Delegate feedback</td>
<td></td>
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LHB – local health board; LHFT – local heart failure team; CR – cardiac rehabilitation QR – Quality Requirements
5 Service delivery by locality

The cardiac rehabilitation service has five nurse led multidisciplinary teams. (see Appendix 1);

1. North Gwent team – based at Nevill Hall Hospital and serving the local communities of Blaenau Gwent and North Monmouthshire; referrals are also accepted from South Powys.
2. Caerphilly team – based at Caerphilly Miners Hospital and serving the community of Caerphilly
3. Pontypool team – based at County Hospital serving the community of Torfaen
4. Torfaen team– based at Canalside Resource Centre – Pontypool, serving the community of Torfaen
5. South Gwent team – based at St Woolos Hospital serving the communities of Newport and South Monmouthshire (Caldicot/ Chepstow)

The level of service provision across ABHB is outlined in Table 4

5.1 North Gwent team

- Compliant with all the CR Quality Requirements this service works to provide cardiac patients with a wide range of conditions (excluding arrhythmia) the opportunity to benefit from a fully comprehensive service.
- Patients can self-refer back into the service at any time.
- Phase 3 CR operates within the hospital for patients requiring more intense supervision in the early stages of recovery (e.g. heart failure) and in the community (Abergavenny/ Abertillery) for patients with angina, non-eventful recovery post ACS and invasive therapy such as angioplasty and CABG.
- Nurse led community heart failure clinics have been established in Monnow Vale and Blaenau Gwent.
- Nurse led clinics are available in Abertillery and Nevill Hall for patients concerned about symptomatic change.
- Home visits are available for patients with end-stage heart failure and there are sustainable links with palliative care, district nurses, chronic conditions management teams and rapid access.
- Four British Association Cardiac Rehabilitation fitness instructors plus two assistants (managed by one of the senior nurses) are responsible for the provision of long term (Phase IV) community classes (see Appendix 8). Two of the tutors also assist in providing community Phase 3 classes.
- The community classes are in part financially supported by the North Gwent Cardiac Rehabilitation and After Care registered charity; clients pay a nominal weekly fee.

Administration – secretarial staff

New patients (CR and others) are booked on to the Patient Administration System (PAS) - to be seen/ follow-up and discharge.
Patient letters follow the Situation, Background, Action, Recommendation (SBAR) proforma
Letters are forwarded within seven working days; letters noted as urgent are forwarded within 12 hrs.
Specialist nurse electronic diaries are kept up-to-date
Patient medical records are accessed/filed/returned as required
Patient enquiries are recorded using an SBAR proforma
CR patient records are filed and stored as ABHB protocol

**Patient equipment – monitoring/exercise/resuscitation**
Equipment within the hospital and community is safety checked (and recorded) as required.

**5.2 Caerphilly and Pontypool/ Torfaen teams**
- The service operating within **Caerphilly** accepts patients post MI, post revascularisation and as from Jan 2010 those with heart failure.
- Phase 3 is community based for all patients (whether low or high risk of adverse cardiac events) thus necessitating staff/patient ratio of 1:5.
- The team works to provide the basic minimum requirements as outlined in the CR pathway.
- CR provision at **County Hospital** is predominately for high risk patients post ACS and patients with heart failure.
- Revascularisation patients and those with a stable recovery post MI are referred directly to **Torfaen Locality CR community provision**. This scheme run by a small multidisciplinary team also targets patients with angina and offers an optional accredited educational component (Open College Network level 1)
- Phase IV community classes are run independently from the core team.

**Administration - secretarial staff**
**Torfaen Locality**
Administration support is shared between the 4 LTC lead nurses based in the Torfaen Locality, so CR provision is limited to one day per week.
Specialist nurse electronic diaries are kept up-to-date
Providing administration support required when registering patients attending Phase III for OCN accreditation
Keeping a log of patient telephone calls received and acting on them according to protocol.
Patient medical records are accessed/filed/returned as required
CR patient records are filed and stored as ABHB protocol

**Patient equipment - monitoring/exercise/resuscitation**
**Torfaen Locality CR community provision**
Equipment within the community is safety checked (and recorded) as required.
5.3 South Gwent team
- The service operating at St Woolos prioritises patients post MI/ post revascularisation and those with angina.
- The team works to provide the basic minimum requirements as outlined in the CR pathway.
- Phase IV community classes, in terms of funding, are run independently from the core team.

Administration - secretarial staff
New patients (CR and others) are booked on to the Patient Administration System (PAS) - to be seen/ follow-up and discharge.
Patient letters follow the Situation, Background, Action, Recommendation (SBAR) performa
Patient medical records are accessed/filed/returned as required
Patient enquiries are recorded using an SBAR performa
CR patient records are filed and stored as ABHB protocol

Patient equipment – monitoring/exercise/resuscitation
Equipment within the hospital and community is safety checked (and recorded) 6 monthly as required.

Table 2. CR service components as identified by hospital and locality
### Hospitals

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<th>RGH</th>
<th>NH</th>
<th>CM</th>
<th>County</th>
<th>St W</th>
<th>Caer</th>
<th>Nwpt</th>
<th>Tfn</th>
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### Community

#### REFERRALS

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<tbody>
<tr>
<td>Angina</td>
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<td>✓</td>
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<td>Heart/angina plan</td>
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#### PHASE 3 CR – EXERCISE/ EDUCATION/ PSYCHOSOCIAL SUPPORT

| Hospital based | na | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Community based| na | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Home          | na | na | na | na | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Occupational therapy | na | ✓  | na |    |    |    |    |    |    |    |
| Psychotherapy  | na | ✓  | na |    |    |    |    |    |    |    |

#### SPECIALIST NURSE PROVISION

| Hospital out patient clinic | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Community out patient clinic | na | na | na | na | na | ✓  | ✓  | ✓  | ✓  | ✓  |
| Palliative care support    | ✓  | ✓  | na | na | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Home visits                | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |
| Long term maintenance community classes | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  | ✓  |

**KEY**

- unavailable
- Na not applicable

### 6 Responsibilities

#### 6.1 Consultant Nurse

**Status:** Issue 1 (Interim)  
**Issue date:**  
**Approved by:**  
**Review date:**  
**Owner:**  
**Expiry date:**  
**Number:** ABHB/
The Consultant Nurse works within the Cardiology Directorate has overall responsibility for the delivery of the service (apart from Torfaen Locality) as outlined in this protocol and is professionally accountable to the Nurse Director and managerially accountable to the General Manager.

Apart from the allied health professionals, who have dual accountability to their professional lead, the nursing staff, clerical staff and the fitness instructors in the North are accountable to their respective team leads. The team leads are accountable to the Consultant Nurse.

6.2 Team leads – senior nurses
The team leads are responsible for;
Ensuring the requirements and recommendations of the protocol are met within their respective areas.
Ensuring all staff receive appropriate training and have the required knowledge and competencies to safely and effectively deliver the protocol requirements.
Ensuring regular evaluation of the protocol and procedures as practised within their areas.
Providing advice and guidance to health professionals, patients or members of the public on protocol issues

6.3 Team members
Team members are responsible for;
Working with the team leads to deliver the service as outlined in the protocol
Assist in audit and evaluate compliance with and effectiveness of the protocol

7 Staff development and training
There is a strong commitment to the personal and professional development of the Cardiac Rehabilitation team. All new multi disciplinary staff undertake an induction programme, which includes familiarisation with all relevant policies/procedures as identified within ABHB statutory/mandatory.

- Each staff member has a personal development plan and undertakes a yearly appraisal in line with KSF requirements.
- Rotation between teams is a developmental requirement.
- The multidisciplinary team meets quarterly in County CR dept; hosted by each area team in rotation. The aim of the meetings is to provide a structure within which factors that may change or influence clinical practice such as; national and local standards of care/policies, research and educational (feedback from conferences, invited speakers), audit and team management issues are discussed and progressed.
- The CR Nurse Forum arranged and chaired on an annual rotation agreement meets up to four times per year; the premise is to share and reflect on professional issues.
• Group clinical supervision for Heart Failure Nurse Specialists and interested parties is held quarterly.
• Physiotherapy offers a rotation into the speciality. A physio’ sub group, chaired by a head of dept, meets up to four times per year to review best practice guidelines.
• Occupational Therapy has a permanent post into the speciality within North Gwent.
• Each lead nurse is responsible for maintaining an up-to-date staff list of educational achievements/ plan for their respective team.
• Representation is sustained on the: Cardiac Network Clinical Collaborative Group, the CR sub group and the Heart Failure sub group; the All Wales CR Working Group; the All Wales Heart Failure Nurse Specialist Group; the All Wales HF Forum; 1000 Lives Plus and by the Nurse Consultant at the University of Glamorgan/ Cardiff University regarding the development of post graduate courses.
• Representation on national groups such as the British Association of Cardiac Rehabilitation and the British Society of Heart Failure is encouraged and supported.
• A programme of research is led by the Consultant Nurse

8 Monitoring and Effectiveness
The development of the Cardiac Rehabilitation Quality Improvement programme demonstrates a commitment to the setting of realistic, measurable standards across the range of services we provide. The service works to the NSF and respective quality standards, national guidelines (e.g. NICE/ SIGN) and was awarded the Charter Mark for excellence in public service in 1997/ 2000. The Nurse Consultant visits each site /programme at least twice annually.

8.1 Audit criteria
Audit criteria for patients attending the outpatient programme include:-

• Number, source and type of referral
• Specific demographics; age range/ gender
• Diagnosis
• Programme activity
• Specific outcomes – such as re-admission data/ patient lifestyle change

The National Audit of Cardiac Rehabilitation - NACR (all teams) and Heart Failure - CCAD (Nevill Hall) are used for comprehensive audit purposes. Data is presented twice annually at the MDT meeting by each team lead.

8.2 Teaching evaluation
Teaching undertaken by members of the team whether to health professionals, patients and carers is subject to quality monitoring and peer evaluation.

8.3 Integrated care pathway
The ICP is subject to ad hoc inspection and peer review

9 Patient and public involvement
Public and patient involvement is vital in the delivery and development of cardiac rehabilitation services including service redesign. A number of mechanisms are used to elicit information to support these activities including:

- Patient satisfaction questionnaires
- Focus groups
- Suggestion box
- Working with expert patient programmes
- Patient stories
- News letters
- Patients panel

Two dedicated charities (North Gwent Cardiac Rehabilitation and Aftercare registered charity no. 1056887 and for the south Gwent Cardiac Rehabilitation Trust Fund registered charity no. 1081525) use fundraising activities in order to support developments beyond the scope of the current health service budget. Each charity has regular representation and support through the senior nurses and Nurse Consultant.

10. Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
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<td>01873 7322511/0</td>
</tr>
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<td>01633 238398</td>
</tr>
<tr>
<td>VACANT</td>
<td>Senior Specialist Nurse County/ Caerphilly CR</td>
<td></td>
<td>01495 768713/02920807280</td>
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<tr>
<td>Sue Francombe</td>
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<td>01495 332159</td>
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<td>01873732511/0</td>
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</table>
11. References
3. ESC (2008) European Guidelines for the Diagnosis and Treatment of Acute and Chronic Heart Failure. European Heart Journal 29. 2388-2442
4. British Association for Cardiac Rehabilitation (2007). Standards and Core Components for Cardiac Rehabilitation. London. British Association for Cardiac Rehabilitation

12. Appendices
Appendix 1. PROCESS MAP

Identification of patients in secondary care requiring cardiac rehabilitation – pathway 1

Identification of patients in primary care requiring cardiac rehabilitation – pathway 1

Referral to local cardiac rehabilitation team – pathway 1

Access to multidisciplinary comprehensive cardiac rehabilitation

Individual Assessment, goal planning and review – pathway 2

Early contact (phase 1) – pathway 1

Following discharge (phase 2) – pathway 1

Structured programme (phase 3) – pathway 3

Long term maintenance (phase 4) – pathway 4

Discharge from cardiac rehabilitation - pathway

Enter data onto National Audit for Cardiac Rehabilitation (NACR)
Appendix 2. Cardiac Rehabilitation Staffing

Nurse Consultant Heart Failure Services/Cardiac Rehab

North Gwent (Nevill Hall)

South Gwent (St Woolos)

Pontypool (County)/Caerphilly (CDM)

Post MI/Surgery WTE

Nurse Bd 7 1
Nurse Bd 6 1
Physio Bd 6 0.40
Physio rotation) Bd 6 0.32
Physio tech Bd 3/4 0.2
Occ Therapist Bd 6 0.6
Dietician Bd 6 0.1
Psychotherapist ad hoc 0.43
Pharmacy Bd 6 0.005
Fitness Instructor ad hoc 0.26
AC III Bd 3 0.30

Post MI/Surgery/ HF WTE

County
Nurse Bd 7 0.5
Nurse Bd 6 0.8
Physio Bd 6 0.5
Physio tech Bd 3/4 0.5
Occ Therapist Bd 6 0.3
Pharmacy Bd 6 0.06
Psychotherapist ad hoc 0
Pharmacy Bd 6 0
AC III Bd 3 0

South Gwent

Nurse Bd 7 1
Nurse Bd 6 1
Physio Bd 6 0.3
Physio rotation Bd 6 0.2
Physio tech Bd 3/4 0.2
Occ Therapist Bd 6 0.05
Dietician Bd 6 0.08
Psychotherapist ad hoc 0.05
Pharmacy Bd 6 0
AC III Bd 3 0.16
AC III Bd 3 0.7

Angina WTE

Nurse Bd 7 1
Nurse Bd 6 1
Physio Bd 6 0.3
Physio rotation Bd 6 0.3
Physio tech Bd 3/4 0.2
Occ Therapist Bd 6 0.05
Dietician Bd 6 0.08
Psychotherapist ad hoc 0.05
Pharmacy Bd 6 0
AC III Bd 3 0.16
AC III Bd 3 0.49
AC II 0

Healthy Hearts WTE

Nurse Bd 6 1.0
Fitness Instr’ Bd 6 1.0
Physio Bd 6 0.0
Physio tech Bd 3/4 0.0
Occ Therapist Bd 6 0
Dietician Bd 6 0
Psychotherapist ad hoc 0
Pharmacy Bd 6 0
Fitness Instructor ad hoc 0
AC III Bd 3 0

Phase IV (Community Classes) = 22
Fitness Instructors Bd 5 0.32 (Charity)
Assistant Instructors 0.59 (ABHB)

Phase IV (Community Classes) = 14
Self financing

Phase IV (Community Classes) = 9
Self financing

Number: ABHB/7
**Appendix 3  Simplified Management Pathway**

*‘CARDIAC REHABILITATION PHASE 1’  (In-patient Cardiac Rehabilitation)*

<table>
<thead>
<tr>
<th>Inclusion Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Acute Coronary Syndromes;</td>
</tr>
<tr>
<td>• Post Revascularisation (to include post CABG &amp; post primary, rescue &amp; elective PCI);</td>
</tr>
<tr>
<td>• Newly diagnosed Angina;</td>
</tr>
<tr>
<td>• Heart Failure;</td>
</tr>
<tr>
<td>• Established Stable Angina;</td>
</tr>
</tbody>
</table>

**Cardiac Rehabilitation Patient Groups**

Patient is identified for Cardiac Rehabilitation and referred to Cardiac Rehabilitation Team within two working days of diagnosis *(NSF QR 119)*

---

### PRIMARY CARE

( to include ‘Self - Referral’)

Patient is identified for Cardiac Rehabilitation in Primary Care, having been either:

- Diagnosed with any of the above within the previous month and not yet known to local Cardiac Rehabilitation Team; or:
- Diagnosed with any of the above and previously known to Cardiac Rehabilitation, but now presenting with new or specific secondary prevention needs that require specialist intervention

Patient is referred by Primary Care to local Cardiac Rehabilitation Team for ongoing management.

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### SECONDARY CARE

Patient is identified for Cardiac Rehabilitation as an in-patient:

**PHASE 1**

Patient is seen by Cardiac Rehabilitation Team as an inpatient and as a minimum is given:

1. An initial assessment.
2. An initial exercise and mobilization programme.
   *(NSF QR 120)*

Referred to specialist services if need identified (e.g. smoking cessation, specialist dietary advice, psychology service, counselling and psychological support, etc)

On discharge, patient is referred to local Cardiac Rehabilitation Team for ongoing management.

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### TERTIARY CARE

Patient is contacted by local Cardiac Rehabilitation Team within seven working days of referral from Primary Care or discharge from Secondary / Tertiary Care and arrangements for on-going management are agreed *(NSF QR 125)*.

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Approved by:  
Owner:  
Review date:  
Expiry date:  
Number: ABHB/
Appendix 4  **Simplified Management Pathway**

‘CARDIAC REHABILITATION PHASE 2’  
(Post Inpatient Discharge)

EACH PATIENT RECEIVES A COMPREHENSIVE INDIVIDUAL ASSESSMENT. THIS COMMENCES FROM FIRST CONTACT, AND AT LATEST IS COMPLETED AT PHASE 2 PRIOR TO COMMENCEMENT OF A PHASE 3 STRUCTURED CARDIAC REHABILITATION PROGRAMME..  
(THIS MAY BE CONDUCTED BY TELEPHONE, HOME VISIT OR CLINIC CONSULTATION DEPENDING ON PATIENT NEED)

AS A MINIMUM, PHASE 2 CARDIAC REHABILITATION CONSULTATION WILL CONSIST OF:  
(NSF QR 121, 126 &127)

### Patient Assessment

**Assessment of Symptoms & Risk Stratification:**
- Patient clinical assessment
- Exercise assessment
- New York Heart Association Classification
- History and clinical presentation based on diagnosis and investigation results (e.g. exercise tolerance test, echocardiography, angiography 1,2.)

**Psychological/Quality of Life Status:**
- Assessment of patient and carer’s psychological support needs
- E.g HAD Psychological Assessment
- E.g Dartmouth Quality of Life Assessment

**Functional Status:**
- Functional assessment of activities of daily living

### Risk Factor Assessment

- Blood Pressure
- Lipid Profile
- Smoking History
- Waist Circumference
- Weight/BMI
- Alcohol Consumption
- Dietary Habits
- Previous CHD
- Family History
- Physical Activity
- Diabetes
- Stress & Anxiety

### Education & Goal Setting

- Patient and carer’s understanding of diagnosis
- Risk factors and targets for reduction
- Symptom recognition and management
- Activity advice and goals
- Medication and compliance awareness
- Advice on return to work and leisure activities
- Indications for further investigations
- Health beliefs & misconceptions
- Advice on importance of basic life support training

### Medication Review

- Patient understanding
- Compliance
- Contraindications
- Side effects
- Optimisation
- ‘Over the counter’ medications

### Future Management

- Issue / updating patient hand-held record
- Giving any additional information that is required
- Agreement of the structured programme of Cardiac Rehabilitation, including involvement of patient’s partner / carer
- Giving a contact number for further advice

### CARDIAC REHABILITATION PLAN

An individualised cardiac rehabilitation plan is developed with the patient and family dependant on need and risk stratification.
Appendix 5  **Simplified Management Pathway**

‘CARDIAC REHABILITATION PHASE 3’
(Structured Programme)

ON TRANSITION FROM PHASE 2 THE PATIENT RECEIVES A COMPREHENSIVE
‘PRE-PHASE 3 ASSESSMENT’ TO IDENTIFY ON-GOING CARDIAC REHABILITATION GOALS
AND RISK STRATIFICATION FOR EXERCISE IN ACCORDANCE WITH ‘BACR’, ‘SIGN’ AND
‘A.C.P.I.C.R.’ STANDARDS.

**PATIENT ASSESSMENT** (Pre-Phase 3)

- **Assessment of Symptoms & Risk Stratification to include:**
  - Exercise History
  - Functional Capacity Assessment (e.g. 6 Minute Walk Test / Chester Step Test / Shuttle Walk / ETT)
- **Assessment of Psychological/Quality of Life Status**

**Hospital**
Est’ 20% of provision

**Community**
Est’ 60% of provision

**Home based**
Est’ 20% of provision

**‘PHASE 3’ ACCESS**
Programmes are provided as near to patients home as possible and allocated on the basis of individual ‘patient risk’.

**‘PHASE 3’ PROVISION (NSF QR 122 & 128)**

- Programmes provide for a minimum of 8 weeks participation (twice weekly) depending on need;
- Programmes are delivered by an appropriately trained team consisting of: nurses, occupational therapists, physiotherapists, exercise instructors, dieticians, pharmacists, clinical psychologists, etc;
- Programmes provide the option of a ‘structured supervised exercise session’ or supported ‘home-based exercise programme’ as appropriate;
- Programmes provide patients with access to health education & secondary prevention / risk factor management with relevant supporting literature as appropriate;
- Programmes provide patients with feedback and on-going support with goal setting and support with social / vocational / leisure / occupational issues;
- Programmes provide access to psychological support and stress management;
- Programmes provide the option of family support / engagement;
- Updating Patient Held Record Card.

**If appropriate, ‘fast-track’ to Phase 4 – ‘National Exercise Referral Scheme’.

**PATIENT ASSESSMENT** (Post-Phase 3)
ON COMPLETION OF ‘PHASE 3’ PROGRAMME EACH PATIENT IS OFFERED AN ASSESSMENT OF THEIR
PROGRESS AND ARE SUPPORTED IN DEVELOPING A PLAN FOR ONGOING MAINTENANCE WITH
REFERRAL TO ‘PHASE 4’ IF DESIRED. A COPY IS ISSUED TO MEDICAL NOTES IN SECONDARY CARE AND
GENERAL PRACTITIONER / PRACTICE NURSE IN PRIMARY CARE. THE ‘PATIENT HELD RECORD CARD’ IS
UPDATED TO REFLECT PROGRESS AND FUTURE PLAN (NSF QR 129).
A menu of options exist for Phase 4 - ‘Long-Term Maintenance’

- Individualised ‘self-directed’ programme
- Supervised ‘BACR’ Phase 4 Programme
- ‘NERS’ (National Exercise Referral Scheme)

Long-Term Review and Maintenance with Primary Care is suggested at:
6 months, 12 months and Annually thereafter

Provision of Community Support Group / ‘Expert Patient Programme’

A facility exists for patient to ‘self-refer’ / contact Cardiac Rehabilitation Team for further advice if needed