Delivering Quality Cardiac Rehabilitation Services in Mid & West Wales

A Proposed Strategy to Support Health Board Service Planning and Quality Assurance
## Version Control

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**Notes**
There are several electronic hyperlinks throughout this document; these are highlighted blue and are underlined. Please visit www.mswcardiacnet.wales.nhs.uk/cardiacrehab for a full list of hyperlinks from this document where you can then navigate to the respective website/document.
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1 Summary

- This strategy is designed to support service planning with the ultimate aim of improving the quality of Cardiac Rehabilitation services by increasing efficiency and reducing waste, empowering the workforce and providing more integrated, patient centred care, all within the context of a robust sustainability framework.

- Cardiac Rehabilitation, as a chronic disease management for all cardiovascular disease is an inexpensive, cost-effective intervention offering significant outcomes compared to other cardiovascular interventions.

- The benefits of Cardiac Rehabilitation are in addition to those gained from secondary prevention. It is proven to reduce mortality, reduce disability, promote ongoing recovery, as well as improve health behaviour and socio-psychological status.

- Cardiac Rehabilitation has the potential to reduce hospital stay by facilitating early discharge, with a demonstrated 30% reduction in unplanned readmissions from patients on home-based programmes.

- Cardiac Rehabilitation has long-term effect on patient health habits, equipping them with the skills necessary to fight back against heart disease by becoming active managers of their own health.

- Early engagement with Cardiac Rehabilitation services is considered vitally important by patients and seen as critically linked to achieving best possible outcomes.

- Inequity of access, provision, funding and staffing of services is resulting in suboptimal uptake and benefits in patients requiring Cardiac Rehabilitation.

- Support of strong clinical leadership is essential to underpin meaningful development and effective governance of culturally relevant local Cardiac Rehabilitation services.

- Clinical effectiveness of Cardiac Rehabilitation services could be optimised by more efficient communication, patient documentation and clinical audit, linked to an improved information technology infrastructure.

- There is need to facilitate a culture change to make research and development a core activity within Cardiac Rehabilitation services in order to challenge traditional service models in the drive forward robust and purposeful service innovation.

- Variations in team professional constitution exist across, with particular deficits in specialist physiotherapy and occupational therapy. There is also need to identify and balance dietetic, pharmacy and clinical psychology input to Cardiac Rehabilitation services.
• **Flexible working across professions** has potential to utilise **skills to maximum effect**, thus ensuring services **meet the needs of patients**

• Careful **realignment of services** together with **stronger partnership working** between health, social care and other partners has the potential to **optimise delivery and continuity** of Cardiac Rehabilitation care.

• **Prioritisation of patient groups for Cardiac Rehabilitation**, together with an agreed **patient pathway**, provides a route map to **facilitate improved prevention, detection and management of coronary disease** through a more **integrated and holistic approach**
2 Introduction and background

What is Cardiac Rehabilitation - and how has it developed?

Cardiac Rehabilitation is defined by the World Health Organisation as:

‘…. The sum of the activities needed to influence favourably the underlying cause of the 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. Rehabilitation cannot be regarded as an isolated form or stage of therapy but must be integrated within secondary prevention services, of which it forms only one facet.’ (WHO, 1993)

Cardiac Rehabilitation is an inexpensive treatment that saves lives, reduces disability, improves health-related quality of life and helps people fight back against heart disease by becoming active managers of their own health (Knapton, 2007). It helps people to change poor health habits, regain confidence, recover psychologically, deal with social issues, and to live longer. Despite these assertions by the British Association for Cardiac Rehabilitation (BACR), findings of the National Audit of Cardiac Rehabilitation (NACR) confirm the impression that the majority of patients with heart disease do not get Cardiac Rehabilitation, with an uptake of 30% reported for the Mid and South West Wales region.

Cardiac rehabilitation services have developed in a ‘home-grown’ manner, leading to inequity of access to Cardiac Rehabilitation across the Network region and throughout Wales. This situation arises for a number of reasons, partly due to a previous lack of robust evidence to support service developments, and because limited or short-term funding has been used to resource local services. The evidence for Cardiac Rehabilitation as an intervention is now established - a Cochrane review of 48 randomised controlled trials concluding that Cardiac Rehabilitation reduces all cause mortality and is a cost-effective intervention.

The reality ‘on the ground’ is, that use of short-term approaches to funding has proven to be a barrier to thinking and acting strategically to develop such services, stifling the innovation and planning needed for the future of Cardiac Rehabilitation services and their role in managing chronic cardiovascular conditions. The Wales Audit Office report on management of chronic conditions (Wales Audit Office, 2008) criticised short-term approaches to planning and funding and recommended better planning, integration and development of services for patients with chronic conditions.
Despite being effective and cost-effective, Cardiac Rehabilitation is not provided to a consistent minimum standard across all areas of Mid & West Wales. This draft strategy is an opportunity to take a more strategic approach to Cardiac Rehabilitation that should help to improve planning, integration and development of local services and also help Local Health Boards to assure themselves of the quality of clinical care being provided through Cardiac Rehabilitation in their localities. It is an opportunity to consider how Cardiac Rehabilitation can be developed to contribute to achieving all NSF standards and delivering further value by aligning with the NHS Wales policy direction and Health Boards’ Local Delivery Plans.

The potential benefits of a robustly planned and effective comprehensive Cardiac Rehabilitation service include:

- **greater survival** for people with Coronary Heart Disease (CHD) who participate in comprehensive Cardiac Rehabilitation
- **improved exercise tolerance and quality of life** for people with mild to moderate heart failure
- **reductions in unplanned hospital admissions**
- **reduced referral time and length of hospital stay**
- **shifting appointments to more appropriate care settings**
- **reduced post-discharge complications and re-admission**
- **increased choice for patients** by offering hospital, home and/or community based rehabilitation programmes
- **improvement in clinical outcomes** as people become active self managers of their condition
- **efficient clinical management** at all four phases of the patient journey through implementation of the agreed care pathway
- **reduction in inequities** and improved access for those groups less likely to access Cardiac Rehabilitation services, including people from black and minority ethnic groups, women, people from rural communities and people with mental and physical health co-morbidities
- **better value for money** through more effective use of budgets – this may include opportunities for clinicians to undertake local service redesign to meet local requirements in novel ways.

**Scope and aims of the Cardiac Rehabilitation Strategy**

This strategy relates to Cardiac Rehabilitation services in Mid & West Wales for patients with coronary heart disease as defined in the Cardiac Disease National Service Framework for Wales (NSF) (Welsh Assembly Government, June 2009). Ministerial letter EH/ML/0019/09 states that the NSF must be delivered in full by March 2015. Standard 6 requires that Cardiac Rehabilitation should be an integral part of the treatment plan for patients with established coronary heart disease. It also responds to Key Action 29 of the WAG Cardiac Disease Strategic Framework 2009-11 which instructs the Network to ‘…develop a strategy for systematic referral of all clinically appropriate patients to Cardiac Rehabilitation teams…’.
The National Institute for Health and Clinical Excellence (NICE) in its Cardiac Rehabilitation Commissioning Guide advocates local quality assurance to ensure that integrated Cardiac Rehabilitation services effectively, efficiently and equitably provide treatment and care to the required capacity, based on evidence and best practice and responding to the needs of patients and carers.

The approach outlined here provides strategic direction towards the 2011 deadline for Health Boards to be compliant with the Welsh Assembly Government’s Cardiac Strategic Framework and to be equally relevant in helping the Abertawe Bro Morgannwg University, Hywel Dda and Powys Local Health Boards to self-assess and quality assure their services at an organisational level. It will also set the tone for purposeful and progressive developments in the next strategic framework period to 2015 and inform the steps in this progression towards achieving the NSF standard and optimal use of the skills and knowledge held by Cardiac Rehabilitation staff.

Demonstration of value, not just generation of volume, will be a particular focus throughout this strategy. There are variations between Cardiac Rehabilitation services in Mid & West Wales and across the rest of Wales, including variation in the mode of service delivery. These variations between services pose challenges to delivery in the light of:

- increasing demand
- Cardiac Rehabilitation’s ability to deliver on the wider priorities of the NSF
- future priorities that Cardiac Rehabilitation could potentially help to address.

Inequity in access, provision, uptake, choice and outcome for patients recovering from a cardiac event is unsatisfactory. This review takes a clinically engaged, quality driven, patient focussed approach to developing the strategy for Cardiac Rehabilitation in Mid & West Wales, measuring the service baseline and comparing ‘services’ rather than ‘organisations’. Using the Cardiac NSF Quality Requirements, this approach re-focuses on patient’s needs and clinical priorities to drive balanced and equitable development of Cardiac Rehabilitation services for the future.

How this strategy was developed

A multi-disciplinary advisory sub-group of the Network was set up to guide this strategy, engaging clinical and patient opinion on the best ways to improve services towards meeting NSF standards. The group provides a forum for sharing best practice across Mid & West Wales and drives Cardiac Rehabilitation developments in partnership with other Welsh regions through the All-Wales Cardiac Rehabilitation Group. The outcome of these relationships is a clear vision of priorities for Cardiac Rehabilitation and an agreed patient pathway developed and supported by Cardiac Rehabilitation professionals across Wales.

As part of the Cardiac Network Quality Programme the Advisory Group carried out a baseline review using the Wales Quality Requirements to define
progress against the standards contained in the Cardiac National Service Framework. The Group also used workforce and financial information, demand and capacity information, NICE guidance and national professional standards relating to each service to assess equity, need and potential demand for Cardiac Rehabilitation. This work provided the basis for the former Local Health Boards’ plans to develop Cardiac Rehabilitation and delivery of some elements of this strategy is already underway.

Policy drivers for Cardiac Rehabilitation in Wales

NHS Wales is being reformed. It is clear from the consultations carried out on these changes that organisations and services within the NHS should not stand in isolation and it is increasingly important to work together with partners on service developments. Cardiac Rehabilitation practitioners are used to dealing with uncertainty and are best placed to guide and shape the services that they provide in the context of the vision for NHS Wales as articulated through the Welsh Assembly Government’s policy framework.

Cardiac rehabilitation inherently focuses on health, well-being and recovering independence following illness. Cardiac rehabilitation practitioners already work closely with Assembly Government initiatives such as the National Exercise Referral Scheme to ensure more seamless and efficient services that support the vision of improved and sustained health with quality assured treatment and care based on evidence, situated closer to the patient, in settings that may be away from the hospital environment. Cardiac Rehabilitation has the potential to offer this kind of high quality care and benefits for other patient groups, as well as those with acute coronary syndromes (heart attacks).

A dedicated Cardiac Rehabilitation standard is included in the updated Cardiac Disease National Service Framework (NSF) (Welsh Assembly Government, 2009) which replaced the previous version of the NSF published in 2001. Quality requirements have been produced to support the NSF standards. The Cardiac Quality Requirements can be found here: Cardiac Quality Requirements.

It is clear from the NSF and its Quality Requirements that Cardiac Rehabilitation should be offered to a wider range of patient groups than currently receive it. As a result of baseline work on the Quality Requirements, the all-Wales Cardiac Rehabilitation Group produced planning guidance to guide any expansion or re-design of services in the context of the NSF.

Several other initiatives also link Cardiac Rehabilitation within the policy framework:

Designed to Improve Health and the Management of Chronic Conditions in Wales – an integrated model and framework for action, advocates a proactive, planned and managed approach to chronic conditions, in an integrated way with all key stakeholders. It recognises the need to prevent or delay the onset of chronic conditions in the first instance and the important
role local people and patients play in this, as well as in their self-care and self-management to support their independence.

Managing patients in the community, preventing ill-health and maintaining good health are the cornerstone of current policy for the NHS in Wales since publication of the *Review of Health and Social Care in Wales* (Wanless Project Team, 2003). Cardiac Rehabilitation inherently focuses on this type of chronic condition management within primary care and is ideally placed to focus on services delivered within the community. It also fits with the emerging policy outlined in the *Consultation on the Development of Community Nursing Strategy for Wales* and the focus on Cardiac Rehabilitation as a specialist Public Health Nursing role.

**NICE Clinical Guideline CG48**: MI Secondary Prevention (NICE, 2007) emphasises assessment of individuals’ risk, the need for Cardiac Rehabilitation and development of individualised plans to meet their needs.

Service integration, with development of the health and local authority workforce, particularly for ongoing maintenance and delivery of services closer to the patient is recognised as an area for development in the final consultation of a *Workforce Development Plan* (Wavehill, 2009) to support delivery of Climbing Higher, Food and Fitness and Quality of Food.

Despite extensive changes to NHS Wales, there are positive messages about Cardiac Rehabilitation in Welsh Assembly Government policy about the need to embed Cardiac Rehabilitation as an integral part of the package of care for people at risk of, or who have cardiac disease, and to take a strategic approach on service development. These messages included ‘ring-fencing’ Cardiac Rehabilitation budgets within NHS Wales financial allocations to ensure a ‘minimum spend’ and specific reference to Cardiac Rehabilitation in the Welsh Assembly Government’s Cardiac Strategic Framework 2008-11.

In 2008 the Welsh Assembly requested that each former LHB assess current Cardiac Rehabilitation provision against the requirements of the NSF Standard and submit a Network-level action plan by 31st December 2008. The plans submitted by each of the LHBs were produced under the auspices of this strategy and LHBs have worked through the Cardiac Network to implement their plans.

The Welsh Assembly Government also made clear that a data collection exercise will be undertaken to ascertain baseline investment in Cardiac Rehabilitation services.
Heart Disease in Mid & West Wales

Wales has the second highest rate of CHD mortality in the UK and Wales is known to have generally higher levels of deprivation than most of the UK. There are high levels of deprivation in Mid and West Wales with some of the highest of all in Wales in parts of Mid & West Wales, particularly Swansea and Neath Port Talbot. The National Public Health Service (NPHS) produced epidemiological profiles for each of the Cardiac Network areas in 2007. The NPHS CHD profile for Mid & West Wales can be downloaded by clicking the on the following link: Cardiac Network Profiles

Access to cardiac services also varies between areas of the UK, Wales and within Mid & West Wales. If Mid & West Wales is to achieve rates of access to cardiac services that compare with European expected rates in an equitable way across the region, further attention will need to be paid to the variation and existing low rates of access in some areas identified in the table below and services will need to expand or re-configure to meet the increased need for Cardiac Rehabilitation for patients undergoing these procedures.

Summary by Intervention (Cardiac Procedures) – Wales Mid/South West 2006-7 (Source: British Cardiovascular Society, 2009)

Further information on relative access to cardiac interventional procedures in the UK is available in a report commissioned by the British Cardiac Society (BCS) British Heart Foundation (BHF) and the Cardiovascular Coalition Access to Cardiac Care in the UK (Oxford Healthcare Associates, 2009)
What patients and service users tell us…

British Heart Foundation (BHF) held focus groups in October 2008 which sought to explore patients’ and carers’ views of Cardiac Rehabilitation Services in their locality. Focus groups were also carried out in South East Wales and North Wales. The BHF report from the focus groups can be found on the Cardiac Network website.

Patient statements regarding Cardiac Rehabilitation:

- Cardiac Rehabilitation “has given me my life back.”
- Cardiac Rehabilitation has made “the difference between living a life or just existing in fear of what might happen”.
- “Without it (rehab) I wouldn’t be here, I’d probably be dead by now!”
- Cardiac Rehabilitation “should be part of the (NHS) prescription.”

What patients perceived as personal benefits of Cardiac Rehabilitation:

- “A chance to discuss the causes of your condition and to learn the medical view about the things that have been shown to help reduce the risk of further heart problems.”
- “The opportunity to take part in programmes for improving physical activity, diet and weight management and to stop smoking.”
- “Advice and guidance on the medicines you’ve been given.”
- “Advice and, if desired, practical support to deal with the psychological and social consequences of heart disease.”
- “Help with returning to work, accessing benefits and getting your life back.”
- “The chance to meet other people going through similar experiences.”

Conclusions from the focus groups:

- Earliest possible engagement with the Rehabilitation Service is critical to achieving best possible outcomes from the patient’s perspective.
- The presumption should be that all cardiac patients get access to rehabilitation services if they want it and there are no clinical obstacles.
- Referral processes should be clear and uniform within NHS.
- Clear statements of what patients might expect from rehabilitation, and on what timescales should be available at the earliest opportunity.
• **Flexibility in designing programmes to the individual’s needs is valued as against any ‘one-size fits all’ tendency.**

• **Good communication between different elements of sometimes complicated NHS structures/arrangements is essential to avoid delay and confusion.**

• **Programmes should be pro-active and accommodating in relation to relevant participation by family/carers.**

• **Cardiac Rehabilitation groups and classes should as far as possible be locality based, and this most particularly with reference to rural areas.**

• **Arrangements for Phase 4 (long-term maintenance and management) should be reviewed so that ‘partnerships’, e.g. with local authorities and other providers are secure and uniform in all areas, including the matter of charges.**

• **‘Quality of staff’ is a central factor that influences the patient’s experience of Cardiac Rehabilitation.**
3 A vision for Cardiac Rehabilitation in 2015

Vision Statement

‘Supporting the development of equitable, cost efficient and resource sustainable Cardiac Rehabilitation services equipped to deliver high quality, evidence based, clinically effective and culturally relevant care across Mid and West Wales.’

Cardiac Rehabilitation in 2015

By 2015, Local Health Boards will need to have implemented this strategy to enable systematic referral of all clinically appropriate patients to Cardiac Rehabilitation Teams staffed and providing services in accordance with agreed guidelines as set out in the Quality Requirements and in line with the Cardiac Strategic Frameworks.

The All-Wales Cardiac Rehabilitation Working Group agreed priorities for achieving this vision in a stepwise manner. Recognising that health professionals will find it difficult to prioritise patient groups if this appears to contradict evidence based care and national guidance, the view of the All Wales Cardiac Rehabilitation Working Group is that all patients in the following diagram should receive appropriate Cardiac Rehabilitation. The Group also acknowledged that whilst there is need to consider priorities in planning to develop services, these may vary in some areas, and be influenced by existing services. It would be inappropriate to disengage services in a particular area simply because it does not comply with the ‘Stages’ illustrated.
Stages towards achieving NSF Cardiac Rehabilitation Standards by 2015

Stage 1
Acute coronary syndromes (ACS); Post-revascularisation (to include post CABG & post primary, rescue & elective PCI).

Stage 2
Newly diagnosed angina; heart failure.

Stage 3
Established stable angina; Pre-hab (pre-CABG/elective PCI); valve surgery and other cardiac surgery; specialised interventions (e.g. ICD implant, transplant).

Adapted from – *Patient Groups for Cardiac Rehabilitation. All-Wales Cardiac Rehabilitation Group (February 2009).*

**Fig. 2**

Figure 2 above represents patient diagnostic groups in ‘stages’ to inform future planning and fits with other regional networks’ strategies for Cardiac Rehabilitation across Wales. As they are arranged, the stages are consistent with NICE guidance and constitute the strategic objectives towards meeting NSF Standard 6 by 2015.

**National Service Framework**

By 2015, everyone with established coronary heart disease should be offered an appropriate evidence-based Cardiac Rehabilitation plan and have the high-quality, multi-disciplinary support they need to achieve the plan.
Towards achieving Standard 6 – Providing Cardiac Rehabilitation, by 2015

To achieve this vision, in addition to achieving the stages and Key Actions towards compliance with the NSF, stakeholders will need to assure the quality of Cardiac Rehabilitation services by implementing key actions and regularly assessing progress using the Quality Requirements. This process is already underway through the Cardiac Rehabilitation Advisory Group’s prioritised action plan, but will need full engagement of the new Local Health Boards and recognition within their Cardiac Local Delivery Plans (LDPs) in order to succeed. Following this process will also assist the new Local Health Boards by informing their organisation’s LDP and to articulate the LHBs’ achievement of the Health Care Standards for Wales where they relate to heart disease.
4 Where are we now?

Cardiac Rehabilitation in Mid & West Wales

A baseline review using the Cardiac NSF Quality Requirements was carried out by the Network’s Cardiac Rehabilitation Advisory Group in May 2008. The review highlights the gaps and shortfalls in Cardiac Rehabilitation services and gives clinical recommendations from the Advisory Group. The full report and recommendations from the group can be found at the following link: Cardiac Rehabilitation Baseline Review 2008. The Advisory Group is to carry out a further assessment of progress with implementing the recommendations during 2010.

The following is a summary of the findings and recommended actions from the Baseline Review carried out in 2008-9 grouped into key areas for action. Prioritisation and risks associated with the actions are detailed in Appendix 1 – Key Actions:

Clinical Leadership

The principles of good leadership include the ability to: establish direction or vision; persuade people to share the vision; innovate; communicate; inspire and motivate. Clinical leaders of Cardiac Rehabilitation services also need to have the responsibility and authority to take forward improvements.

Leadership to drive collaborative working between local services, regional Cardiac Network Advisory Groups and the All Wales Cardiac Rehabilitation Working Group has already proven instrumental in addressing a number of identified issues for Cardiac Rehabilitation services and supported agreement between professionals on how to tackle these issues effectively.

The Cardiac Rehabilitation Baseline Review found that:

- Not all Cardiac Rehabilitation teams have a designated clinical team leader.
- The extent to which clinical team leaders are engaged with strategic planning, either for their local service, or across services, varies across Mid & West Wales.
- The majority of services don’t have a designated lead consultant cardiologist, physician or GP with a special interest in Cardiac Rehabilitation. This leads to difficulties for staff in accessing timely and appropriate clinical and strategic support.
Recommended actions:

- Where this has not already been addressed a designated Clinical Team Leader should be appointed within each Cardiac Rehabilitation team. The Clinical Team Leader should engage in Health Board forums where there is a strategic remit for Cardiac National Service Framework (NSF) implementation and also with their regional Cardiac Rehabilitation Advisory Group (The Cardiac Rehabilitation Advisory Group is a strategic sub-group of the Cardiac Network).

- Health Boards should designate a lead consultant cardiologist, physician, or GP with a special interest in Cardiac Rehabilitation. The lead cardiologist, physician, or GP should be available for support and advice.

Clinical Effectiveness

Clinical Effectiveness refers to the extent to which specific clinical interventions in Cardiac Rehabilitation do what they are intended to do (NHS Quality Improvement Scotland) i.e. maintain and improve the health of patients securing the greatest possible health gain from the available resources. It is described as the right person (you) doing:

- the right thing (evidence based practice)
- in the right way (skills and competence)
- at the right time (providing treatment/services when the patient needs them)
- in the right place (location of treatment/services)
- with the right result (clinical effectiveness/maximising health gain).

Clinical effectiveness is thinking critically about what you do, questioning whether it is having the desired result and making a change to practice. It is based on evidence of what is effective in order to improve patient care and experience. This can happen at NHS Board, directorate, department or team, or individual level.

The Cardiac Rehabilitation Baseline Review found that:

- Operational policies did not exist for all Cardiac Rehabilitation services or were outdated Not all services had clinical guidelines covering all the phases of Cardiac Rehabilitation.

- There is variation in the extent to which services use clinical guidelines.

- Most services do not achieve referral within 2 working days of diagnosis and contact within 7 working days of discharge from hospital or GP referral.
• There are delays in referral to local Cardiac Rehabilitation services following discharge, particularly ‘out of county’ and from tertiary to secondary care.

• Obstacles in transition between phases of Cardiac Rehabilitation are contributing to fragmentation of patient care and increased patient drop-out.

• Variations in approach and models for structured exercise programmes (Phase 3) may lead to inequitable patient benefit and outcomes.

• There is inconsistency in the extent to which services are able to provide ‘home-based’ exercise programmes.

• The end of BHF 3 year short-term funding to support the National Audit of Cardiac Rehabilitation (NACR) threatens each team’s ability to continue participation in the national audit. Issues have been identified around the adequacy, reliability, consistency of approach, organisation and process in using NACR across Wales.

• The majority of Phase 4 programmes (Long-term maintenance) are limited to gym-based and ‘circuit’ programmes which fail to accommodate patients’ differing needs. For example, many programmes are not designed for less physically able patients that experience particularly high levels of depression and social isolation.

• The National Audit of Cardiac Rehabilitation (NACR) highlights a low average of 30% uptake to Cardiac Rehabilitation within the Mid & South West Wales region.

**Recommended actions:**

• Where operational policies are absent or outdated, they should be developed or revised, and a regular process to review operational policies should be established. A peer review process would support this, and also provide opportunities to share good practice.
• Process mapping and other available service re-design techniques will help teams to compare the patient journey for Cardiac Rehabilitation with the agreed care pathway. Where patient journeys cross organisational boundaries, service re-design should take account of this. Patients should be involved in service re-design and provide the focus for its outcomes.

• Local services should work with the Network, regional Advisory Group and All-Wales Cardiac Rehabilitation Working Group to explore variations in approach and models of Cardiac Rehabilitation. An ‘optimal model’ for Cardiac Rehabilitation will assist service re-design.

• Strong professional links and collaboration between NHS and local authority staff will improve local integration, co-ordination, planning and delivery of services reducing potential for fragmentation of care and drop-out from Cardiac Rehabilitation programmes.

• Local Cardiac Rehabilitation services should work with Local Authority partners to ensure that wherever possible, Cardiac Rehabilitation programmes are co-located in community settings.

• There is a need for investment or service reconfiguration to enable the provision of ‘home-based exercise programmes’.

• Health Boards should ensure that high quality data input to the National Audit for Cardiac Rehabilitation is supported.

• Opportunities should be identified to support collaborative innovations, evaluation and research, including the broader application of Cardiac Rehabilitation staff skills in areas where there is evidence of the need for: lifestyle modification; education; risk factor management; psychosocial support; protective drug therapy; and cardiovascular long-term management strategy. Clinical leadership as outlined above can help to identify these opportunities.

Key clinical issues

Key clinical issues in providing an effective and comprehensive Cardiac Rehabilitation service are:

• active identification of all people potentially eligible for Cardiac Rehabilitation and prior to hospital discharge, encouraging them to take part in Cardiac Rehabilitation

• Assessment of an individual’s risk and need for Cardiac Rehabilitation and developing individualised plans to meet those needs in line with NICE clinical guideline CG48 on MI: secondary prevention and the British Association for Cardiac Rehabilitation document Standards and Core Components for Cardiac Rehabilitation

• providing corporate and quality assurance (NICE)
Information and Information Technology (IT)

Better quality of information and deployment of Information Technology have the potential to drive improvements in clinical effectiveness that are needed to achieve NSF standards through improved referral, communication and audit systems. Informing Healthcare is a Welsh Assembly Government programme set up to improve health services in Wales by introducing new ways of accessing, using and storing information.

The Cardiac Rehabilitation Baseline Review found:

- Inadequate referral and communication systems compromise the process for meeting the standard for patients to be contacted within 7 days of discharge in some areas. Some Cardiac Rehabilitation services do not have adequate systems in place to monitor this process.

- Efficient referral and communication systems are integral to prompt ongoing management for patients and the ability to carry out audits.

- The National Audit for Cardiac Rehabilitation is currently limited in its ability to adequately provide for robust performance monitoring of Cardiac Rehabilitation services.

Recommended actions:

- Health Boards should consider developing a suitably robust tool for performance monitoring Cardiac Rehabilitation services through a collaborative approach with partner organisations. An electronic referral system for Cardiac Rehabilitation could also improve communication between services and support a unified database using an agreed data set for Cardiac Rehabilitation.

- Opportunities should also be identified to develop the Cardiac Rehabilitation patient documentation as an electronic tool to improve service efficiency, time management and contribution to audit.

Staff Education & Training

Training and education of the cardiac workforce is central to achieving the high quality of care needed to deliver the Cardiac National Service framework. Without staff that are appropriately trained and developed Health Boards will be unable to ensure the delivery of the highest quality of cardiac services to meet the needs of local people for Cardiac Rehabilitation.

The Cardiac Rehabilitation Baseline Review found:

- Variations in the level of professional development and training available to Cardiac Rehabilitation staff, ranging from individual attendance at study
days, seminars and conferences, to organised access to in-house training and externally provided training.

- Limited opportunities for some teams to access training, education and clinical supervision.

- Collaboration on education and training related to Cardiac Rehabilitation also varied across the region.

- No formal links between the Cardiac Rehabilitation community, universities, and other higher education institutions.

- There was no consensus on identified competencies for Cardiac Rehabilitation professionals.

**Recommended actions:**

- Health Boards should review training needs of Cardiac Rehabilitation staff to inform local, organisational and national workforce planning.

- Structured Clinical Supervision should be developed to support Cardiac Rehabilitation staff.

- Education and training needs, identified through structured Clinical Supervision should be addressed equitably, with emphasis on skills experiential learning.

- LHBs should consider opportunities for multi-disciplinary education in collaboration with Local Authorities and neighbouring Health Boards, potentially facilitated by the Cardiac Network. Educational interventions with a focus on cardiovascular prevention and risk factor management could develop Cardiac Rehabilitation staff; Local Authority staff; Primary Care; community and hospital staff for the benefit of people with and at risk of cardiac disease.

- Links should be developed Universities and other Higher Education institutions to develop staff education and training programmes.

- The Advisory Group should collaborate with the All-Wales Cardiac Working Group in developing core competencies for personnel working in Cardiac Rehabilitation.

**Staffing and Workforce Planning**

Getting the right staff with the right skills, in the right numbers is the essential foundation to improving Cardiac Rehabilitation services. Getting workforce planning wrong means that improvements are more difficult to achieve and at worst, can lead to failing or poor services.
The Cardiac Rehabilitation Baseline Review found that:

- There is evidence of variation and inequity in staff levels and professional composition across services. The majority of Cardiac Rehabilitation teams operate with staffing levels significantly below recommended minimum requirements for a Cardiac Rehabilitation service.

**Fig. 5a**

<table>
<thead>
<tr>
<th>Profession</th>
<th>Bridgend Recommended WTE</th>
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**Fig. 5b**

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</table>
Delivering Quality Cardiac Rehabilitation Services

Swansea

PROFESSIONS

Recommended WTE
Current WTE

Fig. 5c

Carmarthenshire

PROFESSIONS

Recommended WTE
Current WTE

Fig. 5d
Delivering Quality Cardiac Rehabilitation Services

**Pembrokeshire**

![Graph showing whole time equivalents (WTE) for various professions in Pembrokeshire.](image)

PROFESSIONS

**Ceredigion**

![Graph showing whole time equivalents (WTE) for various professions in Ceredigion.](image)

PROFESSIONS

Fig. 5e

Fig. 5f
Figures 5a – 5g illustrate the short-falls in current staffing levels and professional composition for each team analysed against national standards. This analysis should be considered in conjunction with the findings of the Baseline Review, which provides a more in-depth breakdown of data for each team.

NOTE:

1. Analysis for the Nurse, Physiotherapist, Pharmacist, Clinical Psychologist and Administration & Clerical components has been completed using ‘British Association for Cardiac Rehabilitation’ (BACR) minimal staffing levels. However, identified limitations to this analysis include the fact that these recommendations:
   - are now dated, due review in 2010 and thus may not most accurately reflect staffing needs given more recent developments in Cardiac Rehabilitation services;
   - were issued prior to the advent of the National Audit for Cardiac Rehabilitation and thus do not reflect additional Administration & Clerical workload currently experienced by teams;
   - apply essentially to urban populations and do not fully reflect the demands upon services working in largely rural settings.
   - do not reflect the additional demands given the increased CHD morbidity within Mid and South West Wales
   - currently do not include recommendations for the level of occupational therapy component for a team.

2. Whilst the ‘BACR’ recommends inclusion of the Occupational Therapy component within the Cardiac Rehabilitation team, there is currently no stipulated minimal staffing level for this discipline. Thus, for the benefit of this analysis, the ‘recommendation’ used in Figure 5 has been developed as part of a benchmarking process utilising average levels of Occupational Therapy staff levels within the region.

- Inadequate capacity and staff resource is leading to inequities in provision of Cardiac Rehabilitation services in each diagnostic group. Provision of Cardiac Rehabilitation for each diagnostic patient group for each service is captured in the Baseline Review

- Variation in the professional composition of teams across the region.
• Significant gaps and inequities are evident in: physiotherapy; occupational therapy; dietetics; pharmacy; psychology.

• Some services have no route of referral for specialist psychology input, counselling and psychological support for patients

**Recommended actions:**

• There is a need to address inequities in provision of Cardiac Rehabilitation between diagnostic groups. The All-Wales Cardiac Rehabilitation Group has produced guidance to assist LHBs in assessing this need. The guidance can be found on the Cardiac Networks website. In most areas this will require investment or service reconfiguration.

• There is a significant need to develop routes of referral for specialist psychology input, counselling and psychological support for Cardiac Rehabilitation patients. In most areas, this will require investment or service reconfiguration.

• The National Public Health Service (Now part of Public Health Wales) produced a series of [interactive tools](#) to help NHS organisations estimate the capacity of cardiac rehabilitation required to meet NICE standards. Health Boards should use the capacity tool for their area, in conjunction with recommendations on minimum staffing levels, to inform service planning towards meeting NSF requirements.

• Staff levels should reflect at least the minimum levels outlined by the British Association of Cardiac Rehabilitation (BACR).

**Research and Development**

Research, evaluation and audit in the NHS have benefits to both patients and the service. Fostering research and innovation within the NHS Wales Research Governance Framework can improve patient safety, develop better services and save money.

**The Cardiac Rehabilitation Baseline Review found that:**

• Variations in models and approach to delivery of Cardiac Rehabilitation across the region have the potential to affect inequitable patient benefit and outcomes.

• Formalised research and evaluation is needed to ascertain most optimal and cost effective ways of delivering Cardiac Rehabilitation services.

• There is currently no identified strategy for research and development in Cardiac Rehabilitation to inform needed future service re-design.
Recommended actions:

- Health Boards and their partners in the Mid & South West Wales Cardiac Network should contribute to a programme of cardiovascular research and development that includes investigation of various aspects of Cardiac Rehabilitation.

- Scoping of potential research, evaluation and audit projects by Cardiac Rehabilitation professionals and members of the Advisory Group could help to focus and inform research on key areas of importance in developing Cardiac Rehabilitation and Wales’ contribution to the knowledge base on cardiovascular disease risk management and prevention.
5 Priorities for Change

Many of the actions contained in this strategy will require no extra financial resources and are currently being addressed either by Cardiac Rehabilitation teams locally, by collaboration with partners though the Network at regional or all-Wales level, or by engaging with Local Health Board clinical management structures. Re-evaluation of the Baseline Review carried out in 2008 will track progress to date. For example; most services will have identified a team leader as an outcome of the recommendations from the Baseline review and they will also be developing or revising operational policies. Other actions will require resources, either in the form of support for service re-design, or through identification of financial resources and will be the responsibility of Local Health Boards through their Local Development Plan (LDP) and Annual Operating Framework (AOF) processes.

Risk and Priority

The Action Plan accompanying this strategy takes a view of risk and priority for organisations based on the risk assessment tool published with the Cardiac Quality Requirements. LHBs should refer to the Quality Requirements and the risk assessment scoring system described within the Quality Requirement tools for detailed information on risk weighting. This work is in its early stages and the weights require further validation. However; the scores have been used where appropriate to provide an initial guide to risk and priority. Local Health Boards may have their own risk assessment policies and procedures that consider other factors including resource availability, demand and capacity.

A suggested priority is offered to guide LHBs in addressing the actions within their internal processes. After identification of team leadership, actions related to staffing levels and clinical effectiveness of Cardiac Rehabilitation services carry the combination of highest risk and suggested priority.

Financial Considerations

Priorities most likely to require identification of financial resources are those required to equate staffing levels to minimum requirements. Based on the Advisory Group’s analysis of current patient demand (2008-9) and NICE recommended expenditure of £550 per patient, an estimated total of £630,000 alongside service re-design would address current gaps and inequities in service provision Mid & West Wales, with investment targeted at the identified need for physiotherapy, occupational therapy, dietetics, pharmacy and psychology.
Financial Summary – Achieving Cardiac NSF Standard 6

<table>
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<tr>
<th>Service Area</th>
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<td>Powys</td>
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</tbody>
</table>

The observed cost of Cardiac Rehabilitation varies enormously, from £228 to £560 per patient, despite it being highly cost effective at around £550 per patient.

Projecting Potential Demand

Staffing and budgetary analysis up to this point is based upon observed patient uptake in the 2008-9 financial year. The National Audit for Cardiac Rehabilitation claims that this reflects a 30% uptake of Cardiac Rehabilitation...
Delivering Quality Cardiac Rehabilitation Services

across the region. Similar analysis using NPHS discharge data reflects patient uptake of Cardiac Rehabilitation in a range from 25% - 93%. British Heart Foundation (BHF) advocates that services should aspire to an optimal uptake of 85% for eligible patient groups.

**Figure 8** Blue section indicates patients seen in 2008-9. Red indicates estimated eligible patients who could benefit from CR but currently don’t receive it. The blue and red section combined would constitute an 85% uptake. The 85% target for uptake is informed by the English NSF and BHF campaign. The green section equates to 15% of eligible patients who wouldn’t attend for various reasons. The table highlights current inadequate funding, but also that there are potentially many more patients that could benefit from Cardiac Rehabilitation.

**Figure 9** estimates additional staffing to meet the demand outlined above.
Measuring Progress – key quality and performance markers

Demonstrating progress with achieving the Cardiac Quality Requirements is a key marker of improvements in the quality of Cardiac Rehabilitation services. Self-monitoring of this progress is being undertaken by the Advisory Group which is repeating the baseline review during 2010. However; mechanisms for quality assurance within Health Boards will be necessary

- **Service and performance targets**, including estimated activity levels and case mix, waiting and referral-to-treatment times (ensuring that patients and carers do not experience unnecessary delays), complaints procedures.
- **Clinical governance arrangements**, including incident reporting.
- **Clinical quality criteria**: appropriateness of referral, consenting procedures, clinical protocols.
- **Audit arrangements**: frequency of reporting, reporting route and format, and dissemination mechanisms; this should include auditing the proportion of eligible patients requiring cardiac rehabilitation who are provided with care, and monitoring of patient outcomes and complications. See [audit criteria for NICE clinical guideline CG48 on MI: secondary prevention](https://www.nice.org.uk/guidance/cg48), which includes recommendations to link with the National Audit of Cardiac Rehabilitation.
- **Health, safety and security**: infection control, waste management, confidentiality procedures, legislative requirements.
- **Equipment**: testing and calibration of exercise and monitoring equipment.
- **Accreditation requirements**: for some or all elements of the service, the premises and/or staff.
- **Patient satisfaction**: patient and carer perspective and perception of service provision, complaints.
- **Patient outcomes**: reduced risk of further cardiac problems, improved quality of life, reduction in hospital admissions, improved return to work rates, reduced blood pressure and cholesterol levels, improved patient
knowledge and psychosocial well-being and reporting these outcomes to the National Audit of Cardiac Rehabilitation.

- **Staff competencies**: individual and team baseline requirements, monitoring and performance. See Implementation advice for NICE clinical guideline CG48 on MI: secondary prevention for recommendations on assessing training needs.

- **Information requirements**, including both patient-specific information (NHS number, referring GP, provision of high-quality information to patients/carers) and service-specific information (referral-to-treatment times, workload trends, number of complaints).

- **The process for reviewing the service with stakeholders**, including decisions on necessary changes

Two initial recommended performance measures for monitoring performance of Cardiac Rehabilitation teams are identified from the NSF

- referral within 2 working days of diagnosis
- contact within 7 working days of discharge from hospital or GP referral

The Cardiac Rehabilitation Advisory Group is working with NACR and local audit processes to identify further performance criteria.
6 Key Recommendations

Clinical Leadership

Recommended actions:

- Where this has not already been addressed a designated Clinical Team Leader should be appointed within each Cardiac Rehabilitation team. The Clinical Team Leader should engage in Health Board forums where there is a strategic remit for Cardiac National Service Framework (NSF) implementation and also with their regional Cardiac Rehabilitation Advisory Group (The Cardiac Rehabilitation Advisory Group is a strategic sub-group of the Cardiac Network).

- Health Boards should designate a lead consultant cardiologist, physician, or GP with a special interest in Cardiac Rehabilitation. The lead cardiologist, physician, or GP should be available for support and advice.

Clinical Effectiveness

Recommended actions:

- Where operational policies are absent or outdated, they should be developed or revised, and a regular process to review operational policies should be established. A peer review process would support this, and also provide opportunities to share good practice.

- Process mapping and other available service re-design techniques will help teams to compare the patient journey for Cardiac Rehabilitation with the agreed care pathway. Where patient journeys cross organisational boundaries, service re-design should take account of this. Patients should be involved in service re-design and provide the focus for its outcomes.

- Local services should work with the Network, regional Advisory Group and All-Wales Cardiac Rehabilitation Working Group to explore variations in approach and models of Cardiac Rehabilitation. An ‘optimal model’ for Cardiac Rehabilitation will assist service re-design.

- Strong professional links and collaboration between NHS and local authority staff will improve local integration, co-ordination, planning and delivery of services reducing potential for fragmentation of care and drop-out from Cardiac Rehabilitation programmes.

- Local Cardiac Rehabilitation services should work with Local Authority partners to ensure that wherever possible, Cardiac Rehabilitation programmes are co-located in community settings.
• There is a need for investment or service reconfiguration to enable the provision of ‘home-based exercise programmes’

• Health Boards should ensure that high quality data input to the National Audit for Cardiac Rehabilitation is supported.

• Opportunities should be identified to support collaborative innovations, evaluation and research, including the broader application of Cardiac Rehabilitation staff skills in areas where there is evidence of the need for: lifestyle modification; education; risk factor management; psychosocial support; protective drug therapy; and cardiovascular long-term management strategy. Clinical leadership as outlined above can help to identify these opportunities.

Key clinical issues

Key clinical issues in providing an effective and comprehensive Cardiac Rehabilitation service are:

• active identification of all people potentially eligible for Cardiac Rehabilitation and prior to hospital discharge, encouraging them to take part in Cardiac Rehabilitation

• Assessment of an individual’s risk and need for Cardiac Rehabilitation and developing individualised plans to meet those needs in line with NICE clinical guideline CG48 on MI: secondary prevention and the British Association for Cardiac Rehabilitation document Standards and Core Components for Cardiac Rehabilitation

• providing corporate and quality assurance (NICE)

Information and Information Technology (IT)

Recommended actions:

• Health Boards should consider developing a suitably robust tool for performance monitoring Cardiac Rehabilitation services through a collaborative approach with partner organisations. An electronic referral system for Cardiac Rehabilitation could also improve communication between services and support a unified database using an agreed data set for Cardiac Rehabilitation.

• Opportunities should also be identified to develop the Cardiac Rehabilitation patient documentation as an electronic tool to improve service efficiency, time management and contribution to audit.
**Staff Education & Training**

**Recommended actions:**

- Health Boards should review training needs of Cardiac Rehabilitation staff to inform local, organisational and national workforce planning.

- Structured Clinical Supervision should be developed to support Cardiac Rehabilitation staff.

- Education and training needs, identified through structured Clinical Supervision should be addressed equitably, with emphasis on skills experiential learning.

- LHBs should consider opportunities for multi-disciplinary education in collaboration with Local Authorities and neighbouring Health Boards, potentially facilitated by the Cardiac Network. Educational interventions with a focus on cardiovascular prevention and risk factor management could develop Cardiac Rehabilitation staff; Local Authority staff; Primary Care; community and hospital staff for the benefit of people with and at risk of cardiac disease.

- Links should be developed Universities and other Higher Education institutions to develop staff education and training programmes.

- The Advisory Group should collaborate with the All-Wales Cardiac Working Group in developing core competencies for personnel working in Cardiac Rehabilitation.

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**Staffing and Workforce Planning**

**Recommended actions:**

- There is a need to address inequities in provision of Cardiac Rehabilitation between diagnostic groups. The All-Wales Cardiac Rehabilitation Group has produced guidance to assist LHBs in assessing this need. The guidance can be found at: [Link to guidance]. In most areas this will require investment or service reconfiguration.

- There is a significant need to develop routes of referral for specialist psychology input, counselling and psychological support for Cardiac Rehabilitation patients. In most areas, this will require investment or service reconfiguration.

- The National Public Health Service (Now part of Public Health Wales) produced a series of [interactive tools](#) to help NHS organisations estimate the capacity of cardiac rehabilitation required to meet NICE standards. Health Boards should use the capacity tool for their area, in conjunction with recommendations on minimum staffing levels, to inform service planning towards meeting NSF requirements.
• Staff levels should reflect at least the minimum levels outlined by the British Association of Cardiac Rehabilitation (BACR).

Research and Development

Recommended actions:

• Health Boards and their partners in the Mid & South West Wales Cardiac Network should contribute to a programme of cardiovascular research and development that includes investigation of various aspects of Cardiac Rehabilitation

• Scoping of potential research, evaluation and audit projects by Cardiac Rehabilitation professionals and members of the Advisory Group could help to focus and inform research on key areas of importance in developing Cardiac Rehabilitation and Wales’ contribution to the knowledge base on cardiovascular disease risk management and prevention.
7 Glossary

Explaining the phases of Cardiac Rehabilitation

• Phase 1

The inpatient stage or after a ‘step change’ in the patient’s cardiac condition (MI, onset of angina, any emergency hospital admission for CHD, cardiac surgery or angioplasty, or first diagnosis of heart failure).

• Phase 2

The early post discharge period, a time when many patients feel isolated and insecure. Psychological distress and poor social support are powerful predictors of outcome following MI, independent of the degree of physical impairment.

Support can be provided by home visiting, telephone contact or an equivalent cognitive behavioural programme.

• Phase 3

Structured exercise training together with continuing educational and psychological support and advice on risk factors. All components can be undertaken safely and effectively in the community.

A menu-based approach recognises the need to tailor services to the individual and is likely to include specific education to reduce cardiac misconceptions, encourage smoking cessation and weight management; vocational rehabilitation to assist return to work or retirement; and referral to a psychologist or, cardiologist, or exercise physiologist if appropriate.

Most patients will benefit from and should be encouraged to undertake at least low to moderate intensity exercise. However, patients with clinically unstable cardiac disease, complicating illness or serious psychotic illness should be excluded from exercise training.

• Phase 4

Long-term maintenance of physical activity and lifestyle change.
8 References


9 Appendices

Appendix i
All-Wales Cardiac Rehabilitation Pathway. All-Wales Cardiac Rehabilitation Group, 2009.

Appendix ii
Mid & South West Wales Cardiac Network Baseline Review of Cardiac Rehabilitation Services 2008

Appendix iii
Mid & South West Wales Cardiac Network Cardiac Rehabilitation Advisory Group prioritised actions
Appendix i

All-Wales Cardiac Rehabilitation Pathway

All-Wales Cardiac Rehabilitation Group
2009
Simplified Management Pathway

‘CARDIAC REHABILITATION PHASE 1’

Cardiac Rehabilitation Patient Groups

**Inclusion Criteria**

- Acute Coronary Syndromes;
- Post Revascularisation (to include post CABG & post primary, rescue & elective PCI);
- Newly diagnosed Angina;
- Heart Failure;
- Established Stable Angina;
- Pre-hab (pre-CABG/elective PCI);
- Valve and other Cardiac Surgery;

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

**PHASE 1 (In patient care)**

- 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 147)

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

**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.

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

**EARLY CONTACT (Pre-Phase 2)**

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 152)

Patient proceeds to ‘Phase 2’
‘CARDIAC REHABILITATION PHASE 2’
(Post-Discharge Cardiac Rehabilitation)

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, A PHASE 2 CARDIAC REHABILITATION CONSULTATION WILL CONSIST OF:
[NSF QR 148, 153 &154]

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**Patient Assessment**

*Assessment of Symptoms & Risk Stratification:*
- Patient clinical assessment
- Assessment of current activity level
- 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
- HAD Psychological Assessment
- Dartmouth Quality of Life Assessment or a similar validated quality of life assessment tool

*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

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**Medication Review**

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

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**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

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CARDIAC REHABILITATION PLAN

AN INDIVIDUALISED CARDIAC REHABILITATION PLAN IS DEVELOPED WITH THE PATIENT AND FAMILY DEPENDANT ON NEED AND RISK STRATIFICATION.

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Patient proceeds to ‘Phase 3’
**‘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, PSYCHOLOGICAL AND BEHAVIOURAL EXPECTATIONS, 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**
- **Assessment of Functional Status**

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### ‘PHASE 3’ ACCESS

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

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

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### ‘PHASE 3’ PROVISION [NSF QR 149 & 155]

- 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 physiologists, BACR 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.

---

### Patient proceeds to ‘Phase 4’

---

### ‘Hospital or Community Based’

- ‘high risk’.
  (Estimated 20% of classes)

### ‘Community Based’

- ‘low and moderate risk’
  Leisure Services, local health & treatment centres, community halls, etc.
  (Estimated 60% of classes)

### ‘Home based’

(Estimated 20% of classes)

---

### ON COMPLETION OF ‘PHASE 3’ PROGRAMME EACH PATIENT IS OFFERED AN ASSESSMENT OF THEIR PROGRESS AND ARE SUPPORTED IN DEVELOPING A PLAN FOR ONGOING MAINTAINANCE 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 WHICH CAN BE RE-ASSESSED IN PRIMARY CARE AS PART OF THEIR FOLLOW UP [NSF QR 156].
A menu of options exist for Phase 4 - ‘Long-Term Maintenance’

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

Long-Term Review and Maintenance with Primary Care is suggested at:
6 months, 12 months and annually thereafter to re-assess goals of psychological and behavioural changes as set in Phase 3

- **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
Appendix ii

Mid & South West Wales Cardiac Network
Baseline Review of Cardiac Rehabilitation Services

December 2008
Current Provision of Cardiac Rehabilitation Services in Mid & West Wales 2008

A Baseline Review Using the Wales Quality Requirements

Mid & South West Wales Cardiac Network
Cardiac Rehabilitation Advisory Group

Paul Smith
Advisory Group Chair
Cardiac Network Clinical Lead

December 2008

Contact Details:

Mid & South West Wales Cardiac Network
The Oldway Centre
36 Orchard Street
Swansea
SA1 5AQ

Telephone: 01792607353
E-mail: paul.smith@mswcardiacnet.wales.nhs.uk
NHS Wales Intranet: http://nww.mswcardiacnet.wales.nhs.uk
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Hospital/Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paul Smith</td>
<td>BHF Cardiac Rehabilitation Specialist Nurse - Hywel Dda NHS Trust</td>
<td>Carmarthenshire Division</td>
</tr>
<tr>
<td></td>
<td>Chair – MSWWCN Cardiac Rehabilitation Advisory Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chair - All Wales Cardiac Rehabilitation Working Group</td>
<td></td>
</tr>
<tr>
<td>Paula Emery</td>
<td>BHF Cardiac Liaison Specialist Nurse, Hywel Dda NHS Trust</td>
<td>Pembrokeshire Division</td>
</tr>
<tr>
<td>Julie Thomas</td>
<td>Clinical Nurse Specialist, Cardiac Care, ABM University NHS Trust</td>
<td>West Division</td>
</tr>
<tr>
<td>Jenny Matthews</td>
<td>BHF Cardiac Liaison Specialist Nurse, Hywel Dda NHS Trust</td>
<td>Carmarthenshire Division</td>
</tr>
<tr>
<td>Denise Lewis</td>
<td>Cardiac Rehabilitation Co-ordinator, Hywel Dda NHS Trust</td>
<td></td>
</tr>
<tr>
<td>Linda Speck</td>
<td>Consultant Clinical Health Psychologist, Cardiac Rehabilitation Services Manager, ABM University NHS Trust</td>
<td>Ceredigion Division</td>
</tr>
<tr>
<td>Helen Rees-Harries</td>
<td>Cardiac Rehabilitation Specialist Nurse, Powys LHB</td>
<td></td>
</tr>
<tr>
<td>Dean Wright</td>
<td>Coronary Heart Disease Specialist Nurse, Powys LHB</td>
<td></td>
</tr>
<tr>
<td>Janette Bowen</td>
<td>Occupational Therapist, Hywel Dda NHS Trust</td>
<td>Carmarthenshire Division</td>
</tr>
<tr>
<td>Margaret Upton</td>
<td>Physiotherapist, Hywel Dda NHS Trust</td>
<td>Carmarthenshire Division</td>
</tr>
<tr>
<td>With thanks to:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert Harries - Mayes</td>
<td>Patient Representative</td>
<td>Mid &amp; South West Wales Cardiac Network Board</td>
</tr>
<tr>
<td>Ken Yeomans</td>
<td>Patient Representative</td>
<td>Mid &amp; South West Wales Cardiac Network Board</td>
</tr>
<tr>
<td>Martin Lane</td>
<td>Cardiac Network Manager</td>
<td></td>
</tr>
<tr>
<td>Marc Thomas</td>
<td>Cardiac Network Support Manager</td>
<td></td>
</tr>
</tbody>
</table>
1. Clinical Team Leadership...

**Quality Requirement 114:**
The Cardiac Rehabilitation team should have a designated ‘clinical team leader’ (CTL), who is a core member of the team with responsibility for:
- Leadership of the Cardiac Rehabilitation team.
- Ensuring Quality Requirements relating to the work of the Cardiac Rehabilitation team are met.
- Development of Cardiac Rehabilitation services across the area served by the team.
- Coordination of the Cardiac Rehabilitation services across the area served by the team.
- Liaison with primary care, acute cardiac services and local heart failure teams serving the local population in relation to Cardiac Rehabilitation.

**Quality Requirement 133:**
The Team Leader of the Cardiac Rehabilitation team (QR114) should meet at least annually with representatives of the Local Health Board and / or local general practices, the cardiac team in local hospital/s and Local Heart Failure Team/s within the local area in order to review:
- Referral guidelines and criteria.
- Communication between different aspects of the service for patients.

**Key Findings:**

<table>
<thead>
<tr>
<th>Key (Table 1)</th>
<th>Presence of a team leader</th>
<th>Name and designation of team leader</th>
<th>Meets at least annually with local representatives from Local Health Board: Primary Care: Cardiac Rehabilitation Co-ordinator</th>
<th>Team members attend</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓</td>
<td>Dr Linda Speck</td>
<td>Cardiac Rehabilitation Services Manager</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>×</td>
<td>Julie Thomas</td>
<td>Clinical Nurse Specialist, Cardiac Care</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>×</td>
<td>Denise Lewis</td>
<td>Cardiac Rehabilitation Co-ordinator</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>×</td>
<td>Paula Emery</td>
<td>Cardiac Liaison Nurse Specialist</td>
<td>×</td>
<td></td>
</tr>
<tr>
<td>✓</td>
<td>Julie Harvard-Evans</td>
<td>Lead for Chronic Diseases</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Summary of Clinical Team Leadership constitution.
Five out of the six teams in the Mid & South West Wales region have a ‘clinical team leader’ with the exception of Carmarthenshire, where there is no designated clinical team leader. In Carmarthenshire, Medical Directorate managers delegate leadership functions in consultation with team members.

Recommendations:
- The British Association of Cardiac Rehabilitation (BACR) states that a team should have a co-ordinator who has overall responsibility for the Cardiac Rehabilitation service (*BACR - Standards and Core Components for Cardiac Rehabilitation, 2007: 2.1*).
- It is an NSF Quality Requirement that the designated clinical team leader for Cardiac Rehabilitation should meet at least annually with representatives of the Local Health Board and/or local general practices, the cardiac team in local hospitals and Local Heart Failure Teams to ensure adequate engagement in planning, management and evaluation of services.
Quality Requirement 115: As a minimum, the Cardiac Rehabilitation team should have a core membership of specified professional disciplines as a part of the teams’ budgeted establishment, with the stipulation that ‘core members’ should have at least one session per week (0.1 WTE / 3.75 per week) specified for Cardiac Rehabilitation.

**Key Findings:**

<table>
<thead>
<tr>
<th></th>
<th>Cardiologist; GP; Physician</th>
<th>Administrative Support</th>
<th>BACR Instructor</th>
<th>Cardiac Nursing</th>
<th>Physiotherapy</th>
<th>Occupational Therapy</th>
<th>Dietician</th>
<th>Pharmacist</th>
<th>Psychologist</th>
<th>Total WTE</th>
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<tbody>
<tr>
<td>Bridgend</td>
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<td>0.5</td>
<td>2.6</td>
<td>0.8</td>
<td>0.06</td>
<td>0.5</td>
<td>0</td>
<td>0.8</td>
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<tr>
<td>Neath Port Talbot</td>
<td>0</td>
<td>0.5</td>
<td>1.63</td>
<td>0.5</td>
<td>0.06</td>
<td>0.2</td>
<td>0</td>
<td>0.5</td>
<td>3.39</td>
<td></td>
</tr>
<tr>
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<td>1.32</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>9.71</td>
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</tr>
<tr>
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<td>1.6</td>
<td>1</td>
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<td>0</td>
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</tr>
<tr>
<td>Pembrokeshire</td>
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<td>1.6</td>
<td>0.13</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2.66</td>
<td></td>
</tr>
<tr>
<td>Ceredigion</td>
<td>0.71</td>
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<td>2</td>
<td>0</td>
<td>0.13</td>
<td>0</td>
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<td>0</td>
<td>3.7</td>
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<td>Powys</td>
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<td>0.9</td>
<td>3.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.33</td>
<td></td>
</tr>
</tbody>
</table>

**Table 2a:** Summary of 2008/09 professional constitution of each team expressed in Whole Time Equivalents (WTE)

**Note:** On comparison with BACR minimum recommended staff levels, the current WTE for some teams and certain disciplines within the teams is greater than it would be otherwise as employment of lower banded staff provides greater capacity. The WTE for these teams would be less if BACR recommended bandings were applied.

**Recommendations**

- **BACR Standards and Core Components for Cardiac Rehabilitation 2007** recommend that, as a minimum, a Cardiac Rehabilitation service should consist of a comprehensive Cardiac Rehabilitation team of appropriately qualified core staff including:
  - a cardiac specialist nurse
  - physiotherapist
  - dietician
  - administrator
  - a designated clinical lead (cardiologist or GP specialist in cardiology)
The team should also include, where appropriate, referral to a psychologist; pharmacist; occupational therapist; and physical activity-exercise specialist. The full Cardiac Rehabilitation team should be involved with the development of Cardiac Rehabilitation educational materials. The time allocated per professional should be in agreement with the established guidelines.

- Whilst most services don’t have a Consultant / GP / Physician with an interest in Cardiac Rehabilitation as a ‘core member’ of the team, the Advisory Group recommends that, as a minimum, services should have a ‘designated’ Consultant /GP/Physician with an interest in Cardiac Rehabilitation who can be accessed by the service to provide clinical support and advice.

### Key Findings:

<table>
<thead>
<tr>
<th>Patients seen in 2008/09</th>
<th>Admin Support</th>
<th>Cardiac Nursing</th>
<th>Physiotherapy</th>
<th>Occupational Therapist</th>
<th>Dietician</th>
<th>Pharmacist</th>
<th>Clinical Psychologist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommended staff levels: WTE per 500 patients</td>
<td>0.5 Band 3</td>
<td>3.0 Band 6/7</td>
<td>2.0 Band 6/7</td>
<td>0.72 Band 6/7</td>
<td>0.3 Band 6/7</td>
<td>0.2 Band 6/7</td>
<td>0.2 Band 6/7</td>
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<td>Bridgend</td>
<td>480 0.48 2.88 1.92 0.69 0.28 0.19 0.19</td>
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<td></td>
<td></td>
</tr>
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<td>Neath / Port Talbot</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
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<td>732 0.73 4.4 2.9 1.05 0.44 0.29 0.29</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Carmarthenshire</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Pembrokeshire</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceredigion</td>
<td>452 0.45 2.7 1.8 0.65 0.27 0.18 0.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powys</td>
<td>383 0.38 2.3 1.53 0.55 0.23 0.15 0.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2b: Summary of 2008/09 recommended professional constitution for each team expressed in whole time equivalents (WTE), as per staffing recommendations per 500 patients referred.

**Note:** *Whilst the analysis in Table 2b above is useful, consideration should be given to the following:*

1. Analysis for the Nurse, Physiotherapist, Pharmacist, Clinical Psychologist and Administration & Clerical components has been completed using ‘British Association for Cardiac Rehabilitation’ (BACR) minimal staffing levels. However, identified limitations to this analysis include the fact that these recommendations:
   - are now dated, due review in 2010 and thus may not most accurately reflect staffing needs given more recent developments in Cardiac Rehabilitation services;
...Team Constitution & Staff Levels (continued).

- were issued prior to the advent of the National Audit for Cardiac Rehabilitation and thus do not reflect additional Administrative & Clerical workload currently managed by teams;
- apply essentially to urban populations and do not fully reflect the demands upon services working in largely rural settings;
- do not reflect the additional demands given the increased CHD morbidity within Mid and South West Wales;
- currently do not include recommendations for the level of occupational therapy or BACR Instructor component for a team;
- agenda for change bands stated are provided as a guide to the minimum requirement reflecting the BACR minimum recommended level of expertise for each profession and may vary locally. It has been noted that Band 7 is considered to be the qualified ‘entry-level’ for some professions, particularly where staff are required to work alone.


2. Whilst the ‘BACR’ recommends inclusion of the Occupational Therapy component within the Cardiac Rehabilitation team, there is currently no stipulated minimal staffing level for this discipline. Thus, for the benefit of this analysis, the ‘recommendation’ used in Figure 5 has been developed as part of a benchmarking process utilising average levels of Occupational Therapy staff levels within the region.

- Administrative and clerical staffing levels are generally significantly lower than the BACR recommended guidelines. In addition to the need for general administrative and clerical support, Cardiac Rehabilitation teams are now additionally required to complete the National Audit of Cardiac Rehabilitation (QR 131). The BHF 3 year short-term funding to facilitate this process will begin to cease from December 2008, posing a threat to teams’ ability to participate in the audit. The Advisory Group recommends that, as a minimum, teams should have an administrative & clerical component that complies with the BACR minimum staffing standards.

- General under-representation of physiotherapy and BACR Instructor components significantly compromises the exercise element of the service. The Advisory Group recommends the presence of both physiotherapist and BACR Instructor components as part of the basic skill-mix. These professions are able to offer specific and distinct clinical expertise within the essential multi-disciplinary constitution of a Cardiac Rehabilitation team

- General under-representation of psychology and occupational therapy components significantly compromises the ability of the service to provide adequate levels of psychological and vocational support. The Advisory Group recommends the presence of both a psychology and occupational therapy component as the ‘gold-standard’ for each team because of the specific and distinct clinical expertise that both professions are able to offer within the essential multidisciplinary constitution of a Cardiac Rehabilitation team. However as a minimum, team constitution should include ‘either/or’ of these professions, but it is recommended that where psychology/occupational therapy is not represented, teams should be working towards redressing this omission.

- Dietetic and Pharmacy components across the region are grossly under-represented, generally provided as an informal or ‘good-will’ arrangement
in most areas. Given the clinical, and particularly the health educative benefits that these disciplines bring to the holistic philosophy of Cardiac Rehabilitation services, the Advisory Group identifies that investment is needed to ensure that each service has adequate dietetic and pharmacy representation within its respective team constitution.

- The Advisory Group identifies that greater robustness is required in the future planning of Cardiac Rehabilitation services across the region, particularly in ensuring adequate team capacity to meet patient demand. The NPHS capacity planning tool currently being developed will assist in this process.
3. **Continuity of service and cover arrangements…**

**Quality Requirement 116:** The cover arrangements for each member of the Cardiac Rehabilitation team should be identified to ensure that, during periods of leave, the Cardiac Rehabilitation service available to patients does not change significantly and that the individual’s role within the team is covered.

### Key Findings:

<table>
<thead>
<tr>
<th>Administrative Support</th>
<th>BACR Instructor</th>
<th>Cardiac Nursing</th>
<th>Physiotherapy</th>
<th>Occupational Therapy</th>
<th>Dietician</th>
<th>Pharmacist</th>
<th>Psychologist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>×</td>
<td>N/A</td>
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<td>✓</td>
<td>x</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
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<td>L</td>
<td>x</td>
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</tr>
<tr>
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<td>x</td>
<td>x</td>
<td>✓</td>
<td>N/A</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>L</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Powys</td>
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<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Note:** This summary reflects the ability of each service to provide cover arrangements for short periods of sick leave or pre-arranged leave (study, holiday, compassionate, etc) only. The situation would be different for longer periods of leave (sickness; maternity; etc).

**Table 4:** Summary of staff covering arrangements for each Cardiac Rehabilitation team

**Key (Table 4):**

- ✓ **Yes**
  - (Cover arrangements are adequate to ensure that during periods of leave, provision of this component of the Cardiac Rehabilitation service is not compromised significantly)

- × **No**
  - (Inability to provide cover arrangements during periods of leave, resulting in this component of the Cardiac Rehabilitation service being significantly compromised)

- L **Limited**
  - (Cover arrangements are made to provide for prioritised service delivery. Quality of care may not be maintained at optimal levels)

- N/A **Not Applicable**
  - (This professional group is not represented within the team)
Impact of absence of cover:
- Failure to achieve standard of consultation within two working days of diagnosis in Phase I (Inpatient)
- Patients are inadequately prepared for discharge
- Communication between primary and secondary care on discharge is compromised
- Failure to achieve Phase II consultation within seven days of discharge/referral. Attempts made to replace home visits with telephone contact which is not ideal
- Cancellation of Home Visits at short notice, resulting in reduced patient satisfaction
- Post-discharge follow-up is compromised
- Recruitment/Induction to Phase III delayed
- Reduced uptake of Phase III
- Phase III classes cancelled
- Reduced retention at Phase III and patients less likely to go to Phase IV
- Reduced uptake of Phase IV
- No facility for referral to Occupational Therapy
- Referral to Occupational Therapy consultation time is prolonged
- Increased administration and clerical work for clinical staff
- Completion of NACR and service evaluation compromised
- Reduced quality
- Increased inequity
- Increased workload for colleagues
- Increased levels of stress and sickness in teams

Recommendations:
- The Advisory Group recommends investment to ensure that as a minimum, staff levels are consistent with the BACR staffing recommendations. Cover arrangements should be in place during periods of leave to ensure that provision of the Cardiac Rehabilitation service is not significantly compromised.

- The impact of lack of cover is evidenced most significantly through the impact on the exercise components of the service arising from the absence of physiotherapy and BACR Instructors. This further emphasises the need for investment in the physiotherapy and BACR Instructor components of the service.

- The Advisory Group recommends that investment is required to ensure adequate cover arrangements for administrative and clerical staff. This will prevent clinical staff being distracted from clinical duties in order to attend to clerical activities.

- The Advisory Group suggests that there is scope to explore the possibility of diversification of roles or role re-design within Cardiac Rehabilitation...
services as a means of providing ‘cross-cover’ during periods of leave. This does not, however, detract from the distinct professional and clinical expertise of the various disciplines within the multi-disciplinary team and would need to be linked to development of competencies. It would be desirable to agree these competencies through the Advisory Group and the All Wales Cardiac Rehabilitation Working Group. Tools such as the CHD competency framework could be used to facilitate this process.
4. Referral to other services.

**Quality Requirement 117:** The Cardiac Rehabilitation team should have agreed arrangements for referral of appropriate patients to other services.

**Quality Requirement 123:** Guidelines should be in use covering referral to other services. Referral guidelines should be agreed with the service to which referrals are made. These should include, at least:
- Referral to smoking cessation services
- Referral for specialist dietary advice

**Key Findings:**

<table>
<thead>
<tr>
<th>Key (Table 4)</th>
<th>Summary of the existence of agreed arrangements for referral to:</th>
<th>Summary of the existence of written guidelines for referral to:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Smoking cessation</td>
<td>Specialist dietary advice</td>
</tr>
<tr>
<td>Bridgend</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Swansea</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Carmarthenshire</td>
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<td>✓</td>
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</tr>
<tr>
<td>Powys</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 4: Summary of arrangements and guidelines for referrals to other services.

*Note:* ‘Psychology service’ includes: ‘clinical psychology’, ‘health psychology’ or ‘counselling psychology’.

**Recommendations:**
- The Advisory Group identifies a significant need for the development of routes of referral for specialist psychology input, counselling and psychological support for Cardiac Rehabilitation patients.
- The Advisory Group recommends that some services need to develop local guidelines for referral to ‘specialist dietary advice’.
5. Information Available to patients.

QR 118: In addition to the patient held record (QR34) and information which is available in primary care (QR11), written information should be available covering, at least:

- The types of Cardiac Rehabilitation programme from which patients may choose;
- Locally available basic life support training;
- Contact details for members of the Cardiac Rehabilitation team.

### Key Findings:

<table>
<thead>
<tr>
<th>Key Findings</th>
<th>Bridgend</th>
<th>Neath Port Talbot</th>
<th>Swansea</th>
<th>Carmarthenshire</th>
<th>Pembrokeshire</th>
<th>Ceredigion</th>
<th>Powys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient held record</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>×</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Information available in primary care</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>×</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Types of Cardiac Rehabilitation programmes available</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>×</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Locally available basic life support training</td>
<td>×</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Contact details for Cardiac Rehabilitation team</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>

*Table 5: Summary of types of information available to patients*

### Recommendations:

- The Advisory Group recommends the development of a ‘hand-held record card’ for ease of use, to replace the currently used ‘Cardiac Care Record’ when stock levels are exhausted.

- The Advisory Group recommends BHF Heart Start UK training for patients and families interested in locally available basic life support training. Information on BHF Heart Start should be available from local Cardiac Rehabilitation services.
Quality Requirement 119: The Cardiac Rehabilitation team should have agreed guidelines, including referral criteria, for referral for Cardiac Rehabilitation with:

- the Local Health Board on behalf of local general practices (QR10)
- the cardiac team in each hospital with which the service is linked (QR148)
- the Local Heart Failure Team/s within the local area (QR146)

These guidelines should ensure that patients are normally referred to the Cardiac Rehabilitation team within two working days of diagnosis. Guidelines should be based on network-agreed guidance.

Key Findings:

### Key Findings:

<table>
<thead>
<tr>
<th>Team</th>
<th>Local Health Board on behalf of local general practices</th>
<th>Cardiac team in each hospital with which the service is linked</th>
<th>Local Heart Failure Team/s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Swansea</td>
<td>x</td>
<td>x</td>
<td>N/A</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>✓</td>
<td>x</td>
<td>N/A</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Powys</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Table 6a: Summary of existence of agreed written guidelines and referral criteria for referral to each team**

<table>
<thead>
<tr>
<th>Team</th>
<th>Referral within 2 working days of diagnosis?</th>
<th>System in place to monitor this?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Swansea</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Powys</td>
<td>x</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Table 6b – Summary of teams carrying out referral within 2 days of diagnosis**

Recommendations:

- In the majority of cases, guidelines and referral criteria for referral to Cardiac Rehabilitation are non-documentation, informally agreed guidelines, and are not based on network-agreed guidance.
The Advisory Group recommends the development of documented guidelines and referral criteria that are consistent with network-agreed guidance.

In the majority of cases referral is not achieved within 2 working days of diagnosis. The Advisory Group will work to identify reasons for this and establish further recommendations to remedy the situation. There is a need to move towards more efficient modes of referral and communication and potentially the adoption of an electronic mode of referral.

The Advisory Group recommends that systems currently used to monitor the target of ‘referral within 2 working days of diagnosis’ are reviewed as an opportunity to share best practice across the region.
7. Clinical Guidelines in Phase I Cardiac Rehabilitation.

Quality Requirement 120: Clinical guidelines should be in use covering the early rehabilitation of patients admitted to hospital with acute coronary syndromes or diagnosed with angina or heart failure during an acute hospital stay. These guidelines should cover at least:
- initial assessment of patients
- an initial exercise and mobilization programme.

Key Findings:

<table>
<thead>
<tr>
<th></th>
<th>STEMI/NSSTEMI</th>
<th>U Angina</th>
<th>Heart Failure</th>
<th>Post PCI</th>
<th>CABG</th>
<th>New S Angina</th>
<th>Established S angina</th>
<th>Valve surgery</th>
<th>Pacemaker</th>
<th>ICD</th>
<th>Pre-hab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
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<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
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<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Swansea</td>
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<td>✓</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
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<td>✗</td>
</tr>
<tr>
<td>Carmarthenshire</td>
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<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Pembrokeshire</td>
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<td>✓</td>
<td>✗</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Ceredigion</td>
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<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
</tr>
<tr>
<td>Powys</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Table 7: Summary of existence of clinical guidelines for Phase I for each team according to diagnostic groups

Key (Table 7)
- ✓ Yes (Clinical guidelines exist)
- ✗ No (Clinical guidelines do not exist)
- N/A Not Applicable (Not required as non-tertiary centre or provided by another service)

Recommendations:
- The Advisory Group recommends the use of Integrated Care Pathways (ICPs) to guide clinical practice where these are necessary. The Group wishes to explore the possibility of developing a regionally agreed ICP as a means of enhancing communication between services and providing greater equity and continuity of care for patients. This would also ensure clinical guidelines in use are consistent with network-agreed guidance.
8. Provision of Phase I Cardiac Rehabilitation.

The provision of Phase I should, as a minimum, consist of the interventions detailed in Phase I clinical guidelines.

Key Findings:

<table>
<thead>
<tr>
<th></th>
<th>STEMI/NSTEMI U Angina</th>
<th>Heart Failure</th>
<th>Post PCI</th>
<th>CABG</th>
<th>New S Angina</th>
<th>Established angina</th>
<th>Valve surgery</th>
<th>Pacemaker</th>
<th>ICD</th>
<th>Pre Hab</th>
<th>Provided by</th>
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</thead>
<tbody>
<tr>
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<td>✓</td>
<td>×</td>
<td>×</td>
<td>N/A</td>
<td>×</td>
<td>L</td>
<td>N/A</td>
<td>L</td>
<td>N/A</td>
<td>L</td>
<td>Nurse</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>N/A</td>
<td>×</td>
<td>L</td>
<td>N/A</td>
<td>L</td>
<td>N/A</td>
<td>L</td>
<td>Nurse</td>
</tr>
<tr>
<td>Swansea</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>N/A</td>
<td>×</td>
<td>Nurse</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>Nurse</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>Nurse</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>✓</td>
<td>Nurse</td>
</tr>
<tr>
<td>Powys</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<td>N/A</td>
<td>N/A</td>
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<td>N/A</td>
</tr>
</tbody>
</table>

Table 8: Summary of provision of Phase I Cardiac Rehabilitation for each team by diagnostic group

Key (Table 8)

✓ Yes
   (Provided routinely as part of service)
× No
   Not provided routinely as part of service
L Limited
   (Only provided when capacity available)
N/A Not Applicable
   (No service required as non-tertiary centre or provided by another service)

Potential clinical impact of absence of Phase I:

- Failure to achieve standard of referral within two working days of diagnosis in Phase I in-patients.
- Patients are inadequately prepared for discharge.
- Patients not given essential post-discharge advice.
- Increased potential for delayed discharge.
- Communication between primary and secondary care on discharge is compromised.
- Increased patient anxiety.

Recommendations:

- Table 8 identifies the inequities in provision of Phase I Cardiac Rehabilitation for each diagnostic group within each service across the region. Consensus guidelines on ‘prioritisation of patient groups’, will be available shortly from the ‘All Wales Cardiac Rehabilitation Working Group’, to inform prioritised future investment and development of Cardiac Rehabilitation services in each locality.
- Reduced potential of uptake of Phases II-IV.
Quality Requirement 124: An operational policy should be in use covering referral of in-patients to their local Cardiac Rehabilitation team prior to discharge. This QR is NOT applicable if the same Cardiac Rehabilitation team serves same in-patients and patients in the community exclusively.

Key Findings:

<table>
<thead>
<tr>
<th>Key (Table 9)</th>
<th>Operational policy exists</th>
<th>Mode of referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>× No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A Not Applicable. (Same team serves both, or no Phase I required of service)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area</th>
<th>Operational policy exists</th>
<th>Mode of referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>×</td>
<td>Letter</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>×</td>
<td>Letter</td>
</tr>
<tr>
<td>Swansea</td>
<td>×</td>
<td>Telephone; Referral form</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>×</td>
<td>Fax; Letter; Telephone</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>×</td>
<td>Fax; Letter; Telephone</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>×</td>
<td>-</td>
</tr>
<tr>
<td>Powys</td>
<td>✓</td>
<td>Fax; Letter; Telephone</td>
</tr>
</tbody>
</table>

Table 9: Summary of existence of operational policy covering referral of in-patients to their local Cardiac Rehabilitation team prior to discharge and mode of referral in use

Recommendations:

- The Advisory Group recommends the review of operational policies pertaining to referral of in-patients to their local Cardiac Rehabilitation team prior to discharge, as an opportunity to share best practice across the region.

- As for 6 above, the need for more efficient modes of referral / communication has been identified as a key recommendation by the Advisory Group, with the desire to move towards the possible adoption of an electronic mode of referral as a means of addressing known weaknesses in current referral arrangements.
### 10. Operational Policies for Phase II Cardiac Rehabilitation...

**Quality Requirement 125:** An operational policy should be in use covering arrangements for contacting patients following discharge or initial GP referral. This policy should ensure that the patient is contacted within 7 days of referral and an appointment made. Audit of time to first contact is an additional desirable demonstration of compliance.

**Key Findings:**

<table>
<thead>
<tr>
<th>Key (Table 10a)</th>
<th>Operational policy (contacting patients following discharge or initial GP referral)</th>
<th>Systems in place to monitor the standard of ‘Phase II’ consultation within 7 working days of discharge/referral</th>
<th>Extent to which service achieved this standard in 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>✓</td>
<td>✓</td>
<td>On receipt of referrals, 100% patients are offered a home visit by Health Visiting service (specialist &amp; trained generic Health Visitors) – no data available as yet.</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>✓</td>
<td>✓</td>
<td>On receipt of referrals, 100% patients are offered a home visit by health visiting service (specialist &amp; trained generic Health Visitors). – no data available as yet.</td>
</tr>
<tr>
<td>Swansea</td>
<td>✓</td>
<td>✓</td>
<td>67%. Main reason for not reaching 100% is staff shortages or unable to contact the patients within the target.</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>✓</td>
<td>✓</td>
<td>System has been developed in 2008 – no data available as yet.</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>✓</td>
<td>✓</td>
<td>On receipt of referrals, 100% of patients are offered a home visit by letter within 7 days. 36% are actually seen within 1 week of discharge as often the referral from the tertiary site is not received until after 1 week. This has fallen from an average of 62% (from 1999-2005) since patients are transferred directly to Morriston and not discharged from Withybush General Hospital.</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>✓</td>
<td>×</td>
<td>Unknown</td>
</tr>
<tr>
<td>Powys</td>
<td>✓</td>
<td>✓</td>
<td>NACR will audit time delays. Standard is achieved once referrals are received. All patients offered home visits by specialist nurse within 7 days. Delays when referral forms not sent by DGH</td>
</tr>
</tbody>
</table>

**Table 10a:** Summary of existence of operational policy covering arrangements for contacting patients following discharge or initial GP referral for each team

**Recommendations:**

- The Advisory Group recommends the review of operational policies pertaining to arrangements for contacting patients following discharge or initial GP referral for each team, as an opportunity to share best practice across the region.
- The Advisory Group recommends the review of currently used systems to monitor the target of ‘Phase II’ consultation within 7 working days of discharge / referral, as an opportunity to share best practice across the region.
Quality Requirement 126: An operational policy should be in use covering the first consultation after discharge (or the first consultation for patients referred by their GP) and ongoing support from the team.

This policy should cover:
- Updating patient hand-held record
- Giving any additional information that is required (QR118)
- Agreement of the structured programme of Cardiac Rehabilitation (QR122), including involvement of the patient’s partner / carer
- Advice on the importance of basic life support training
- Giving a contact number for further advice
- Arrangements for further visits / contacts.

Quality Requirement 127: Validated assessment tools should be used by all members of the team covering:
- Quality of life assessment
- Exercise assessment
- Psychological assessment

Key Findings:

Key (Table 10b)

<table>
<thead>
<tr>
<th>Operational policy in existence (first consultation after discharge)</th>
<th>Validated assessment tools in use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updating patient hand-held record</td>
<td></td>
</tr>
<tr>
<td>Giving any additional information that is required</td>
<td></td>
</tr>
<tr>
<td>Agreement of the structured programme of Cardiac Rehabilitation, including involvement of the patient’s partner / carer</td>
<td></td>
</tr>
<tr>
<td>Advice on the importance of basic life support training</td>
<td></td>
</tr>
<tr>
<td>Giving a contact number for further advice</td>
<td></td>
</tr>
<tr>
<td>Arrangements for further visits / contacts</td>
<td></td>
</tr>
</tbody>
</table>

| Bridgend | YES | × | YES | YES | YES | YES | YES | YES | YES |
| Neath Port Talbot | YES | × | YES | YES | YES | YES | YES | YES | YES |
| Swansea | YES | YES | YES | × | YES | YES | YES | YES | YES |
| Carmarthenshire | YES | YES | YES | × | YES | YES | YES | YES | YES |
| Pembrokeshire | YES | YES | YES | YES | YES | YES | YES | YES | YES |
| Ceredigion | YES | YES | YES | × | YES | YES | YES | YES | YES |
| Powys | YES | YES | YES | YES | YES | YES | YES | YES | YES |

Table 10b: Summary of existence of operational policy and use of validated assessment tools for each team

Recommendations:
- The Advisory Group recommends the review of operational policies pertaining to the first consultation after discharge (or the first consultation for patients referred by their GP) and ongoing support from the team, as an opportunity to share best practice across the region. BHF ‘Heart Start’ training for patients and family should be available to patients and family interested in locally available basic life support training.
11. Clinical Guidelines in Phase II Cardiac Rehabilitation.

Quality Requirement 121 – Clinical guidelines should be in use covering the first consultation after discharge (or the first consultation for patients referred by their GP) and ongoing support from the team. These guidelines should cover:

- The patient and their carer’s understanding of their diagnosis
- Assessment of symptoms
- Risk factors and targets for reduction
- Symptom recognition and management
- Activity advice and goals
- Medication and compliance awareness
- Functional assessment of activities of daily living
- Advice on return to work and leisure activities
- Assessment of patient and carer’s psychological support needs
- Indications for further investigations (if required)

Key Findings:

<table>
<thead>
<tr>
<th></th>
<th>STEMI/ NSTEMI</th>
<th>U Angina</th>
<th>Heart Failure</th>
<th>Post PCI</th>
<th>CABG</th>
<th>New S Angina</th>
<th>Established Stable angina</th>
<th>Valve surgery</th>
<th>Pacemaker</th>
<th>ICD</th>
<th>Pre-Hab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
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<td>×</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>✓</td>
<td>×</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Swansea</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
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<td>✓</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>×</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Powys</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
</tr>
</tbody>
</table>

Table 11: Summary of existence of clinical guidelines for Phase II for each team

Recommendations:

- The Advisory Group recommends the use of ‘Integrated Care Pathways’ (ICP) to guide clinical practice where these are necessary. As for Section 7 above, the Group wishes to explore the possibility of developing a regionally agreed ICP as a means of enhancing communication between services and providing greater equity and continuity of care for patients. This would also ensure clinical guidelines in use are consistent with network-agreed guidance.
12. Provision of Phase II Cardiac Rehabilitation...

The provision of Phase II should, as a minimum, consist of the interventions detailed in Quality Requirement 121 (Section 11)

### Key Findings:

<table>
<thead>
<tr>
<th></th>
<th>STEMI/ NSTEMI</th>
<th>UA Angina</th>
<th>Heart Failure</th>
<th>Post PCI</th>
<th>CABG</th>
<th>New S Angina</th>
<th>Established S angina</th>
<th>Valve surgery</th>
<th>Pacemaker</th>
<th>ICD</th>
<th>Pre Hab</th>
<th>Provided by?</th>
<th>Mode of contact?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
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<td>✓</td>
<td></td>
<td>Nurse</td>
<td>HV TC</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td></td>
<td>Nurse</td>
<td>HV TC</td>
</tr>
<tr>
<td>Swansea</td>
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<td>✓</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Nurse; OT; Physio</td>
<td>HV TC</td>
</tr>
<tr>
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<td>✓</td>
<td>✓</td>
<td>N/A</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Nurse</td>
<td>HV TC CL</td>
</tr>
<tr>
<td>Pembrokeshire</td>
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<td>✓</td>
<td>L</td>
<td>✓</td>
<td>L</td>
<td>✓</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>✓</td>
<td>✓</td>
<td>Nurse</td>
<td>HV TC CL</td>
</tr>
<tr>
<td>Ceredigion</td>
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<td>✓</td>
<td>N/A</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Nurse</td>
<td>HV TC CL</td>
</tr>
<tr>
<td>Powys</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
<td>Nurse</td>
<td>HV TC CL</td>
</tr>
</tbody>
</table>

Table 12: Summary of provision of Phase II for each team

### Key (Table 12)

- ✓ Yes (Provided routinely as part of service)
- × No (Not provided routinely as part of service)
- L Limited (Only provided when capacity available)
- N/A Not Applicable (No service required as provided by another service)
- HV Home visit
- TC Telephone contact
- CL Phase II Clinic

### Recommendations

- **Table 12** identifies the inequities in provision of Phase II Cardiac Rehabilitation for each diagnostic group within each service across the region. As for 8 above, consensus guidelines on ‘prioritisation of patient groups’, will be available shortly from the ‘All Wales Cardiac Rehabilitation Working Group’, to inform prioritised future investment and development of Cardiac Rehabilitation services in each locality.
Potential clinical impact of absence of Phase II:
- Failure to achieve standard of consultation within seven working days of discharge in Phase II
- Patients and family are inadequately supported post-discharge
- Patients are not given essential post-discharge advice – e.g. non-compliance with medication and risk factor management
- Increased anxiety for patients post-discharge
- Increased potential for re-admission
- Reduced potential of uptake of Phases III-IV
- Inability to develop home-based exercise programmes
- Inadequate Occupational Therapy Input
- Inadequate Physiotherapy input
13. Operational policy for Phase III Cardiac Rehabilitation and ongoing assessment of the needs of patients and carers...

Quality Requirement 128 - An operational policy should be in use covering the ongoing assessment of the needs of patients and carers. This policy should cover:

- frequency of assessment
- items to be assessed, including at least:
  - clinical status
  - risk factors and risk stratification
  - activity and progress towards goals
  - psychological needs
  - social / vocational / leisure / occupational support
  - functional assessment of activities of daily living
  - documentation of assessment
  - updating patient-held record

Key Findings:

<table>
<thead>
<tr>
<th>Key (Table 13)</th>
<th>Frequency of assessment</th>
<th>Clinical status</th>
<th>Risk factors and risk stratification</th>
<th>Activity and progress towards goals</th>
<th>Psychological needs</th>
<th>Social/vocational/leisure/occupational support</th>
<th>Functional assessment of activities of daily living</th>
<th>Documentation of assessment</th>
<th>Updating patient-held record</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Yes</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>× No</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
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<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
</tr>
</tbody>
</table>

Bridgend
Neath Port Talbot
Swansea
Carmarthenshire
Pembrokeshire
Ceredigion
Powys

Table13: Summary of existence of operational policy for Phase III & the ongoing assessment in each team:

Recommendations
- The Advisory Group recommends the review of operational policies pertaining to Phase III and ongoing assessment of patients in each team, as an opportunity to share best practice across the region.
Quality Requirement 122 – Clinical guidelines should be in use covering structured programmes of Cardiac Rehabilitation. These programmes should cover at least:

- Health education
- Supervised exercise sessions
- Home exercise programmes
- Psychological support
- Patient feedback and goal setting

Key Findings:

<table>
<thead>
<tr>
<th></th>
<th>Health Education</th>
<th>Supervised exercise sessions (group)</th>
<th>Home exercise programmes (as an alternative/complement to group)</th>
<th>Psychological support</th>
<th>Patient feedback and goal setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Swansea</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Carmarthenshire</td>
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<td>✓</td>
<td>✓</td>
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<td>✓</td>
</tr>
<tr>
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<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Ceredigion</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>×</td>
<td>✓</td>
</tr>
<tr>
<td>Powys</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 14: Summary of existence of clinical guidelines for Phase III for each team:

Recommendations

- The Advisory Group recommends the use of ‘Integrated Care Pathways’ (ICPs) to guide clinical practice where these are necessary. As for Section 7 and Section 11 above, the Group wishes to explore the possibility of developing a regionally agreed ICP as a means of enhancing communication between services and providing greater equity and continuity of care for patients. This would also ensure clinical guidelines in use are consistent with network-agreed guidance.
The provision of Phase III should, as minimum, offer patients the interventions detailed in Phase III clinical guidelines.

**Key Findings:**

<table>
<thead>
<tr>
<th></th>
<th>STEMI/NSTEMI</th>
<th>Unstable Angina</th>
<th>Heart Failure</th>
<th>Post PCI</th>
<th>CABG</th>
<th>New Stable Angina</th>
<th>Established Stable Angina</th>
<th>Valve Surgery</th>
<th>Pacemaker</th>
<th>ICD</th>
<th>Pre HAB</th>
<th>Group programme(s) delivered by?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>L</td>
<td>✓</td>
<td>✓</td>
<td>L</td>
<td>x</td>
<td>Nurse Physio, Dietician, Psychol</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>L</td>
<td>✓</td>
<td>✓</td>
<td>L</td>
<td>x</td>
<td>Nurse Physio, Dietician, Psychol</td>
</tr>
<tr>
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<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>x</td>
<td>x</td>
<td>Nurse Physio, OT, Dietician</td>
</tr>
<tr>
<td>Carmarthen-shire</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Pembroke-shire</td>
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<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>L</td>
<td>Nurse OT, Dietician</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Nurse BACR Ins</td>
</tr>
<tr>
<td>Powys</td>
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<td>✓</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Nurse BACR Ins</td>
</tr>
</tbody>
</table>

*Table 15a: Summary of provision of Phase III (group supervised exercise sessions) for each team according to diagnostic group*

**Key (Table 15a)**

- ✓ Yes
  - (Provided routinely as part of service - Should provide, and do)
- x No
  - (Not provided routinely as part of service - Should provide, but don’t)
- L Limited
  - Only provided when capacity available (Should, but only do limited)
- 1 ONLY health education
- 2 ONLY supervised exercise sessions
- 3 ONLY home exercise programmes (e.g. HM, APP, AP, R2R)
- 4 ONLY psychological support
- 5 Patient feedback and goal setting

**Recommendations**

- Table 15a identifies the inequities in provision of Phase III Cardiac Rehabilitation for each diagnostic group within each service across the region. As for Sections 8 and 12 above, consensus guidelines on ‘prioritisation of patient groups’, will be available shortly from the ‘All Wales Cardiac Rehabilitation Working Group’, to inform prioritised future investment and development of Cardiac Rehabilitation services in each locality.
**Table 15b: Summary of description of provision of Phase III (group supervised exercise sessions) or home-based programmes for each team**

<table>
<thead>
<tr>
<th>Key (Table 15b)</th>
<th>Block start or 'roll on roll off?'</th>
<th>Total number of programmes (Hospital &amp; community)</th>
<th>Number of hospital based programmes</th>
<th>Number of community based programmes</th>
<th>Frequency of sessions per week</th>
<th>Duration of sessions in weeks</th>
<th>Waiting time for sessions (Time from identified as ready to start, to start of programme itself)</th>
<th>Validated pre-assessment completed?</th>
<th>Validated post-assessment completed?</th>
<th>Nature of assessment</th>
<th>Assessment completed by:</th>
<th>Staff/patient ratio (1:5) achieved?</th>
<th>Num of ‘Phase III’ programmes where ‘Phase IV’ is subsequently delivered</th>
<th>Home based programmes as an alternative to group supervised exercise sessions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>RO RO</td>
<td>2-3</td>
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<td>1 7</td>
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<td>9</td>
<td>9</td>
<td>√</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>RO RO</td>
<td>2-3</td>
<td>1</td>
<td>1-2</td>
<td>1 7</td>
<td>1-5</td>
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<td>9</td>
<td>9</td>
<td>√</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Swansea</td>
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<td>4</td>
<td>4</td>
<td>0</td>
<td>1 12</td>
<td>2-3</td>
<td>9</td>
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<td>9</td>
<td>√</td>
<td>0</td>
<td></td>
</tr>
<tr>
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<td>6-8</td>
<td>2-3</td>
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<td>4-5</td>
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</tr>
<tr>
<td>Pembrokeshire</td>
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<td>1</td>
<td>3</td>
<td>1 8-12</td>
<td>4-8</td>
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<td>9</td>
<td>√</td>
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<td>R2R</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>RO RO</td>
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<td>0</td>
<td>3</td>
<td>2 8</td>
<td>1</td>
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<td>4</td>
<td>HM</td>
</tr>
<tr>
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<td>1</td>
<td>2</td>
<td>2 8</td>
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<td>9</td>
<td>9</td>
<td>9</td>
<td>√</td>
<td>2</td>
<td>HM</td>
</tr>
</tbody>
</table>

**Key Findings:**

- **BS**: Block start
- **RORO**: roll on roll off.

**Key (Table 15b)**

- ✔️ YES
- ✗ NO

- **HM**: Heart Manual
- **AP**: Angina Plan
- **APP**: Angioplasty Plan
- **R2R**: BHF Road to Recovery
- **BS**: Block start
- **RORO**: roll on roll off.

---

...Provision of Phase III Cardiac Rehabilitation (Continued)...

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Table 15b: Summary of description of provision of Phase III (group supervised exercise sessions) or home-based programmes for each team
Recommendations

- Table 15b identifies the variability in style and possible inequity of Phase III group ‘supervised exercise sessions’ or home-based programmes employed by each team across the region. Consensus guidelines on the ‘optimal model’ for Cardiac Rehabilitation available shortly from the ‘All Wales Cardiac Rehabilitation Working Group’ will help guide local service redesign where this is considered necessary.

- Additionally, the Advisory Group has identified the need for further audit / research to ascertain optimal models of Phase III delivery.
Quality Requirement 129 - An operational policy should be in use covering discharge from the Cardiac Rehabilitation programme at the end of the structure programme. This should cover:

- Communication with the patient’s primary care team about:
- Current risk factors
- Progress in Cardiac Rehabilitation
- Future goals
- Referral to community-based exercise programmes (Phase IV) and vocational support
- Information for patients contacting the Cardiac Rehabilitation team for further advice and support

### Key Findings:

<table>
<thead>
<tr>
<th>Key (Table 16)</th>
<th>Communication with the patient’s primary care team about:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Current risk factors, Progress in Cardiac Rehabilitation, Future goals, Referral to community-based exercise programmes, Referral to vocational support, Nature of this communication?</td>
</tr>
</tbody>
</table>

| Bridgend       | ✓ | ✓ | ✓ | ✓ | x | Discharge letter | ✓ |
| Neath Port Talbot | ✓ | ✓ | ✓ | ✓ | x | Discharge letter | ✓ |
| Swansea        | ✓ | ✓ | ✓ | ✓ | x | Discharge letter | ✓ |
| Carmarthenshire | ✓ | ✓ | ✓ | ✓ | ✓ | Discharge letter | ✓ |
| Pembrokeshire  | ✓ | ✓ | ✓ | ✓ | ✓ | Discharge letter | ✓ |
| Ceredigion     | ✓ | ✓ | ✓ | ✓ | ✓ | Discharge letter | ✓ |
| Powys          | ✓ | ✓ | ✓ | ✓ | x | Discharge letter | ✓ |

### Recommendations:

- The Advisory Group recommends the review of operational policies pertaining to discharge from the Cardiac Rehabilitation programme in each team, as an opportunity to share best practice across the region.
### Key Findings:

<table>
<thead>
<tr>
<th>Location</th>
<th>Phase IV Details</th>
<th>Availability of other 'exit strategies' post Phase III.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>No problems identified. Local Authority funded.</td>
<td>Cardiac Support Group.</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>No problems identified. Local Authority funded.</td>
<td>Cardiac Support Group.</td>
</tr>
<tr>
<td>Swansea</td>
<td>6 venues available in Swansea for Phase IV. 3 are funded by Local Authority. Limited evening classes are a concern for some patients. Cardiac Rehabilitation Team has good links with the Phase IV providers. Local Authority and privately funded.</td>
<td>Walking Group Cardiac Support Group</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>Phase IV available at the 4 county leisure centres 1 at hall. 1 provided privately in a community hall. Sometimes delays in starting. No evening or weekend class available. Local Authority and privately funded.</td>
<td>Maintenance classes</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>Community programmes follow on directly From Withybush General Hospital Within 1-2 weeks then the patient is asked to see their GP for confirmation Local Authority and BLF funded</td>
<td>Walking Steps to Health, Long Term Maintenance sessions at Local Authority Centres/ community centres</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>Both Phase III and Phase IV are delivered together. It is therefore a seamless progression. Local Authority and Cardiac Rehabilitation funded.</td>
<td>Participants are encouraged to form groups and attend other available exercise classes / walking groups together</td>
</tr>
<tr>
<td>Powys</td>
<td>Part LHB, part Local Authority funded.</td>
<td>Walking groups, cardiac support groups and local challenges</td>
</tr>
</tbody>
</table>

**Table 17: Summary of availability of Phase IV and other ‘exit strategies’ for patients for each team:**

**Recommendations**

- The Advisory Group recommends strong professional links between Cardiac Rehabilitation and local authority/other staff to ensure an integrated approach in planning, delivery and evaluation of the complete Cardiac Rehabilitation pathway.
- The Advisory Group recommends that where possible, Phase III and Phase IV programmes should be co-located, preferably in community settings, to promote ease of access, facilitate a seamless progression between phases, and to achieve optimal uptake of Phase IV and lifelong exercise.
- The Advisory Group recommends that progression between Phases III and IV needs to be sufficiently prompt to ensure maintenance of patient fitness, motivation, and engagement in ongoing exercise/activity.
- The Advisory Group recommends that a wider remit is developed for Phase IV Cardiac Rehabilitation, to encompass a more diverse range of non-gym based activities e.g. Tai-Chi; Bowls; Cycling; Walking; Gardening etc.
The Advisory Group recommends, in addition to traditional exercise-focussed activities, that local social and support networks are developed as a means of addressing patients’ psychosocial needs. This is particularly relevant for patients precluded from traditional exercise but experiencing high levels of depression and social isolation.
18. Cardiac Rehabilitation for Heart Failure.

QR 130 - Guidelines for communication with the Local Heart Failure Team/s in the local area should have been agreed (QR98). These guidelines should specify the arrangements for communication about changes to the patient’s condition and management plan.

QR 91 - The following rehabilitation and support services should be available to patients with heart failure during the ongoing treatment, monitoring and care of their condition:

- Occupational therapy.
- Physiotherapy.
- Sports and exercise physiology / therapy.
- Counseling and psychological support.
- Mental health services.
- Social work.
- Specialist dietary advice.
- Specialist palliative care.
- Pharmacy [if not yet a core member of the local / tertiary team]

Key Findings:

<table>
<thead>
<tr>
<th>Key (Table 16)</th>
<th>Guidelines for communication with the Local Heart Failure Team/s</th>
<th>Provision of rehabilitation and support services: (provided by Cardiac Rehabilitation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Guideline</td>
<td>Occupational therapy</td>
</tr>
<tr>
<td>Bridgend</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Swansea</td>
<td>N/A</td>
<td>x</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>N/A</td>
<td>x</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Powys</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Recommendations:

- The Advisory Group identifies that significant work is necessary for the development of guidelines for communication and provision of rehabilitation and support service for patients with heart failure. The ‘Baseline Review of Heart Failure Services’ currently being undertaken across the network will add further detail and help inform need for future investment and developments.
19. Service evaluation and audit.

Quality Requirement 131 - The Cardiac Rehabilitation team should participate in the National Audit of Cardiac Rehabilitation (NACR).

Key Findings:

<table>
<thead>
<tr>
<th></th>
<th>NACR Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>✓</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>✓</td>
</tr>
<tr>
<td>Swansea</td>
<td>✓</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>✓</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>✓</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>✓</td>
</tr>
<tr>
<td>Powys</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 19: Summary of participation with NACR for each team

Recommendations:

- Table 19 illustrates the hard work and commitment demonstrated by teams in participating with the National Audit of Cardiac Rehabilitation. This success is attributed largely to the BHF 3 year short-term funding to facilitate this process, which will begin to cease from December 2008, posing a threat to team’s ability to continue participation in the audit. The Advisory Group identifies the essential need for continued investment to support the ongoing participation in the audit.
20. Public & Patient involvement

Quality Requirement 134 – Operational policies should be in use covering at least:
- Mechanisms for receiving feedback from patients and carers about their rehabilitation programme
- Mechanisms for involving patients and carers in decisions about the organisation of the Cardiac Rehabilitation service

Key Findings:

<table>
<thead>
<tr>
<th>Location</th>
<th>Policy on mechanisms for receiving feedback from patients and carers about their rehabilitation programme</th>
<th>Nature of feedback mechanism</th>
<th>Policy on mechanisms for involving patients and carers in decisions about the organisation of the cardiac rehabilitation service</th>
<th>Nature of involvement</th>
<th>Patient User Group exist</th>
<th>Nominated Patient Representatives</th>
<th>Nature and extent of Nominated Patient Representatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridgend</td>
<td>✓ PSQ × PSQ IC x x x x</td>
<td>PSQ</td>
<td>×</td>
<td>PSQ IC</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Neath Port Talbot</td>
<td>✓ PSQ × PSQ IC x x x x</td>
<td>PSQ</td>
<td>×</td>
<td>PSQ IC</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Swansea</td>
<td>x PSQ FG CB x PSG PPI Grp ✓ ✓</td>
<td>✓</td>
<td>x</td>
<td>PSQ FG</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Carmarthenshire</td>
<td>✓ PSQ FG x PSQ FG x x x x</td>
<td>✓</td>
<td>x</td>
<td>PSQ FG</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Pembrokeshire</td>
<td>✓ PSQ ✓ PSQ FG ✓ ✓</td>
<td>✓</td>
<td>x</td>
<td>PSQ FG</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Ceredigion</td>
<td>✓ PSQ x PSQ x x x x</td>
<td>✓</td>
<td>x</td>
<td>PSQ</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Powys</td>
<td>✓ PSQ x PSQ x x x x</td>
<td>✓</td>
<td>x</td>
<td>PSQ</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 20: Summary of existence of operational policies and process for patient and public involvement for each team:

Key (Table 20)
- ✓ Yes (Operational policy / process exist)
- × No (Operational policy / process do not exist)
- PSQ: Patient satisfaction questionnaire
- PSG: Patient support group
- FG: Focus group
- CB: Comments book
- IC: Informal comments

Recommendations
- The Advisory Group recommends the review of operational policies pertaining to the process for patient and public involvement for each team, as an opportunity to share best practice across the region
## 21. Professional development and training.

**Quality Requirement 132** - The Cardiac Rehabilitation Team should cooperate with and participate in relevant staff training and awareness programmes.

### Key Findings:

<table>
<thead>
<tr>
<th>Nature of staff training and awareness programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team members attend:</td>
</tr>
<tr>
<td>• Annual All Wales Cardiac Rehabilitation Conferences</td>
</tr>
<tr>
<td>• British Association for Cardiac Rehabilitation (BACR) Annual Conference</td>
</tr>
<tr>
<td>• Study days of relevance to Cardiac Rehabilitation</td>
</tr>
<tr>
<td>• ACPICR Advanced Course - Exercise in Cardiac Rehabilitation for the Complex Patient</td>
</tr>
<tr>
<td>• Motivational Interviewing Training for all team members</td>
</tr>
<tr>
<td>• Training the Trainer Motivational Interviewing training for selected team members</td>
</tr>
<tr>
<td>• Ongoing ‘in house’ motivational interviewing training updating for all team members</td>
</tr>
<tr>
<td>• ILS training annually for all team members.</td>
</tr>
</tbody>
</table>

Dr Linda Speck (Team Manager) & Dr Nick Brace, clinical health psychologists, have devised the *Introduction to Psychological Issues for Cardiac Rehabilitation Professionals* course for the British Association for Cardiac Rehabilitation and are now delivering it on a regular basis throughout the UK.

| Team members attend:                            |
| • Mandatory training |
| • Monthly in-house educational programme |
| • Local and national study days. |
| • Training needs of staff identified as part of appraisal. |
| • Intermediate Life Support training. |

| Team members attend:                            |
| • Annual All Wales Cardiac Rehabilitation Conferences |
| • British Association for Cardiac Rehabilitation (BACR) Annual Conference |
| • Other conferences and study days of relevance |
| • Angina Plan training |
| • Heart Manual training |
| • Local cardiac rehab seminars |
| • BHF conferences |
| • Intermediate Life Support training - annually. |

| Team members attend:                            |
| • Impromptu teaching sessions when time allows |
| • attendance at study sessions |
| • Intermediate Life Support training. |

| Team members attend:                            |
| • Study days and BACR courses |
| • Advanced Life Support training |
| • Appropriate post-graduate training |

*Table 21: Summary of staff training and awareness for each team*
Key Findings:

<table>
<thead>
<tr>
<th>Service</th>
<th>Budget for 2008/09: (approx)</th>
<th>Patients seen in 2008/09:</th>
<th>Cost per patient:</th>
<th>Funding Stream:</th>
<th>Funding status and short-term funding situation:</th>
</tr>
</thead>
</table>
| Bridgend           | £139,812                      | 480                       | £291              | • Bridgend LHB via ABM NHS Trust  
• IIHF                                                                  | 2/3 of service was resourced through IIHF until Dec ’07. This element of the service has temporarily continued beyond this date through Trust funding – awaiting LHB funding (business case submitted). |
| Neath Port Talbot  | £127,481                      | 340                       | £375              | • Neath Port Talbot LHB via ABM NHS Trust  
• IIHF                                                                  | Whole service was resourced through IIHF until March ’08. Service has temporarily continued beyond this date through Trust funding – awaiting LHB funding (business case submitted). |
| Swansea            | £320,936                      | 732                       | £438              | • Swansea LHB via ABM NHS Trust  
• HCW                                                                  | The Community Cardiac Rehabilitation Programme was resourced through BLF until Apr ’08 and has now ended, business case submitted to LHB |
| Carmarthenshire    | £370,000                      | 660                       | £560              | • Carmarthenshire LHB via Hywel Dda NHS Trust                                                                                         | Part recurrent funding, part non-recurrent funding. Non-recurrent funding via IIH, BLF & BHF has now all ended. These elements of the service have continued through Trust funding, which is agreed until Mar ’09. |
| Pembrokeshire      | £115,772                      | 452                       | £256              | • Pembrokeshire LHB via Hywel Dda NHS Trust  
• BLF                                                                  | Elements of the service BLF funded until July 2008. This element of the service has continued beyond this date through Trust funding, which is guaranteed until Mar ’09. |
| Ceredigion         | £102,966                      | 452                       | £227              | • Ceredigion LHB via Hywel Dda NHS Trust                                                                                              | Recurrent funding.                                                                                                           |
| Powys              | £120,000                      | 383                       | £313              | • Powys LHB                                                                                                                             | Recurrent funding.                                                                                                           |

Table 22: Summary 2008/09 funding arrangements for each team

Recommendations:

- The nature and cost of provision for Cardiac Rehabilitation varies enormously, despite it being ‘highly cost effective’ at approximately £550 per patient (NICE Cardiac Rehabilitation Commissioning Toolkit, 2008). Table 22 illustrates the 2008/09 funding status, particularly the variability in expenditure per patient between teams. As a High priority, investment is needed to provide for equitable service delivery across the region.
Appendix iii

Prioritised Actions

Mid & South West Wales Cardiac Network
Cardiac Rehabilitation Advisory Group
<table>
<thead>
<tr>
<th>Actions by the ‘Advisory Group’ to clarify why referral is not achieved within 2 working days of diagnosis / 7 working days of discharge /referral and establish further recommendations to remedy the situation.</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Advisory Group’ to review operational policies pertaining to:</td>
<td>1</td>
</tr>
<tr>
<td>• referral of in-patients to their local Cardiac Rehabilitation team prior to discharge.</td>
<td></td>
</tr>
<tr>
<td>• the ongoing assessment of patients.</td>
<td></td>
</tr>
<tr>
<td>• Phase 3.</td>
<td></td>
</tr>
<tr>
<td>• discharge from the Cardiac Rehabilitation programme at the end of the structured programme.</td>
<td></td>
</tr>
<tr>
<td>• the process for patient and public involvement for each team.</td>
<td></td>
</tr>
<tr>
<td>Develop the proposed audit tool for performance measurement across the region for monitoring of all standards.</td>
<td>3</td>
</tr>
<tr>
<td>More specifically, ‘Advisory Group’ to collaborate with ‘All Wales Cardiac Rehabilitation Working Group’ in identifying local standards / performance measurements for Phase 3.</td>
<td>4</td>
</tr>
<tr>
<td>Actions to promote more efficient modes of referral / communication, with possibility of adopting an electronic mode of referral / communication as a means of addressing known weaknesses in current referral arrangements.</td>
<td>5</td>
</tr>
<tr>
<td>‘Advisory Group’ recommends the use of Integrated Care Pathways (ICPs) to guide clinical practice where these are necessary. The Group is to explore the possibility of developing a regionally agreed ICP as a means of enhancing communication between services and providing greater equity and continuity of care for patients.</td>
<td>6</td>
</tr>
<tr>
<td>Actions necessary by the ‘M&amp;SWCN Cardiac Rehabilitation Advisory Group’, in collaboration with the ‘All Wales Cardiac Rehabilitation Working Group – NACR Sub Group’ to develop NACR as an adequate mechanism for analysis and regular reporting of patterns and trends in Cardiac Rehabilitation across the region.</td>
<td>7</td>
</tr>
<tr>
<td>‘Advisory Group’ to further explore variability in approaches and models used. Consensus guidelines on the ‘optimal model’ for Cardiac Rehabilitation available shortly from the ‘All Wales Cardiac Rehabilitation Working Group’ will help guide local service redesign where this is considered necessary.</td>
<td>8</td>
</tr>
<tr>
<td>More specifically, ‘Advisory Group’ to collaborate with ‘All Wales Cardiac Rehabilitation Working Group’ and Local Authorities in identifying local standards / performance measurements to capture transition between Phase 3 and Phase 4.</td>
<td>9</td>
</tr>
<tr>
<td>‘Advisory Group’ recommends the development of a ‘hand-held record card’ for ease of use, to replace the currently used ‘Cardiac Care Record’ when stock levels are exhausted.</td>
<td>10</td>
</tr>
</tbody>
</table>