

Livewell Southwest

**Cardiac Rehabilitation
Operational Policy**

Version No 1.1
Review: July 2019

Notice to staff using a paper copy of this guidance

The policies and procedures page of LSW Intranet holds the most recent version of this document and staff must ensure that they are using the most recent guidance.

Author: Cardiac Rehabilitation Team

Asset Number: 289

Reader Information

Title	Cardiac Rehabilitation Operational Policy V.1.1
Asset number	289
Rights of access	Public
Type of paper	Policy
Category	Clinical
Subject	Guidelines for the management of patients requiring Cardiac Rehabilitation in the immediate post-discharge period in primary care.
Document purpose /summary	The purpose of this operational policy is for Cardiac Rehabilitation Nurses to provide a standardised approach for the care and management of patients with coronary heart disease in primary care.
Author	Cardiac Rehabilitation Team
Ratification date and group	6 th July 2016. Policy Ratification Group
Publication date	22 nd July 2016
Review date and frequency of review	Three years after publication, or earlier if there is a change in evidence.
Disposal date	The Policy Ratification Group will retain an e-signed copy for the archive in accordance with the Retention and Disposal Schedule, all copies must be destroyed when replaced by a new version or withdrawn from circulation.
Job title	Cardiac and Respiratory Manager.
Target audience	Cardiac Rehabilitation specialist team, Acute hospital cardiac health professionals, Community Nursing teams, Primary care, Commissioners of cardiac services.
Circulation	Electronic: Livewell Southwest (LSW) intranet and website (if applicable) Written: Upon request to the PRG Secretary on ☎ 01752 435104. Please contact the author if you require this document in an alternative format.

Consultation process	Reviewed by Cardiac Rehabilitation specialist team, Consultant Cardiologists and Commissioners.
Equality analysis checklist completed	
References/sources of information	<p>Association of Chartered Physiotherapists Interested in Cardiac Rehabilitation (A.C.P.I.C.R) "Standards for the Exercise Component of the Phase III Cardiac Rehabilitation 2003".</p> <p>British Association of Cardiac Rehabilitation(BACR), eds, Coates A, McGee H, Stokes H, Thompson D, Guidelines for Cardiac Rehabilitation, Blackwell Science, Oxford , 1995, pp 20-25.</p> <p>National Institute for Clinical Effectiveness(NICE), clinical guideline 48, MI: Secondary Prevention, November 2013.</p> <p>National Service Framework(NSF) for Coronary Heart Disease, Ch 7, Cardiac Rehabilitation, March 2000.</p> <p>Scottish Intercollegiate Guidelines Network (SIGN), Guideline 57: Cardiac Rehabilitation, 2002 Glasgow.</p> <p>Cardiac Rehabilitation Service Specification (Peninsula Heart & Stroke Network – Commissioning Statement and Service Specification, March 2010.</p> <p>BACPR Standards and Core Components for Cardiac Disease Prevention and Rehabilitation 2012 (2nd Edition).</p> <p>Department of Health Commissioning pack: Service Specification for Cardiac Rehabilitation 2010.</p>
Associated documentation	N/A
Supersedes document	V.1.
Author contact details	By post: Local Care Centre Mount Gould Hospital, 200 Mount Gould Road, Plymouth, Devon. PL4 7PY. Tel: 0845 155 8085, Fax: 01752 272522 (LCC Reception).

Document Review History

Version no.	Type of change	Date	Originator of change	Description of change
0:1	New document	March 2014	Cardiac Rehabilitation Team	New document.
1	Ratified	July 2014	PRG	Ratified.
1.1	Reviewed	May 2016	Cardiac and Respiratory Manager.	Minor changes

Contents		Page
1	Introduction/Abbreviations.	6
2	Definition and stages of cardiac rehabilitation	7
2.1	Definition	7
2.2	Stages	7
3	Delivery of Stages 2 - 6 Cardiac Rehabilitation for patients following Myocardial Infarction, Coronary Artery Bypass Grafts and Percutaneous Coronary Intervention.	7
3.1	Overall Aims	7
3.2	Entry Criteria	8
3.3	Exclusion Criteria	8
3.4	Initial Assessment and Input	8
3.5	Follow Up Contact	10
3.6	Liaison with General Practice	11
3.7	Referral to Exercise and Education programme	11
3.8	Discharge from the service	11
4	Data Collection	11
4.1	Electronic Records System	11
Appendix 1	Stages of Rehabilitation	12
Appendix 2	The Core Components	13
Appendix 3	Care Plan	14
Appendix 4	Assessment Form	16

Cardiac Rehabilitation Operational Policy

1. Introduction

1.1 This operational policy is to:

- Provide a standardised protocol for the Cardiac Rehabilitation Specialist Team in caring for adult (18+ years) patients in the community.
- Ensure that patients with Coronary Heart Disease receive the best possible treatment and management in order to achieve and maintain optimal physical and psychosocial health, reduce the risk of subsequent cardiac problems and promote their return to a full and normal life.
- Define the process whereby members of the Cardiac Rehabilitation Team deliver appropriate lifestyle change advice.

1.2 **Abbreviations used.**

ACPICR Association of Chartered Physiotherapists Interested in Cardiac Rehabilitation

BACPR British Association of Cardiac Rehabilitation

GTN Glyceryl trinitrate

HGV Heavy Goods Vehicle

NACRA National Audit of Cardiac Rehabilitation

NICE National Institute of Clinical Excellence

NSF National Service Framework

PCI Percutaneous Coronary Intervention

PSV Passenger Service Vehicle

SIGN Scottish Intercollegiate Guidelines Network

1.3 These protocols are not static and will be developed as required in line with up to date guidelines issued by NSF, SIGN, NICE, BACPR, A.C.P.I.C.R, Department of Health.

2. Definition of Cardiac Rehabilitation

2.1 Cardiac Rehabilitation is the process by which patients with cardiac disease, in partnership with a multi-disciplinary team of health professionals, are encouraged and supported to achieve and maintain optimal physical and psychosocial health. The involvement of partners, other family members and carers is also important

(SIGN 2002).

2.2 Stages of Cardiac Rehabilitation

- Stage 0** Identify and refer patient
- Stage 1** Manage referral and recruit patient
- Stage 2** Assess patient
- Stage 3** Develop patient care plan
- Stage 4** Deliver comprehensive cardiac rehabilitation programme
- Stage 5** Conduct final cardiac rehabilitation assessment post exercise and education programme
- Stage 6** Discharge and transition to long term management

3. Delivery of Stages 2 - 6 within the community

3.1 Overall Aims

- 1 To manage patients in the community following an acute admission Following post-myocardial Infarction and/or Coronary Artery Bypass Grafts +/- Valve replacement or non-elective Percutaneous Coronary Intervention (PCI).
- 2 To utilise, where appropriate, family and carer support and other multi-disciplinary agencies.
- 3 To provide individualised care in order to reduce the risk of a future cardiac event and to enhance patient's quality of life.
- 4 To reduce inappropriate re-admission to hospital and unnecessary use of primary care.

3.2 Entry Criteria

3.2.1 The service is offered to patients who meet the following criteria:

- Registration with a Plymouth GP.
- Referred by a healthcare professional.
- Patients that self-refer will be followed up after consultation with the patient's GP and seen if appropriate.
- Have one or more of the following qualifying medical conditions:-Acute MI, Coronary Artery Bypass Grafts +/- Valve Replacement or non-elective Percutaneous Coronary Intervention.

3.3 Exclusion Criteria

3.3.1 The service will not be provided to patients who have an overriding co-morbidity

assessed as not benefitting from cardiac rehabilitation, although their carers might be offered appropriate support.

3.4 Initial Assessment and Input

3.4.1 Initial contact

Patients are contacted by telephone within 3 days of receipt of referral to offer an appointment. A letter is sent out if the patient cannot be contacted by telephone. The aim is to see the patient within 14 days of receipt of referral. If the patient declines an appointment, they will be offered standard written information and a discharge letter will be sent to the GP.

3.4.2 Home Visit or Clinic Appointment

This appointment is carried out in the patient's home or community clinic setting. Patients are offered a clinic appointment and are encouraged to attend with a relative or carer. In the following circumstances, patients will be offered an appointment at home:-

- The patient is too unwell to attend clinic.
- The patient has co-morbidities which make it difficult for them to attend a clinic. The team assess that they might achieve greater concordance through undertaking a home visit.

If there is an identified risk to staff the patient will be seen in clinic or if unable to attend clinic, a joint visit with 2 members of staff will be arranged. In each case a minimum of two staff will be present.

3.4.3 Assessment and input

The purpose of this appointment is to initiate advice and support to the patient and their family following their acute cardiac event. Stage 2 - 6 is seen as the time in which professionals can capitalise on the individual's motivation for change of lifestyle (BACPR 2012).

The content of this appointment will include the following based on the Core Components (see appendix 2).

- 1 Establish the patients' understanding of events, diagnosis, treatment and future management.
- 2 Explain the patient's diagnosis and implications of this diagnosis in a manner that can be understood by the patient.
- 3 Ensure the patient is aware of relevant restrictions according to their diagnosis, i.e. lifting, pulling, pushing, and the rationale for these restrictions based on healing process, myocardial scar tissue and ventricular remodelling / surgical wounds.
- 4 Assess modifiable and non-modifiable risk factors for Coronary Heart Disease and discuss lifestyle modification plan and realistic goals and the evidence base and rationale behind this advice (for assessment and care

- plan (see appendix 3b and 4).
- 5 Discuss secondary prevention medication, compliance, safety and possible side effects.
 - 6 Reiterate the purpose of the walking programme given in the hospital, individualising advice and emphasising the importance of warm up, brisk walking and cool down.
 - 7 Discuss and assess psychological reaction to MI and/or surgery and/or PCI Use observation and assessment tool, such as Hospital Anxiety and Depression Scale and act according to the assessment, referring as required.
 - 8 Refer the patient to other specialist services as required, e.g. Plymouth Smoking Advice Service, Heart Failure Service, District Nurses, and Care Direct. If patient is referred to Heart Failure Service by Cardiac Rehab, the patient's care will be taken over by them to ensure no overlap in services.
 - 9 Assess clinical signs and symptoms e.g. blood pressure, pulse (regularity and rate), signs of heart failure (breathing, ankle oedema), chest pain, palpitations, dizziness, cough etc. Document and take appropriate action, e.g. liaise with GP, Hospital Consultants team.
 - 10 Assess surgical patient's pain control. Advise on need for regular analgesia to be able to move, deep breathe and sleep comfortably. Liaise with GP as necessary.
 - 11 Assess surgical wounds, looking for signs of infection Liaise with GP and District Nurses as necessary.
 - 12 Assess surgical patients for common after-effects post surgery e.g. constipation, poor appetite, blurred vision, poor concentration. Advise the patient accordingly.
 - 13 Discuss the resumption of sexual activity.
 - 14 Advise about return to driving, informing insurance company and/ or DVLA depending of nature of Licence and clinical condition. If HGV or PSV licence holder, advise of specific rules regarding returning to work.
 - 15 Educate the patient regarding the procedure to follow if they experience chest pain or associated symptoms with an MI, emphasising the 15 minute rule and how to safely use GTN Spray if prescribed.
 - 16 Assess MI and Coronary Artery Bypass Graft's patient's suitability and interest in attending the structured Exercise and Education programme and give details as appropriate. Patients can also be offered the option of attending the education component of the programme and be referred to the Exercise Physiologist for more specific input about exercise. PCI patients are offered the option of attending the education component of the above programme and can be referred to British Association of Cardiac Prevention and Rehabilitation Phase IV exercise classes. A care plan will be left with the patient, with agreed goals. Review will usually be with the patient's GP or practice nurse unless specific follow-up is offered from this service.
 - 17 Advise patients that they can contact the service for advice and queries and ensure that they have the contact details.
 - 18 Relevant lifestyle literature will be left with the patient in a suitable format to reinforce verbal advice given during assessment.

- 19 Advise of local support groups as appropriate.
- 20 Collect information for audit purposes.

3.5 Follow up Contact

- 1 Patients are asked to phone the service with any further concerns or queries that arise.
- 2 Following the initial assessment, patients might be offered a follow-up clinic appointment, dependant on clinical need.
- 3 Patients who have been referred to structured Exercise and Education programme will be contacted by phone 2 weeks prior to the start of the programme to ensure they are clinically stable and to confirm the start date.

3.6 Liaison with General Practice

- 1 Liaison with the patient's GP will occur as necessary following assessment.
- 2 Following initial assessment and input, a letter will be sent to the GP and Practice Nurse advising that the patient should be included in the Coronary Heart Disease register for regular review. The letter will include:-
 - Current clinical status.
 - Risk factor status.
 - The patient's lifestyle modification plan, highlighting any specific issues which will need to be followed up such as smoking cessation, hypertension, weight management, dietary advice.
 - Date that bloods are due and reason for bloods, depending on clinical condition and titration of medication.
 - Whether the patient is planning to attend the exercise and education programme and approximate date of this.
- 3 A copy of this letter will be sent to the patient.

3.7 Referral to the Community Cardiac Rehabilitation Stages 4 - 6 Exercise and Education Programme (see relevant protocol).

- 3.7.1 The structured programme should be offered to all suitable patients. If patients do not meet the referral criteria for structured exercise, they should be offered the opportunity to attend the educational component and offered appropriate information about physical activity at home.
- 3.7.2 The aim of the exercise programme is to increase exercise capacity, encourage patients to achieve moderate intensity exercise for 30 minutes on 5 days of the week in order to enhance the patient's quality of life and psychological well-being.

3.8 Discharge from the Service

- 3.8.1 Those patients who are not planning to attend the structured exercise and education programme will be discharged from the service 12 weeks following their last contact.

3.8.2 Those patients who continue into the LSW exercise and education programme will be discharged following their last exercise session.

4. Data Collection

4.1 As well as a corporate and professional requirement, it is important to maintain data for audit and research purposes.

- **SystemOne.**

All patient demographic and clinical details and contacts are entered into the LSW electronic recording system.

All policies are required to be electronically signed by the Lead Director. Proof of the electronic signature is stored in the policies database.

The Lead Director approves this document and any attached appendices. For operational policies this will be the Locality Manager.

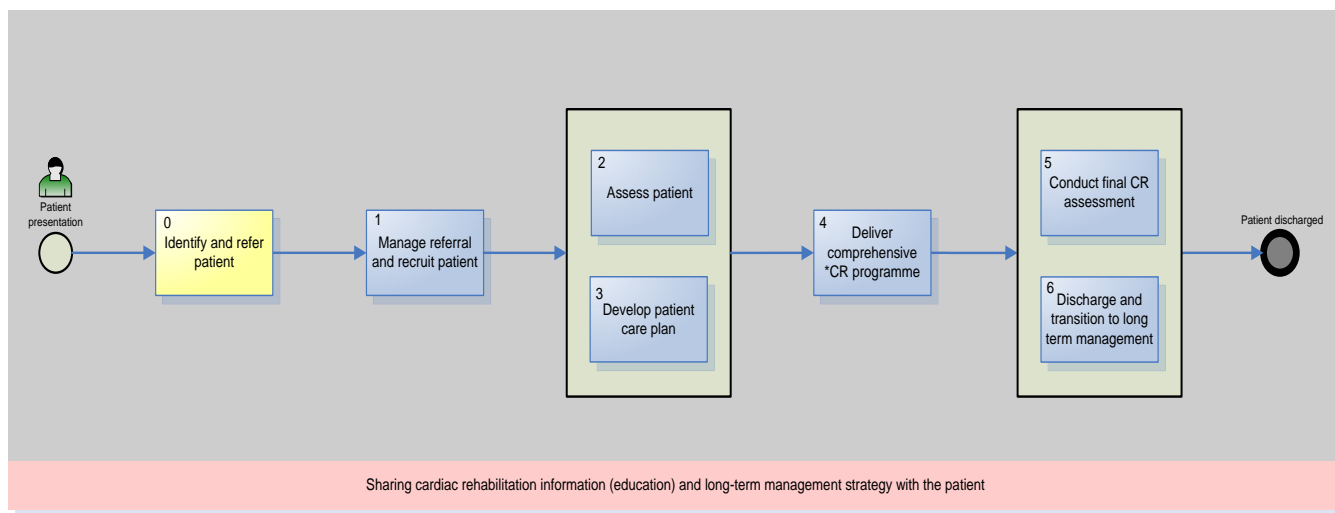
The Executive signature is subject to the understanding that the policy owner has followed the organisation process for policy Ratification.

Signed: Director of Operations

Date: 20th July 2016

Appendix 1

Stages of Rehabilitation



*CR = cardiac rehabilitation

From DH Commissioning Pack: Service specification for cardiac rehabilitation 2010

http://www.bacpr.com/resources/46C_BACPR_Standards_and_Core_Components_2012.pdf

Appendix 2

The Core Components (Standards and Core Components BACPR 2012)

http://www.bacpr.com/resources/46C_BACPR_Standards_and_Core_Components_2012.pdf

A key aim of cardiac rehabilitation, through the core components, is not only to improve physical health and quality of life but also to equip and support people to develop the necessary skills to successfully self manage. The delivery of cardiac rehabilitation should adopt a bio-psychosocial evidence-based approach, which is culturally appropriate and sensitive to individual needs and preferences.

These include:

1. Health behaviour change and education.
2. Lifestyle risk factor management.
 - Physical activity and exercise.
 - Diet.
 - Smoking cessation.
3. Psychosocial health.
4. Medical risk factor management.
5. Cardio-protective therapies.
6. Long-term management.
7. Audit and evaluation.

Appendix 3 Care Plan

Medication

If you have had a heart attack, were you given a clot busting drug?

Yes No

Name of drug given:

Date:

Any allergies to medicines?

Name and group of medicine: for example, Frusemide diu-retic	Dose	When I take it	Side effects/changes to medication



British Heart Foundation
 Greater London 1, Suite
 180, 47-49, Abchurch Lane, London EC4N 3DF
 Phone: 020 7554 0000
 Fax: 020 7554 0130
 Website: bhf.org.uk

Tests

Date	B/P	Date	B/P	Date	B/P

Date			

Investigations

- Exercise test
- Echocardiogram
- Thallium scan
- Magnetic resonance imaging
- Angiogram
- Other:

Treatment

- Coronary artery bypass surgery
- Angioplasty
- Pacemaker
- Implantable cardioverter defibrillator
- Valve surgery
- Other:

My progress card

My details

Name: _____

Date of birth: _____

If you find this card, please phone: _____

G.P.: _____

Phone: _____

Cardiac team: _____

Phone: _____

Conditions

Angina

Acute coronary syndrome

Heart attack

Heart valve disease

Heart failure

Arrhythmic/irregular heart beat

Cardiomyopathy

Diabetes



For information and support on anything heart-related

0300 330 3311 | bhf.org.uk



BEATING HEART DISEASE TOGETHER

Risk factor tracking record

Risk factors are things about your lifestyle that increase your chances of developing coronary heart disease (CHD). There are certain risk factors that you cannot change, such as your age, sex, ethnic origin and family history. The good news is that many risk factors can be reduced.

The table below shows how you can keep your heart healthy.

Giving up smoking	Controlling blood pressure	Increasing physical activity	Controlling weight	Eating a healthy diet	Lowering cholesterol	Drinking within sensible limits	Controlling diabetes
No smoking.	Blood pressure (B/P) below 140/85. No greater than 130/80 if you have diabetes or CHD.	At least 30 minutes of moderate intensity activity five or more days a week.	Waist should be less than 31.5ins (80cm) for a woman and 37ins (94cm) for men. South East Asians: waist should be less than 31.5ins (80cm) for women and 35.5ins (90cm) for men.	At least five portions of fruit and vegetables per day. Reduce saturated fat, salt and sugar intake.	Total cholesterol level (TCL) as low as possible. If you have CHD, TCL less than 4mmol/l, low-density lipoprotein (LDL) under 2mmol/l and high-density lipoprotein (HDL) above 1mmol/l.	No more than two to three units of alcohol for a woman and three to four units of alcohol for a man daily. This may vary depending on your condition so check with your doctor.	Blood sugar level between 4-7mmol/l before meals. It should be no higher than 10mmol/l two hours after meals. This may vary depending on your condition so check with your doctor.
It can be difficult, at first to change your lifestyle, but over time you will notice the benefit to your health and well-being. Set small realistic goals to help you achieve your aim. You can do this on your own or with the help of your health professionals. Don't try to change too many things at once.							
Risk factor:	Goal: Action plan:		Progress/comments:		Progress/comments:		Progress/comments:
Date:	Review date:	Date:	Date:	Date:	Date:	Date:	Date:
Risk factor:	Goal: Action plan:		Progress/comments:		Progress/comments:		Progress/comments:
Date:	Review date:	Date:	Date:	Date:	Date:	Date:	Date:
Risk factor:	Goal: Action plan:		Progress/comments:		Progress/comments:		Progress/comments:
Date:	Review date:	Date:	Date:	Date:	Date:	Date:	Date:

Additional comments:

PATIENT PROFILE

Date Referred	Date of first contact	Assessment Date
----------------------	------------------------------	------------------------

PATIENT'S NAME	
D.O.B	TEL
GP NAME/SURGERY/TEL NO	ADDED REFERRAL TO EPEX <input type="checkbox"/> W <input type="checkbox"/>
CONSULTANT NAME	ADDED TO RAPA <input type="checkbox"/>
NEXT OF KIN AND RELATIONSHIP TO PATIENT	
Additional phone number:	
RELIGION	ETHNIC GROUP
REASON FOR REFERRAL	DATE & WHO REFERRED
CONSENT TO TREATMENT <input type="checkbox"/>	NAME: SIGNATURE: DATE:

INITIAL MEDICATION LIST		
DATE	MEDICATION	DOSE/HOW OFTEN

AMENDMENTS TO MEDICATION LIST		
DATE	MEDICATION	DOSE/HOW OFTEN

Diagnosis/Procedure/Complications

Symptoms since discharge:

ECHO results:

Troponin:

BNP:

NYHA 1-4:

Other investigations:

Pacemaker/ICD settings:

CHD/PCI/CABG procedure explained:

Flu jab:

GTN use explained:

PREVIOUS MEDICAL HISTORY

Allergies:

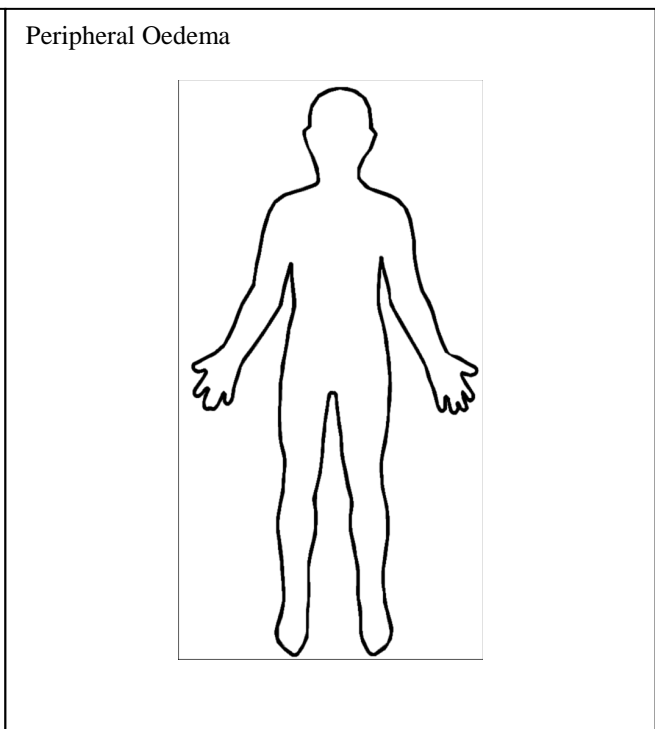
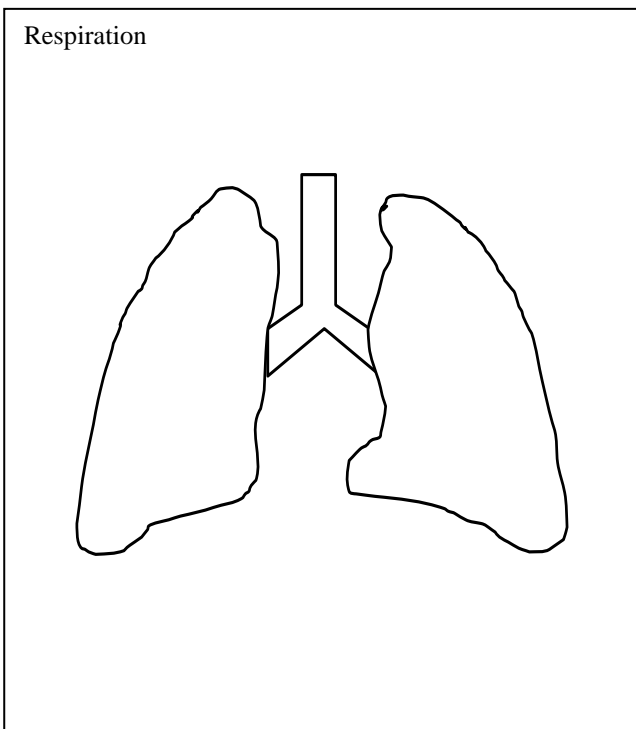
SOCIAL HISTORY

OCCUPATION

FAMILY HISTORY

CLINICAL EXAMINATION		YES	NO
	CYANOSIS:		
	SaO2 - %		
	RESPS:		
	JVP:		
	BP:		
	PULSE:		
	WEIGHT:		
	HEIGHT:		
	BMI:		
	WAIST CIRC:		

Diabetes:



RESPIRATION SMOKING	COMMUNICATION PSYCH STATE HAD SCORE
MOBILITY	ELIMN / SKIN
WORK / INTERESTS	PAIN
SLEEPING	END OF LIFE

NUTRITION

Cardio-Protective Diet advice given	
5 x fruit and veg/day	<input type="checkbox"/>
Wholegrain products	<input type="checkbox"/>
Oily Fish/Mediterranean diet	<input type="checkbox"/>
Olive oil/Sunflower spread	<input type="checkbox"/>
Semi-Skimmed milk	<input type="checkbox"/>
Salt in cooking/at table	<input type="checkbox"/>
Saturated fat intake	<input type="checkbox"/>
Fluid intake	<input type="checkbox"/>
Caffeine intake	<input type="checkbox"/>

Advice booklet given:

Additional information:

Alcohol Consumption:

PHYSICAL ACTIVITY

Physical Activity levels prior to acute event
Physical Activity levels since event Benefits of exercise <input type="checkbox"/> Aerobic exercise <input type="checkbox"/> 5 x 30: <input type="checkbox"/> Warm up/Cool down: <input type="checkbox"/> Intensity/duration <input type="checkbox"/> Swimming <input type="checkbox"/> Walk/talk test <input type="checkbox"/> Maintenance <input type="checkbox"/> Walking programme explained <input type="checkbox"/>
Other Driving <input type="checkbox"/> Holiday insurance <input type="checkbox"/> Sexual activity <input type="checkbox"/>
Referral Phase III YMCA <input type="checkbox"/> Brickfields <input type="checkbox"/> Quayside <input type="checkbox"/> Tavistock <input type="checkbox"/> Low Level <input type="checkbox"/> Not Interested <input type="checkbox"/> state reason: Not suitable <input type="checkbox"/> state reason: PCI patients only Referral Phase IV <input type="checkbox"/> venue

Blood Chemistry Investigations											
DATE	Norm										
Na ⁺	135-145										
K ⁺	3.5-5.5										
Bicarb	22-29										
Urea	2.8-7.6										
Creat	F44-80 M62-106										
GFR	>65										
Glucose	<6.0										
HbA1 _c	40-60%> mmol										
Chol	<5.0										
HDL											
LDL											
Trigs											
Ratio											
Protein	60-83										
Albumin	35-50										
Alk Phos	70-120										
Bilirubin	3-20										
ALT	10-37										
Wcc	3.5-10.5										
Hb	F12-15.5 M13-17.5										
Platelets	140-400										
INR	1.0										
BNP/ Trop/sens	<300 0.1-8.0										
Mg ⁺⁺	0.7-1.0										
Thyroid Function	T4 11-26 TSH 0.35-4.5										
T/Ferrin Sats	16 – 45%										
Iron	11 - 22										
CRP	0.1-5.0										
AP											
AST											