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Post Percutaneous Coronary Intervention (PCI) Clinic Guideline

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and/or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

This guideline was introduced to allow punctual assessment of the cardiac patients post percutaneous coronary intervention (PCI) by the cardiac specialist nurse. The post PCI clinics will only be held alongside the cardiologist.

This guideline is for use by the following staff groups:

This guideline will be used by the Cardiac Specialist nurse who will run the Post Percutaneous Coronary Intervention Clinic.

Lead Clinician(s)

Dr Jasper Trevelyan	Consultant Cardiologist
Approved at Cardiology Business Meeting	31st July 2018
Review Date: This is the most current document and is to be used until a revised version is available	31st February 2021

Key amendments to this guideline

Date	Amendment	Approved by:
24.08.2015	New Document	
August 2017	Document extended for 6 months as per TMC paper approved 22nd July 2015	TMC
December 2017	Sentence added at the request of the Coroner	
December 2017	Document extended for 3 months as per TLG recommendation	TLG
March 2018	Document extended for 3 months as approved by TLG	TLG
June 2018	Document extended for 3 months as approved by TLG	TLG
July 2018	Document Rewieved and approved for further two years	Cardiology Business Meeting
August 2020	Document extended for 6 months during COVID period	QGC/Gold Meeting

Post Percutaneous Coronary Intervention (PCI) Clinic Guideline

Introduction

The Post PCI clinic has been set up to review patients post PCI. The Cardiology specialist nurse (CNS) will see this group of patients. Clinics will need to be run alongside an interventionist Cardiologist. Patients will be identified by the interventionist Cardiologist following a presentation of either elective PCI or PPCI to return to see the specialist nurse.

The Clinical Cardiac Specialist Nurse will provide this service alongside the interventional Cardiologist. Guidelines will be adhered to by the specialist nurse (see chart 3).

Competencies Required

The cardiology specialist nurse team will assist with this service. Competence will be assessed by already established cardiac knowledge, clinical supervision, cpd and relevant educational courses.

The cardiac specialist nurse team team comprises of 2 band 7 and 4 band 6 (WTE) specialist nurses. We have a mixed skill level that includes a post registration cardiology degree, with members of the team being experienced in advanced practice and non-medical prescribing or working towards

Patients Covered

The Clinical cardiology specialist nurse will see patients post PCI with no further complications as identified by the Cardiologist. (i.e. patients requiring further intervention should not be referred).

Guideline

- Patients will initially be referred to the cardiology specialist nurse via the Interventionist Cardiologist. Cardiology secretaries will inform appointments department and letters will be generated to invite the patients to the Cardiologist led clinic for a nurse appointment. (flow chart 1)
- Health records will generate an outpatient pack to use in clinic.

- Cardiology specialist nurse will utilise clinic proforma as their reference point (Chart 3)
- Patients attending the clinic will need baseline observations (BP, HR, and SPO2) and ECG.
- Patient notes and angiogram report will be viewed via ez-notes by the cardiology specialist nurse. Blood results will be reviewed.
- Patient will be seen by the Cardiology specialist nurse. A history will be taken and any further chest pain will be assessed. The patient will be physically examined and medication will be reviewed.
- The CNS will discuss any concerns or new symptoms with the Cardiologist. (Flow chart 2)
- At the end of the consultation the history sheet and patient outcome will be completed.

Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

- The Post PCI clinic will be monitored 12 times a year initially then 4 times a year, until the clinics are established, then 4 monthly reports will be fed back in cardiology governance meetings. Excel spread sheets will be utilised to monitor clinic outcomes

How will monitoring be carried out?

- Monitoring will be carried out by the Led nurse and the cardiac specialist nurse team for Post PCI clinics, via audit, supervision and patient outcome.

Who will monitor compliance with the guideline?

- The lead nurse will monitor guideline compliance and review the guideline as needed; training needs will be identified as needed.

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	Referral numbers will be monitored, patient outcomes will be reviewed and discussed.	Audit of the service provided will be carried out, devising datasets to capture outcomes. Informal clinical supervision with all members of the team.	Review of outcomes via GP letters and informal clinical supervision.	The lead nurse for post PCI clinic will be responsible for these checks	The results of the monitoring will be provided at cardiology audit meetings.	The reports will be shared at the audit meetings 4 times a year.

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References:

National service framework. Coronary Heart Disease. Chapter 8. Arrhythmia and sudden cardiac death. Department of Health. March 2005

Acute coronary syndrome guideline. (including mangement of ST elevation and non-ST elevation myocardial infarction) WAHT-CAR-043. May 2012

CG67 Lipid Modification. NICE 2010

CG127 Hypertension. NICE 2011

www.nice.org Secondary prevention in primary and secondary care for patients following a myocardial infarction. NICE clinical guideline 48

www.nice.org Hypertension. NICE clinical guideline 34

www.nice.org Lipid modification. NICE clinical guideline 67

Strategy for Management of Patients with suspected or known stable angina in angina in primary care. WAHT-CAR-032

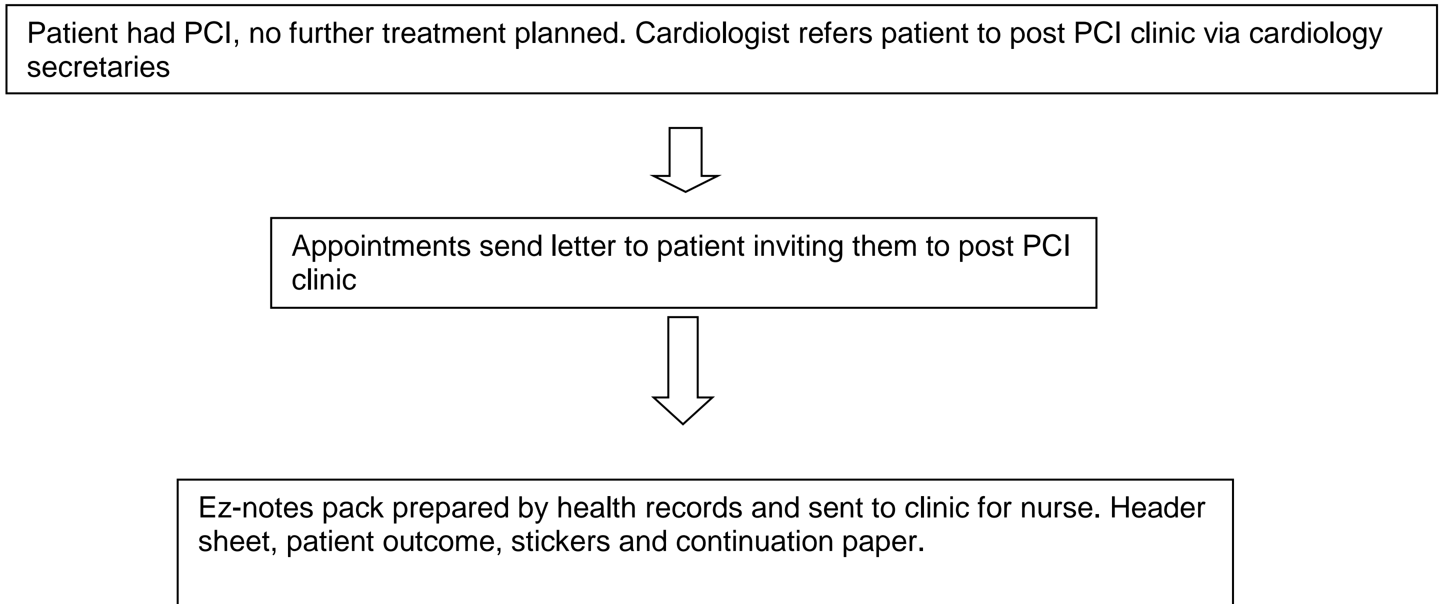
Acute Coronary Syndrome Guideline (including management of ST elevation and non-ST elevation Myocardial Infarction) WAHT-CAR-043

Cardiac Catheterisation WAHT-CG-056

Guideline for treatment of chronic Heart Failure caused by left ventricular dysfunction WAHT-CAR-041

Flow chart 1

Referral system for PCI clinics



Flow Chart 2

PCI Clinic flow

- No admin support
- No outpatient nurse support (at WRH)

Print off pick list for receptionist staff (if not already done)

Call 1st patient into clinic

- Arrange for ECG. Perform baseline observations.
- Review patient's notes, angio report, Echo report and bloods
- Take history.
- Examine patient
- Review of chest pain
- Any issues with BP and Cholesterol refer to

CHEST PAIN?

NO

If no concerns, patient well, bloods, ECG and examination satisfactory- Discharge from Cardiology clinic.

YES

Assess patient's chest pain via OLDCARTS.
Discuss with Cardiologist

- Outcome the patient.
- Complete letters.

Flow chart 3

Shared Cardiology Clinic Proforma

To see patients returning post MI/PCI.

Initial Diagnosis:

Any Angina, new symptoms? Y/N

If yes discuss with Cardiologist
Any new problems?

Lifestyle issues: Smoking, healthy diet, alcohol consumption, exercise

ECG normal	Y/N	Cardiac rehab Y/N
BP within normal limits	Y/N	Lipids checked Y/N
Appropriate medication	Y/N	

Physical examination if clinically indicated:

Investigations required Y/N

Check angio puncture site- pulse?

Review ECHO report-
Discuss with cardiologist if EF < 35%

Disposal:

Discharge
Follow up in Shared clinic
Follow up with Cardiologist

Flow chart 4

Guidelines for shared Cardiology clinic

Patients attending shared clinics will have been selected following post MI/PCI

- Angina symptoms, such as chest discomfort, exertional symptoms – if so discuss with Cardiologist
- Any new problems? If in doubt discuss with Cardiologist.
- ECG Normal- if not, document reading. Discuss with Cardiologist.
- Appropriate medications:
  - Betablocker- Bisoprolol 1.25mg – 5mg daily
  - ACE I- Ramipril 1.25mg-5mg bd
  - Clopidogrel 75mg od / Ticagrelor 90mg bd (for 1 year post PCI or post MI with no intervention discuss with Cardiologist)
  - Aspirin 75mg life- long unless contra-indicated –(clopidogrel 75mg- added if not tolerated)
  - Statin- Atorvastatin 80mg
- BP within target range as per NICE guidelines:

If BP raised above 140/90mmHG recheck manually.
Are they on a beta blocker, ACE I, if so titrate ACE I. (maximum Ramipril 5mg bd) (ensure no contra-indications: deranged U&E's, deranged LFT's, heart failure- if so discuss with Cardiologist)

If ACE I contra-indication:

Consider Amlodipine 5mg od

If patient >55 years or of African Caribbean origin : Calcium channel blocker or Thiazide type diuretic.

Consider Amlodipine 5mg or Indapamide 2.5mg od

If patient <55 years prescribe ACE I or Angiotensin II receptor antagonist if not tolerated.

Ramipril or Lisinopril

- Lipids- :
- Lipids- : A repeat lipid profile should be measured 3 months following initiation of treatment.
- Aim for a greater than 40% reduction in non-HDL cholesterol.
- If < 40% reduction is achieved in patients with primary hyperlipidaemia check adherence to medications. Optimise adherence to diet and lifestyle measures. Consider increasing statin dose if commenced on a low dose. Consider adding Ezetimibe 10mg once daily
- If LDL is >3.5 despite statin therapy refer to cardiologist

- Lifestyle issues:
  - Attended Cardiac rehab programme. Exercise taken each week- recommended 30 minutes a day.
  - Smoking- any referral required to NHS smoking cessation
  - Alcohol consumption- <3-4 units a day for men and < 2-3 units a day for a women, avoid binge drinking.
  - Healthy diet- 5 a day, low fat, high fibre, low salt, low sugar.

- Investigations:
  - Echocardiogram if clinical signs indicate i.e new heart sounds, clinical signs of heart failure.
  - Exercise tolerance- ?new onset angina.
  - 24 hour tape- palpitations/ arrhythmias
  - Angiogram- if indicated by new symptoms of chest discomfort and Cardiologist request.
  - Ultrasound- false aneurysm post angiogram

- Disposal:

Discharge into GP's care
Follow- up in 3 months in shared clinic
Cardiologist follow-up pending on plan of care and investigation.

Contribution List

Key individuals involved in developing the document

Name	Designation
Susan Amos	Senior Cardiac Assessment Sister
Sally Baker	Senior Cardiac Assessment Sister
Katherine Smith	Cardiology Pharmacist
Dr Anthony Scriven	Consultant Cardiologist
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Circulated to the following individuals for comments

Name	Designation
Anita Cupper	Matron
Jo Kenyon	Manager for Cardiology
Jane Savage	Ward Manager CCU/Laurel 1
Kim Bull	Cardiac Catheterisation manager
Clare Hamer	Ward Manager CCU/Laurel 1
Emma Fisher	Assistant Cardiology manager

Circulated to the following CD's/Heads of dept for comments from their directorates / departments

Name	Directorate / Department
Ann Carey	Head of Nursing

Circulated to the chair of the following committee's / groups for comments

Name	Committee / group
Medicine safety committee	
Patient Safety committee	

Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

		Yes/No	Comments
1.	**Does the policy/guidance affect one group less or more favourably than another on the basis of:**		
	• Race	No	
	• Ethnic origins (including gypsies and travellers)	No	
	• Nationality	No	
	• Gender	No	
	• Culture	No	
	• Religion or belief	No	
	• Sexual orientation including lesbian, gay and bisexual people	No	
	• Age	No	
2.	**Is there any evidence that some groups are affected differently?**	No	
3.	**If you have identified potential discrimination, are any exceptions valid, legal and/or justifiable?**	No	
4.	**Is the impact of the policy/guidance likely to be negative?**	No	
5.	**If so can the impact be avoided?**	No	
6.	**What alternatives are there to achieving the policy/guidance without the impact?**	No	
7.	**Can we reduce the impact by taking different action?**	No	

If you have identified a potential discriminatory impact of this key document, please refer it to Human Resources, together with any suggestions as to the action required to avoid/reduce this impact.

For advice in respect of answering the above questions, please contact Human Resources.

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	**Yes/No**
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval