PRIMARY PERCUTANEOUS CORONARY INTERVENTION (PPCI) PROTOCOL

Revised April 2018

Liverpool Heart and Chest Hospital
Aintree University Hospital
Countess of Chester Hospital
Royal Liverpool and Broadgreen University Hospital
(Royal Liverpool site)
Southport and Ormskirk Hospitals (Southport site)
St Helens and Knowsley Hospitals (Whiston site)
Warrington and Halton Hospitals NHS Foundation Trust
(Warrington site)
Wirral University Teaching Hospitals (Arrowe Park)

Revised Dr. Nicholas Palmer and Dr. Babu Kunadian 2018

WORKING TOGETHER TO IMPROVE OUTCOMES FOR PATIENTS AND THEIR FAMILIES
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1. INTRODUCTION

The Primary Percutaneous Coronary Intervention (PPCI) service is available for all eligible patients at Liverpool Heart and Chest Hospital (LHCH - formerly the Cardiothoracic Centre on the Broadgreen site) 24 hours per day, 7 days a week (24/7). This protocol has been further updated to include guidance on patient management in local partner hospitals in circumstances where there is significant delay to the ambulance transfer to LHCH.

All patients, with ST Segment Elevation Myocardial Infarction (STEMI) fulfilling the clinical inclusion criteria within the Cheshire and Merseyside Network catchment area, may be offered this treatment. The catchment area is defined, as that of those patients with STEMI who would normally attend or be taken via ambulance to the following hospitals:

Aintree University Hospitals NHS Foundation Trust
Countess of Chester Hospital NHS Foundation Trust
Royal Liverpool & Broadgreen University Hospital NHS Trust (Royal Liverpool site)
Southport & Ormskirk Hospitals NHS Trust (Southport site)
St Helens & Knowsley Hospitals NHS Trust (Whiston site)
Warrington and Halton Hospitals NHS Foundation Trust (Warrington site)
Wirral University Teaching Hospitals NHS Foundation Trust (Arrowe Park)

This protocol illustrates the steps required to identify those patients who would benefit from receiving this intervention, the operational steps required for accessing the PPCI service at LHCH and the management of the patients’ discharge home, which includes follow-up and rehabilitation.

It details the clinical inclusion criteria and the pathways for:

A  Those patients who dial 999 and will be clinically triaged by ambulance paramedics. Suitable patients will be taken directly to the catheter lab at LHCH.

B  Self-presenting or in-patients who may be referred for PPCI from their local hospital. This pathway also includes those patients who have been taken to their local hospital via ambulance for further assessment. All of these patients will require emergency transfer to LHCH.
2. CLINICAL CRITERIA FOR PATIENTS PRESENTING VIA 999

For those patients who dial 999 and will be clinically triaged by ambulance paramedics. Suitable patients will be taken directly to the catheter lab at LHCH.

**Ambulance inclusion criteria**

Alert and able to give verbal consent to transfer to LHCH
Symptoms compatible with an acute MI (eg chest discomfort, breathlessness, collapse) AND with the following ECG criteria:

ST segment elevation ≥1mm in contiguous (adjacent) leads other than leads V2 & V3
(For leads V2 & V3, ST elevations must be ≥2mm in men and ≥1.5mm in women)
Or deep ST depression in Leads V1- V3 (suggesting posterior MI)

Patients resuscitated from cardiac arrest not requiring intubation/ventilation, with ECG criteria as above

**Ambulance exclusion criteria**

Evidence of significant, active bleeding
Paced rhythm on ECG or LBBB
Cardiac arrest on-scene resulting in patient being intubated or unconscious
(However, patients who are successfully resuscitated and able to give verbal consent can still be transferred directly to LHCH)

3. CLINICAL CRITERIA FOR PATIENTS PRESENTING VIA LOCAL HOSPITAL

For self-presenting or in-patients who may be referred for PPCI from their local hospital. This pathway also includes those patients who, have been taken to their local hospital via ambulance for further assessment. All of these patients will require emergency transfer to LHCH.

**Inclusion criteria**

Alert and able to give verbal consent to transfer to LHCH
Symptoms compatible with an acute MI (eg chest discomfort, breathlessness, collapse) AND with the following ECG criteria:

ST segment elevation ≥1mm in contiguous (adjacent) leads other than leads V2 & V3
(For leads V2 & V3, ST elevations must be ≥2mm in men and ≥1.5mm in women)
Or deep ST depression in Leads V1- V3 (suggesting posterior MI)

Patients resuscitated from cardiac arrest not requiring intubation/ventilation with ECG criteria as above

**Discussion**

The inclusion criteria are evidence based to maximise patient benefit but in exceptional circumstances, where the senior on-site clinician considers a patient does not meet the standard inclusion criteria, but would still benefit from PPCI, they should discuss the case with the on-call interventionist at LHCH, via a direct mobile number, 07769 135 883
4 PATIENT ASSESSMENT

4.1 AMBULANCE ASSESSMENT

1 Upon arrival at scene, the paramedic will establish the history of the incident or mechanism of injury whilst ensuring ABCs.

2 If the patient’s symptoms suggest an acute MI, the patient will be placed on high concentration oxygen, via a mask and reservoir, if indicated (SpO2 ≤ 94%) and titrated to maintain SpO2 ≥ 94%, as per current NWAS Pre hospital chest pain policy. The patient will also receive 300 mg of aspirin and GTN and will be transferred to the ambulance at the earliest opportunity.

3 Once on board the ambulance the paramedic should acquire a 12 lead ECG and determine if a STEMI is evident (refer to the inclusion criteria page 4).

4 If no STEMI is evident, the patient must be transported to their nearest hospital immediately, providing appropriate treatment en-route and provide an Amber pre-alert notification via the Emergency Operations Control (EOC) using Age, Sex, History, Injuries, Condition, Estimated time of arrival to the hospital (ASHICE)

5 If a STEMI is evident and if PPCI is available at the present time, then the paramedic must proceed to complete the PPCI assessment checklist (appendix one) to establish if the patient meets the inclusion criteria.

6 If the patient does not meet the inclusion criteria then they must be transported to their nearest hospital immediately for further assessment and provide a Red pre-alert notification via the EOC using ASHICE

7 If the patient fully meets the inclusion criteria and has given consent in principle to being transported to LHCH for the procedure then the paramedic must inform control that a patient requiring ‘Primary PCI’ is being transported to LHCH, providing a Red pre-alert notification using ASHICE via EOC *

8 The patient’s next of kin, or accompanying adult, must be given the tear off information sheet, which is on the PPCI checklist (appendix two).

9 The patient must then be transported to LHCH immediately, using visual and auditory warning devices.

10 Attempt at cannulation, in the left arm, definitely avoiding the right hand, should be made whilst en-route and when it is safe to do so.

11 Whilst en-route to LHCH, the paramedic must complete observations and administer pain relief.

12 On arrival at the LHCH, the patient must be continually monitored using the Lifepak 12/15 until handover in the catheter lab

*(The ambulance control operator will follow the pathway illustrated in appendix three to inform LHCH of the patient’s imminent arrival. This telephone call will firstly inform LHCH that the patient is en-route and secondly it will be the first step in activating the internal protocols within LHCH that will ensure the PPCI team and the catheter lab are ready for the patient. This will include ‘calling in’ the PPCI team if out of hours. In the event that the ambulance has to be diverted to an alternative location (usually a local A&E department) then it is the responsibility of the control operator to ‘stand down’ staff at LHCH using the telephone number 0151 600 1817)
5. IN-HOSPITAL ASSESSMENT

STEMI patients presenting at, or who are already in-patients at any of the local hospitals detailed on page three will have access to the 24/7 PPCI based at LHCH. In addition, patients who have not fully met the ambulance inclusion criteria and have subsequently been taken to their local hospital may then be considered as suitable candidates following further clinical assessment and/or discussion of their individual case with a specialist clinician at LHCH. If the referring hospital identifies the need to discuss the clinical or ECG evidence with the on-call cardiology consultant at LHCH then this, will be carried out with a minimum of delay. Once the patient has been assessed as being a suitable candidate to receive PPCI they will then be rapidly transferred to LHCH via ambulance. On arrival at LHCH, ALL patients will be clinically assessed for suitability, to proceed to PPCI, including referrals already accepted. On occasion, PPCI may not be the best treatment strategy and the "On Call" Interventional Cardiologist will determine this.

6. PATIENT PREFERENCE

When a patient is considered suitable for PPCI, the final determination in the selection of this treatment strategy must always be that of patient preference. In obtaining the agreement to transfer, it is important that the patient understands the benefits and risks associated with the treatment they are likely to be offered at LHCH. This agreement must be sought before transfer to LHCH.

6.1 AMBULANCE CREWS

If a patient meets the clinical inclusion criteria but does not consent to transfer to LHCH, the patient should be transported to their nearest hospital immediately for further assessment/treatment.

7. CONSENT TO TRANSFER

The following does not have to be read verbatim but these are the key facts, which should be relayed to the patient prior to transfer to LHCH. *

Heart Attack
We believe that you are having a heart attack. A heart attack is caused by a clot, forming in one of the heart's blood vessels. The area of heart muscle that this blood vessel supplies is then starved of oxygen and nutrients. The aim of treatment is to re-open this blocked vessel in order to restore blood flow and so minimise the damage done to the heart.

Treatment
The best treatment to open up your blocked heart artery is called an angioplasty. This involves passing a small tube in to your wrist or groin and then a catheter up to your heart. A small balloon is then passed in to the blocked artery and inflated, and this will restore blood flow to the heart. The angioplasty procedure does have some risks associated with it but the benefits far outweigh the relatively small risk of complications.

Location
The procedure can only be performed at The Liverpool Heart and Chest Hospital (formerly called The Cardiothoracic Centre at the Broadgreen site) as this is your local specialist centre. The staff there will discuss all of these issues with you in more detail.

Do you agree to be taken to The Liverpool Heart and Chest Hospital for assessment?

* If the patient is unable to give consent, and the family are not available, the decision to transfer, should be undertaken by two Senior Doctors, acting in the patient's best interest
8. ARRANGING AMBULANCE TRANSFER FROM LOCAL HOSPITAL TO LHCH

8.1 AMBULANCE CREWS

The local hospital clinician must arrange an emergency ambulance transfer to LHCH by telephoning the control centre on 03451400144. The clinician must ensure they ask for 'Emergency Transfer to Liverpool Heart and Chest Hospital for Primary PCI’ It is imperative that this exact terminology is used when requesting an ambulance transfer, as all the control centre staff have been trained using only this terminology.

8.2 INFORMING LHCH

The local hospital clinician must ensure that a ‘Hospital PPCI Transfer Checklist’ (appendix four) is completed and placed within the patient's notes, ready for transferring with the patient to LHCH.

Prior to leaving the hospital, the paramedic must contact Emergency Operation Control (EOC) to provide a Red pre-alert notification and ETA.

The EOC Operator will immediately confirm the information and activate the LHCH Primary PCI policy by telephoning the dedicated number 0151 600 1817

This process will ensure LHCH is informed of the patient’s imminent arrival, thus activating the internal protocols that will ensure the PPCI team and the catheter lab are ready to receive the patient. This will include ‘calling in’ the PPCI team if out of hours.

8.3 AMBULANCE DELAYS – CONSIDERATION OF THROMBOLYSIS

It is recognised that there are on occasions delays to the prompt arrival of the transfer ambulance at the local hospital. If it is anticipated that there will be a significant delay to transfer which could result in the patient breaching the 120min call to balloon time window consideration should be given to thrombolysis in the local AED. Advice and guidance can be sought from the LHCH Cardiology SpR or Consultant on-call. Upon arrival of the ambulance the patient can still be transferred if persistent ST elevation.

9. PATIENT/FAMILY INFORMATION

It is important that the patient themselves and their family/carer/next of kin are kept fully informed of their condition, the treatment options available to them and the risks and benefits associated with those treatment options. Once consent to transfer to LHCH has been obtained, the patient and/or their family member/carer/next of kin should be handed the 'Primary PCI Information Sheet' (appendix two). This information sheet briefly describes the procedure they are likely to have at LHCH and gives details of how to get to LHCH, where they should park and what to do/expect when they arrive.
10. PRIMARY PCI PATHWAY FOR PATIENTS WHO DIAL 999

Would the patient normally be taken to one of the following hospitals?
Aintree Countess of Chester Royal Liverpool Southport Whiston Wirral (Arrowe Park)

If PPCI not readily available?

Patient meets PPCI criteria

Patient does not meet PPCI criteria

Ambulance arrives at scene - Paramedic assessment for STEMI (See protocol)

STEMI Yes

STEMI No

Continue with management as per current chest pain policy

Procedure to local A&E department

When convenient or appropriate → Insert cannula, preferably in the left arm and definitely avoiding the right hand

Assess for consent to transfer to LHCH from patient

Consent? YES

Consent? NO

Give PPCI Information Sheet to carer/next of kin

Obtain consent to transfer to LHCH from patient

Paramedic informs ambulance control centre that the patient requires PPCI giving ETA

Ambulance control activates ‘LHCH PPCI’ protocol via dedicated telephone number

0151 600 1817

Transport to LHCH immediately using visual and auditory warning devices

En-route: administer Aspirin 300mg GTN Pain Relief

Arrival at LHCH

Follow the RED signs ‘Cath lab Emergencies’ to the old main entrance.

The Hospital Coordinator and/or CCU nurse will greet you at the door. You will be escorted to the Cath Lab S/Rec anyway and then handover to nursing staff.

Complete paper work and leave appropriate copies with nursing staff

HAS handover in Cath Lab Recovery
11. PRIMARY PCI PATHWAY FOR PATIENTS WHO PRESENT VIA THEIR LOCAL HOSPITAL

- Patient arrives at Emergency Department via ambulance
- Patient self-presents at their local Emergency Department
- Patient already an 'in-patient' within their local hospital

Clinical assessment with ECG evidence establishes that the patient meets 'PPCI Inclusion Criteria'

Yes

- Obtain verbal consent to transfer to LHCH from patient and/or inform next of kin
- Give 'PPCI Information Sheet' to carer/nex of kin. (If unable to consent, see comments on Page 6)

Local hospital staff request Category A ambulance transfer using the telephone number 0151 261 4302

Emergency Transfer for Primary PCI to LHCH

- Administer Aspirin 600mg AND Ticagrelor 180mg or Prasugrel 60mg
- Only use Clopidogrel 600mg if Ticagrelor/Prasugrel contraindicated (Pathway on Page 10)
- GTN & Pain relief

Transfer Crew:
- When leaving DGH, paramedic informs ECCC that the patient requires PPCI giving ETA.
- EOC then activates 'LHCH PPCI' protocol via dedicated telephone number 0151 600 1817

Transfer Crew:
- All patients should be transferred to LHCH for PPCI, with Defib Pads insitu and continually monitored until handover in Cath Lab

On Arrival:
- Following patient handover to lab team, Transfer Crew need to handover on the HAS in recovery

Nursing escort not required unless specifically requested

Prior to transfer:
- Complete 'PPCI transfer checklist:
  - Original Diagnostic ECG, plus
  - Initial NWAS ECG and PRF
  - Should then be handed to the paramedic for transfer with the patient.

* Patients already receiving one or more oral anti-platelet drug(s) should still receive the loading doses as per the pathway above.
12. **Ticagrelor PCI**

- Ticagrelor 180mg (oral or via NG) or Prasugrel 60mg (oral) are the drugs of choice
- Only give clopidogrel 600mg (oral or NG) if both prasugrel and ticagrelor are contra-indicated.

- **Ticagrelor contra-indications:**
  - History of intra-cerebral haemorrhage
  - Moderate-severe hepatic failure
  - Strong CYP3A4 inhibitors eg clarithromycin / ketoconazole

- **Prasugrel contra-indications:**
  - History of intra-cerebral haemorrhage
  - History of CVA or TIA

Severe hepatic failure

13. **HANOVER**

Upon arrival at the LHCH, the ambulance should follow the RED signs ‘Cath Lab Emergency Ambulance Entrance’, which lead to the old main entrance. The ambulance will be met at this entrance by the Hospital Co-ordinator and/or a CCU nurse, the paramedic and patient will then be escorted to the area of Catheter Lab 5/Recovery, where handover will take place. If the crew has a relative accompanying the patient, the relative should be directed to the designated waiting area by reception/switchboard.

Paramedics will then complete all relevant documentation including the Patient Report Form (PRF). Copies of all documents should be handed to the nursing team at LHCH.

To support the Rapid Handover Compliance at LHCH and units with a Hospital Arrival Screen (HAS) facility, crews are required to complete notification and handover inputting via the HAS, which is situated in the cath lab recovery area.

Patients will then commence on the LHCH Care Pathway for Primary and Rescue Percutaneous Coronary Intervention.

14. **IN-PATIENT STAY**

Following the procedure, all patients will be transferred from the catheter laboratory to the Coronary Care Unit where they will be monitored for a minimum of 6 hours. The patient will then be transferred to the medical ward for on-going medical review and discharge planning.

15. **DISCHARGE PROCESS**

Discharge will be at 72 hours from initial admission. Patients will be given written information and receive advice in the following areas:

- Chest pain/use of GTN
- Lifting/sexual activity
- Wound site care
- Mobility and general activity
- Driving
Returning to work
Psychological support
Discharge medications
Follow-up appointment
Contact telephone number
Cardiac rehabilitation information

The patient’s GP will receive a discharge summary with medication details and a copy of the TTO prescription. The discharge summary will include the patient’s follow-up plan – this will detail if the GP needs to make an additional referral to the patients secondary care cardiologist for on-going management.

It is the responsibility of the discharging nurse to ensure all documentation has been communicated with the patient’s GP and District Nurse (if applicable)

16. FOLLOW – UP

Patients will receive at least one follow-up appointment at LHCH.

If a patient requires local secondary care management this referral will be made by the patients GP.
17. CARDIAC REHABILITATION

Patients will receive Phase 1 cardiac rehabilitation at LHCH; this will include health promotion and lifestyle advice (smoking, alcohol, BP, diet, physical activity).

On-going rehabilitation arrangements will be initiated prior to discharge.

Phase II and III rehabilitation will take place within the patient’s locality. It is the responsibility of the discharging ward, to ensure that an E referral has been fully completed and emailed, via nhs.net accounts, to the appropriate CR Provider, within the patient’s locality.

Referrals to CR Providers, who do not have an nhs.net account, and are not on the E referral list, will be faxed, by the CR Nurse at LHCH

Copies of E referrals will also be posted to the patient's GP

In addition, the Cardiology Consultant’s secretaries will also post copies of the discharge letter to the relevant CR Provider

18. EMERGENCY PLANNING

ONLY THE ON-CALL CONSULTANT AT LHCH CAN MAKE THE DECISION TO CLOSE THE PRIMARY PCI SERVICE

This decision should only be made in exceptional circumstances. If the PPCI service cannot be maintained, paramedics will revert to taking STEMI patients to their local hospital. The on-call interventionalist must contact the following to inform them of the situation:

The Control Centre Manager at the North West Ambulance Service must be informed using the Emergency Telephone Number 0151 261 4301

The Consultant in Charge of the Emergency Departments (ED) within the following hospitals:

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Telephone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aintree University Hospitals NHS Foundation Trust</td>
<td>0151 525 5980 (Switch)</td>
</tr>
<tr>
<td></td>
<td>0151 529 2500 (ED)</td>
</tr>
<tr>
<td>Countess of Chester Hospitals NHS Trust</td>
<td>01244 365 000 (Switch)</td>
</tr>
<tr>
<td></td>
<td>01244 365 224 (ED)</td>
</tr>
<tr>
<td>Royal Liverpool &amp; Broadgreen University Hospital NHS Trust</td>
<td>0151 706 2000 (Switch)</td>
</tr>
<tr>
<td>(Royal Liverpool site)</td>
<td>0151 706 2065 (ED)</td>
</tr>
<tr>
<td>Warrington and Halton Hospitals NHS Foundation Trust</td>
<td>01925 635 911 (Switch)</td>
</tr>
<tr>
<td></td>
<td>No direct line to ED</td>
</tr>
<tr>
<td>Southport &amp; Ormskirk Hospitals NHS Trust (Southport site)</td>
<td>01704 547 471 (Switch)</td>
</tr>
<tr>
<td></td>
<td>01704 704 131 (ED)</td>
</tr>
<tr>
<td>St Helens &amp; Knowsley Hospitals NHS Trust (Whiston site)</td>
<td>0151 426 1600 (Switch)</td>
</tr>
<tr>
<td></td>
<td>0151 430 1313 (ED)</td>
</tr>
<tr>
<td>Wirral University Teaching Hospitals NHS Foundation Trust (Arrowe Park)</td>
<td>0151 678 5111 (Switch)</td>
</tr>
<tr>
<td></td>
<td>0151 604 7203 (ED)</td>
</tr>
</tbody>
</table>

When the PPCI service re-opens, the On-Call Interventionist at LHCH must contact the Control Centre Manager at NWAS and each of the Emergency Departments
19. APPENDICES

APPENDIX ONE

**PRIMARY PCI PATIENT ASSESSMENT CHECKLIST**

<table>
<thead>
<tr>
<th>Paramedic’s Name:</th>
<th>Incident No:</th>
<th>Must answer Yes to all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

- Can you confirm that the patient is conscious, coherent and able to understand that he/she will be taken to Liverpool Heart and Chest Hospital (LHCH) at Broadgreen to receive Primary PCI? Yes / No
- Can you confirm that the patient has had symptoms characteristic of a heart attack (Chest discomfort, breathlessness, collapse) Yes / No
- Can you confirm that the ST segment elevation>1mm in contiguous(adjacent)leads other than leads V2&V3 (for leads V2&V3, ST elevation must be >2 in men & > 1.5mm in women or deep ST depression in leads V1-V3 (suggesting posterior MI) Yes / No
- The ECG is technically adequate Yes / No
- Can you confirm the ECG does NOT show a paced rhythm or LBBB? Yes / No

**Note:** Cardiac arrest on-scene/during journey- patients who are successfully resuscitated and able to give verbal consent should still be transferred directly to LHCH.

**Consent**

The following does not have to be read verbatim but these are the key facts which should be relayed to the patient and their relatives (if appropriate) prior to transfer to LHCH.

**Heart Attack**

We believe that you are having a heart attack. A heart attack is caused by a clot forming in one of the heart’s blood vessels. The area of heart muscle that this blood vessel supplies is then starved of oxygen and nutrients. The aim of treatment is to re-open this blocked vessel in order to restore blood flow and so minimise the damage done to the heart.

**Treatment**

The best treatment to open up your blocked heart artery is called an angioplasty. This involves passing a small tube in to your wrist or groin and then a catheter up to your heart. A small balloon is then passed in to the blocked artery and inflated, and this will restore blood flow to the heart. The angioplasty procedure does have some risks associated with it but the benefits far outweigh the relatively small risk of complications.

**Location**

The procedure can only be performed at The Liverpool Heart and Chest Hospital (formerly called The Cardiac Centre at the Broadgreen site) as this is your local specialist centre, the staff there will discuss all these issues with you in more detail.

**Do you agree to be taken to The Liverpool Heart and Chest Hospital for assessment?**

<table>
<thead>
<tr>
<th>Paramedic Name:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paramedic Signature:</td>
<td></td>
</tr>
<tr>
<td>Patients Name:</td>
<td>DOB:</td>
</tr>
<tr>
<td>Accompanying adult/NOK – name if appropriate:</td>
<td></td>
</tr>
</tbody>
</table>
We believe that your relative/friend is having a heart attack. A heart attack is caused by a blockage in one of the heart's blood vessels. The heart muscle that this blood vessel supplies is then starved of oxygen and nutrients. The aim of treatment is to re-open this blocked vessel in order to restore blood flow and minimise the damage done to the heart.

Often the most appropriate treatment for a heart attack is called 'primary angioplasty' or 'primary PCI'. This involves passing a long narrow tube, via the forearm or groin, into the heart vessel causing the problem and inflating a small balloon to physically unblock it.

In order to receive this treatment your relative/friend will now be taken to The Liverpool Heart and Chest Hospital (formerly called The Cardiothoracic Centre at the Broadgreen site) in Liverpool, which is your local specialist centre. Relatives arriving at the hospital should follow the red cath lab emergency signs into the hospital and identify themselves to switchboard who will facilitate your transfer to the family room on CCU.
APPENDIX THREE

CONTROL CENTRE PATHWAY TO ACTIVATE ‘PRIMARY PCI’ POLICY AT THE LIVERPOOL HEART AND CHEST HOSPITAL (LHCH)

** This process relates to those patients who are being taken to LHCH by the paramedics directly from a home/community address or a DGH**

The Emergency Operations Centre operator is the individual, who will activate the ‘PPCI Policy’ at LHCH. By doing this you will ensure the PPCI team and catheter labs are ready for the patient, and that your paramedic team is met at the designated place for a smooth handover. It is essential that this process is carried out immediately after the paramedic has made contact, as LHCH may need to ‘call-in’ the PPCI team if out of hours.

Paramedic informs EOC that a patient is being taken to LHCH for ‘Primary PCI’
The paramedic will give an ETA

Operator immediately confirms the information and activates the ‘LHCH Primary PCI Policy’ by telephoning the dedicated number 0151 600 1817

*In the event that the ambulance has to be diverted to an alternative location (local A&E department), then it is the responsibility of the control operator to inform/stand down staff at LHCH.*
**APPENDIX FOUR**

**PRIMARY PCI TRANSFER CHECKLIST** (Revised April 2013)

<table>
<thead>
<tr>
<th>DATE</th>
<th>HOSPITAL</th>
<th>A&amp;E NUMBER</th>
<th>HOSPITAL NUMBER</th>
</tr>
</thead>
</table>

1. **PATIENT DETAILS** (use label if available)
   - NHS NUMBER
   - DOB
   - GENDER
   - Surname
   - Forename
   - Address (including postcode)

2. **BROUGHT IN BY AMBULANCE**
   - YES/NO (If yes, please include initial NWAS ECG with transfer checklist)
   - PATIENT REPORT FORM (PRF) COPY ATTACHED
   - YES/NO (If no, complete ambulance details below) and
   - STATE IF SELF PRESENTER YES/NO or IN PATIENT YES/NO
     - TIME OF 999 CALL ______:______ TIME OF HOSPITAL ARRIVAL ______:______
     - STEMI DIAGNOSED ON ARRIVAL IN A&E YES/NO
     - If no, TIME AND DATE STEMI DIAGNOSED: ______:______

3. **CLINICAL DETAILS**
   - TIME & DATE OF ONSET OF CHEST PAIN: ______:______ TIME OF ECG INDICATING STEMI CALL: ______:______
     - (Please include first diagnostic ECG with transfer checklist)

4. **DRUGS REQUIRED BEFORE TRANSFER**
   - ASPIRIN (600mg):
     - DOSE _______ GIVEN BY _______ TIME ______:______
   - TICAGRELOR (180mg) or PRASUGREL (60mg) or CLOPIDOGREL (600mg) (Please circle if given)*:
     - GIVEN BY _______ TIME ______:______
     - *Only use Clopidogrel if both Ticagrelor AND Prasugrel are contraindicated
     - Ticagrelor is the drug of choice BUT if history of an intracranial haemorrhage, load with Clopidogrel 600mg and DO NOT give Ticagrelor.

5. **CONSENT**
   - PATIENT UNDERSTANDS REASON FOR TRANSFER AND HAS VERBALLY CONSENTED? YES/NO
   - If appropriate, relative understands reason for transfer and has been given next of kin information booklet? YES/NO
   - State relationship ( )

6. **REQUEST EMERGENCY AMBULANCE TRANSFER TO LHCH**
   - THIS SHOULD BE DONE IMMEDIATELY AFTER STEMI DIAGNOSED!!
   - Emergency line 03451400144 or 999 **It is crucial that the Clinician must request "EMERGENCY TRANSFER FOR PRIMARY PCI"**

7. **ACTIVATE PCI PATHWAY**
   - IT IS THE RESPONSIBILITY OF THE NWAS CLINICIAN TO INFORM LHCH OF TRANSFER WHEN LEAVING THE HOSPITAL WITH THE PATIENT, VIA THE ECCC, GIVING AN ETA
   - Operator immediately confirms the information and activates the 'LHCH Primary PCI Policy' by telephoning the dedicated number 0151 600 1817
   - TIME LHCH INFORMED OF PATIENT ______:______
   - TELEPHONED BY ______

8. **RESPONSIBILITIES**
   - RESPONSIBLE CONSULTANT __________________ Referring DOCTOR __________________
   - SIGNATURE OF REFERRING DOCTOR __________________

Completed Form, Original Diagnostic ECG, (plus initial NWAS ECG if performed) and PRF - to be handed to the Transferring Ambulance Crew. No other documents are required.