Coronary Angiography & Percutaneous Coronary Intervention
Standard Operating Procedure for Elective, Inpatient and Emergency Cases
UHL Cardiology (LocSSIPs)

Change Description	Reason for Change
☐ Change in format	☒ Trust requirement

APPROVERS	POSITION	NAME
Person Responsible for Procedure:	Lead Consultants	Dr Elved Roberts Dr Ian Hudson Dr Andrew Ladwiniec Dr Amerjeet Banning
SOP Owner:	Charge Nurse	John Steele
Sub-group Lead:	Matron	Ben Hyde

Appendices in this document:

Appendix 1: Procedural Part of Percutaneous Coronary Intervention (PCI) Pathway (including UHL Safer Surgery Cardiac Catheter Department Checklist)
Appendix 2: Patient Information Leaflet for Coronary angioplasty and stenting for the heart (English & Gujarati)
Appendix 3: Catheter Lab Accountable Items Count Form
Appendix 4: Catheter Lab Team Brief & Debrief Checklist

Introduction and Background:

This Local Safety Standards for Invasive Procedures (LocSSIP) outlines the patient pathway for those patients undergoing coronary diagnostic and **interventional procedures in the Glenfield Cardiac Catheter Department. These procedures may require the use of Angioplasty, including stenting and the use of techniques that include pressure wire studies, intravascular ultra sound**, optical cohesive tomography, rotablation, Intravascular lithotripsy and Chronic Total Occlusion (CTO) angioplasty.

Referral / List management and scheduling:

The patient's journey from referral for a coronary angiogram/angioplasty/stent to transfer back to the referring team differs for emergencies, inpatients and elective patients.

Emergencies
For emergency (STEMI, OOHA) patients, a pre-alert system exists informing all members of the team of an imminent admission and the referral is made verbally following Coronary Care Unit (CCU) assessment.

Inpatients
There is an electronic referral process via the ICE system for inpatients requiring senior review prior to referral. Patients are then added to the inpatient waiting list and listed in date order unless clinically indicated through verbal communication from the senior medical team.

Electives
Elective patients are referred via a proforma processed by the cardiology admissions team, some patients receive nurse led pre-admission on the day of referral, others will have a pre admission appointment booked and sent. Patient information leaflets are sent with the pre-admission / admission documentation.

Patients are then added to the waiting list on HISS and breach date established by the Cardiac admissions team. The weekly catheter lab schedule is compiled based on availability of appropriate trained staff, procedure room availability and breach dates within the admissions office and patients booked accordingly.

Emergency Admissions:

Emergency interventional cases include ST Elevated Myocardial Infarct (STEMI) and Out of Hospital Arrests (OOHA). These procedures are clinically time critical and all efforts should be taken to reduce delay. The pre procedure check list in the intervention pathway does not require completing unless time allows due to delayed access to the Cath Lab. This does not mean that the patient is not prepared for the procedure.

- The patient will have an appropriate ID wrist band applied on CCU prior to transfer to the Cath Lab, preferably on the left wrist.
- IV access will be gained and where possible bloods sent. It is very unlikely that bloods results will be available; the procedure will not be delayed to wait for these.
- Dual AntiPlatelet therapy (DAPT) will be administered before commencing any angioplasty and this will be recorded on a paper drug chart.
- STEMI patients will be verbally assented prior to the procedure to reduce delay in assessing the patient's fitness to formally consent. The procedure will still be explained to the patient and any concerns addressed.

There will not be time for a formal team brief prior to the patient arriving in the Cath Lab, the sign in and time out will be used to ensure the team are all aware of the planned procedure and any relevant patient history. Once in the room, all other aspects of the procedural LocSSIP will apply.

Pre Admission (Elective Process)

The following information is required to be completed at pre admission

- Patient name
- Identification numbers, i.e. NHS number with or without hospital number
- Date of birth
- Gender
- Planned procedure
- Procedural Urgency
- Site and side of procedure if relevant
- Significant comorbidities
- Allergies, e.g. to latex or iodine
- Infection risk
- Body mass index (Bariatric assessment if indicated)
- Pre-hydration requirements determined by pre-admission blood results and consultant's advice
- DAPT regime is confirmed with patient and outpatient prescription for antiplatelet medication issued
- Decision made and advice given regarding pre-procedure anticoagulation regime
- The pre-hydration risk calculator is completed and if pre-hydration recommended advice sought from clinical team, including if pre-admission is required, the timing pre-hydration should be commenced prior to the procedure, and whether admission the evening before the procedure for this is required
- UHL nursing risk assessments to be completed
- Documentation of any pre-procedure concerns discussed with the consultant team

Patient preparation / Pre-procedural checklist:

For elective cases the patient will have been given a Patient information leaflet prior to arriving in the department. This will be sent in the post or given at the pre-admission appointment.

The following information is required to be completed prior to the patient being collected for their procedure (Inpatients)/prior to admission to the Cardiology Department (day cases) and must be documented in the percutaneous coronary intervention pathway which includes.

- If any non-standard equipment is required, this should be documented on the procedural listing form.
- All aspects of the WHO compliant pre-procedure checklist in the percutaneous coronary intervention pathway will be completed.
- Full medical documentation
- EWS score
- Consent / Confirmation
- Dentures
- Communication

Procedural Bloods:
U&E and FBC required for all patients. INR check if patient is taking Warfarin. MDT to inform cardiologist as soon as any abnormalities in the above blood tests noted. Advice will also be sought regarding peri-procedural anticoagulation management (Warfarin/DOAC) if this is not documented on the procedural listing form. For patients on Warfarin that have a good radial pulse and can have a radial procedure an INR < 3 is satisfactory. If femoral access is required then INR must be < 2. For patients taking DOAC the medication can be continued for radial procedures however must be stopped for 24hr if femoral access is required. This should be discussed with individual operators as there may be other patient specific concerns that need to be considered.
Workforce – staffing requirements:
All team staff members will have completed relevant role specific HELM training and any other appropriate training (e.g. revalidation/IRMER compliance). Maintaining relevant and current training is the responsibility of the individual and is regularly checked as per the appraisal process. All new members of staff will have completed full induction training before independently working in their role. Progress and skill development is monitored and managed by the senior staff in the area with regular review. Visitors to the area are closely supervised according to UHL policy. **Roles and responsibilities of the clinical team** This procedure requires the following minimum team to be present throughout the procedure: 1 Operator [(either consultant cardiologist or appropriately trained specialist registrar (as determined by the consultant responsible for procedure)], 1 Scrub Nurse, 1 Radiographer, 1 Catheter Lab circulating nurse, 1 Cardiac Physiologist. However, for on-call and if deemed essential the minimum team will comprise of: 1 Cardiologist, 1 Radiographer, 1 Catheter Lab circulating nurse, 1 Cardiac Physiologist. The on-call registrar will join unless there are exceptional circumstances. The procedure will be scheduled by the Angiocatheter Suite clinical coordinator as per the departmental policy. The clinical team have the responsibility to have an on-going assessment of the patients medical care needs in the early post procedural phase and to act accordingly; • **Cardiologist** – Has the overall responsibility for the procedure and ensures that the team safety brief

is completed at 08:30 in the morning and prior to the afternoon list, and that it is conducted by a suitably trained member of the medical team (either consultant or appropriately-trained specialist registrar). As part of the team, they are also responsible for ensuring the safer surgery checklist is performed for each procedure (either by the consultant or appropriately trained specialist registrar) making sure the team are aware of any non-standard steps/procedures/equipment needs for the case. The consultant will act as IRMER practitioner and will be responsible for the documentation of the procedure by a suitably trained medical member of the team. They will ensure documentation includes any further treatment, discharge plans, appropriate prescription (including all verbal orders) and complete all data capture requirements.

- **Specialist Registrar –** The specialist registrar will work in accordance with their level of training and under the supervision of the lead consultant, who may delegate them appropriate roles.

- **Operator –** This may be a consultant or appropriately trained specialist registrar. When no scrub nurse is available, they will be responsible for sterility of equipment and the appropriate preparation of the patient's procedural site. The operator will ensure accountable items counts are undertaken and the safe handling of sharps on the procedural trolley. The operator will also be responsible for checking the integrity of all equipment that is removed from the patient and will sign the accountable items sheet. The operator will prepare equipment for the procedure following appropriate practice. They will work as part of the MDT to ensure safety of patient, ensuring the safer surgery check list is completed.

- **Radiographer –** Has a responsibility for IRMER compliance and ensuring radiation safety of patients and staff. The radiographer will ensure the appropriate imaging with optimum settings. The radiographer will reinforce staff compliance with the local rules and provide support and advice in order to comply. They will complete the imaging process according to protocol and ensure all images are archived and dose information is recorded, reporting and addressing any radiation concerns. They will work as part of the MDT to ensure safety of patient, ensuring the safer surgery check list is completed.

- **Catheter Lab Circulating Nurse –** Is responsible for caring for the patient in the room, ensuring that an adequate handover is given to the ward team. They are responsible for the medicines management, through the storage of medicines and the safe administration of IV medication during the procedure, following cath lab verbal order guidance. They will ensure sterility of all equipment and that all equipment and stock is available for the procedure. The cath lab circulating nurse will scan all stock used to ensure replacements can be ordered by Althea and where stock shortages have been identified they will liaise with the stock management company. They will communicate with the cath lab co-ordinator for any changes to the list or any escalated care requirements. They will work as part of the MDT to ensure safety of patient, ensuring the safer surgery check list is completed.

- **Catheter Lab Scrub Nurse –** Is responsible for sterility of equipment and the appropriate preparation

of the patient procedural site. The scrub nurse will instigate the accountable items counts and will ensure safe handling of sharps on the procedural trolley. They will prepare the equipment for the procedure following company / consultant training. They will work as part of the MDT to ensure safety of patient, ensuring the safer surgery check list is completed.

- **Cardiac Physiologist –** Is responsible for the monitoring of interventional patients, connecting ECG monitoring, setting up pressure transducer and monitoring oxygen saturations, they will keep a log throughout the case and identifying any abnormal readings. The cardiac physiologist will support the operator with advanced imaging equipment (intravascular ultrasound and OCT). They will work as part of the MDT to ensure safety of patient, ensuring the safer surgery check list is completed.

Documentation and pre-procedural checks

- All mandatory pre-procedural patient information will be documented within the admissions proforma and confirmed as being handed over at the required information handover points in the patient journey.
- Consent will be completed by an experienced and appropriately trained cardiology clinician (cardiology consultant, specialist registrar or advanced nurse practitioner with appropriate training in the consent process for coronary procedures) prior to the procedure according to best practice. The pre-procedure checklist must be completed on the ward. Pre-procedure issues must be resolved prior to transfer to cath lab. The cardiologist must be informed of any abnormalities.
- The patient will not be admitted to the procedural area unless the pre-procedure checklist is completed (embedded within the percutaneous coronary intervention pathway) and the patient consented.
- Each patient will get signed in to the department at a formal documented handover from the clinical team.
- The patient will only proceed through each step of the procedure once each safety check is documented as being complete. The patient cannot enter the procedural area without completion of the pre-procedural checklist.

Team Safety Briefing:

Prior to commencement of any elective, procedural list a 'Safety Briefing' which involves key members of the team as a minimum (ideally all the team) must take place.

- A minimum of: the primary operator and if allocated the second operator, 1 radiographer, 1 physiologist and both cath-lab nurses will be present at the team briefing and will be responsible for cascading handover to any other team members that join the procedure during the procedure.

- The purpose of the brief is to discuss the sessions' list schedule of planned procedures.
- The area used should be quiet and free from interruptions and preferably should be in the appropriate cath lab.
- The brief may be led by any designated member of the team.
- All staff members of the procedural team are named for the session and roles identified and written on the white board.
- The procedural list will be updated on the master board in reception as changes happen, the co-ordinator will inform the room team and operator of any changes at an appropriate time verbally. Wards will be informed of cancellations and additions as soon as possible.
- Any nonstandard steps identified and plans put in place if necessary.
- Equipment checks should have already been performed and any issues highlighted, and actions put in place to address if required.
- Procedures involving low usage devices e.g. rotablation and intravascular lithotripsy must be discussed and availability of devices verified.
- The first patient will only be sent for once the team brief has been completed. (The only exception to this will be on mornings when the interventional MDT meeting takes place. On these mornings to improve efficiency the operator will confirm the order of the list before entering the meeting. The patient will be sent for and held in recovery until the briefing has been performed following the return of the operator.)

Sign In:

The Sign In and Time Out are safety processes whereby the prompts on the checklist ensure verification of the correct patient, procedure.

- Conscious and coherent patients should actively be encouraged to participate in these processes.
- The Sign In verification process must be performed by two team members, one will be the radiographer and the other will also be involved in the procedure.
- The questions will be undertaken verbally in a clear, precise and audible tone, with the patient.
- The process must have both the two's checkers full attention to confirm sign in. No other task should be undertaken until this is completed.
- For emergency cases where the patient is not able to communicate identification can be taken from transferring team and the wrist band.

Time Out:

The Time Out must be undertaken with all the team present and everyone must engage and must give their full attention.

- The steps on the checklist must be led by a trained healthcare professional in a clear and audible

manner.

- All team members must 'stop and pause' whilst the checklist questions are asked and responded to, hence this part of the safety process is known as 'time out'.
- If there is an interruption, the 'time out' must be suspended and recommenced.
- Every team member is valuable and should feel comfortable and at ease to raise any questions or concerns they have relating to the case at this time.
- The patient should once again be included where possible in the time out.
- Team members must not enter or leave the procedural room during this time.

Sign Out:

The Sign Out must be performed for all patients who have undergone an interventional procedure before leaving the procedural room.

- Team members who are present at the end of the procedure should not leave the room until this is completed and verified as correct. (Any member of staff leaving the case before it is completed must handover to an equivalent member of staff).
- The nominated Healthcare professional leading time out will request that all the team is present and ask the team to 'stop and pause'.
- The set questions on the designated section of the Checklist are then directed to the appropriate team member/s, who will verbally respond to the questions being asked.
- Implant/device insertion logs and securing of stickers must be confirmed.
- The procedure will be documented either as a written summary in the PCI pathway booklet or with an appropriate printed electronic procedural summary filed in the patient notes (or attached to the PCI pathway).
- Finally prior to transfer to the recovery/discharge area the team will review any key plans or concerns for the handover.
- The procedure nurse must complete adequate patient handover to the recovery/discharge area.
- The 'Sign Out' sheet is then signed by a registered healthcare professional and retained in the patient's notes as evidence.

Restricted Use of Open Systems

The Glenfield Specification Coronary Angiogram Pack has been designed to restrict the use of open systems and to mitigate against the risk of these and will form the basis of the equipment used. Any other equipment should be assessed by the operator and must comply with these restrictions and mitigations as below.

All drugs will be drawn into syringes and labelled with syringe labels that are supplied in the Glenfield Specification Coronary Angiogram Pack.

Flush bowl is pre-labelled 'not for injection'
There is a gallipot for mixing of contrast and saline which is used to inflate angioplasty balloons and stents, this is labelled 'not for injection' and will be labelled as ½ Contrast ½ Saline.
Contrast will be administered via the manifold supplied.

Patient Monitoring:

The patient will be monitored as below throughout the procedure:

Type of monitoring	Frequency of monitoring
BP	Continuously/invasive throughout procedure.
O2 saturations	Continuously throughout procedure.
ECG	Continuously throughout procedure.
Temp	Not routinely
BM	Not routinely/As required
ACT	As directed by the operator. The team should prompt the operator at 30 minutes if not checked, a Heparin clock will be started for all to see.

Stock management / expiry dates:

Stock levels within the cath lab should be maintained such that all standard equipment for undertaking coronary angiography and percutaneous coronary intervention is available on request from the operator. Stock control is undertaken via the stock management system within the lab. Any shortages will be identified and alternatives provided.

Equipment handover to operator during procedures (not including initial trolley set-up):

- Operator asks for the relevant equipment and the lab staff will repeat the request verbally.
- The lab staff locates the equipment and offers it, packaged, for the operator to check.
- The Primary operator MUST stop and actively engage with checking the packaging.
- Primary operator confirms verbally that the packaged item is the intended item for use.
- Packaging opened and equipment placed on the operator trolley.
- Immediately before using any equipment the operator checks visually that it is the intended

equipment.

- Operator observes fluoroscopic imaging before deploying any equipment if this is a standard part of the procedure.

Prevention of retained Foreign Objects:

Procedures will be adhered to within the Management of Surgical Swabs, Instruments, Needles and Accountable Items policy (2018)

- A count of all accountable items, including sharps, swabs and guide wires used during the procedure must be documented on the accountable items record sheet. This must be completed at the start of the case and maintained throughout, adding any further items to the count.
- This count must be completed by a scrubbed practitioner and another member of the cath lab team.
- No waste must leave the room during the case until the final count has been made.
  At the end of the case the count must be repeated and checked against the accountable items record. If there are any discrepancies the waste bags will be searched and the missing item must be found before the patient leaves the room.
- The operator must sign to verify all guidewires are intact at the end of the procedure. In addition to guidewires, catheters (including stent delivery catheters), microcatheters, OCT and IVUS catheters, GuideLiners, rotablation tips and CTO devices should be checked routinely by the operator to ensure their integrity. If there is any doubt as to the integrity of a guidewire or any piece of equipment this should be raised immediately and x-ray screening implemented as appropriate.

Radiography:

All procedures are undertaken with compliance with IRR 17, IR(ME)R 17 and Local Rules.
Cardiology IRMER procedures are in place as per IRMER legislation.
IRMER training relevant to each role is undertaken at induction and audited.

Handover:

Specific details for handover to the recovery and subsequently ward staff required are as follows:

- If an increased level of post procedure monitoring and / or higher dependency area other than standard ward bed or radial lounge is required this will be clearly documented. This will also include a plan for overnight stay or inpatient admission for continuing care following elective procedures if required.

- The access device (i.e. Femoral Arterial Sheath or Radial Band) removal instructions and removal time will be clearly documented.
- Dual Antiplatelet Therapy regime is communicated to the ward team via the patient pathway.
- Any recommended changes to current medication will be documented.
- All medication administered or commenced during the procedure will documented on the drug chart and handed over to the receiving nurse with an infusion chart when required.

Team Debrief:

A team debrief should occur at the end of all procedure sessions as per WHO checklist which should include:

- The purpose of the de-brief is to discuss the sessions' list and identify what went well and what did not.
- The area used should be quiet and free from interruptions.
- The brief may be led by any designated member of the team.
- Any problems with equipment identified and the plan for rectification confirmed. Any long term problem identified to the co-ordinator and the appropriate team
- Identify areas for improvement and escalate to senior team with plan for any change required.

Post-procedural aftercare:

Post-procedural care

- Aftercare of the patient is formally documented (specific procedural routine aftercare sheets are stapled in the procedure booklet) with any additional specific aftercare instructions documented in the 'specific aftercare instructions' section in the procedure booklet.
- The patient will be formally handed back to the clinical team (documented handover back to ward team for inpatients/patients to be recovered on a ward; discharge letter completed and sent home with the patient for patients recovered in the department and subsequently discharged as day case).

Discharge:

- The patient will be formally handed back to the clinical team with a documented handover back to ward team for inpatients/patients to be recovered on a ward;
- A discharge letter should be completed using the ICE system and sent home with the patient for patients recovered in the department and subsequently discharged as day case.

Governance and Audit:

Safety incidents in this area may include;

- Wrong site surgery
- Retained foreign object post-procedure
- Wrong device

All incidents and near misses will be reported on Datix and appropriate actions taken.
This document will be audited periodically and will be reviewed alongside any changes to the service and practice. The service is under regular review at the Mortality and Morbidity audit meetings.
Regular IRMER compliance audits are undertaken.
To submit monthly Safe Surgery Audit and WHOBARS assessment as Per Safe Surgery Quality Assurance & Accreditation programme.

Training:

- Angiocatheter Suite Nursing competencies
- Access and knowledge of massive haemorrhage protocol
- Scrub training protocol / procedures (when implemented)
- IRMER relevant training
- Helm mandatory training
- Equipment competency training

Documentation:

All documentation from admission to discharge should be recorded on the standard UHL related admission documents including

- Percutaneous Coronary Intervention care pathway
- Angiocatheter Suite specific UHL Safer Surgery checklist
- Patient property disclaimer
- NHS consent form
- UHL Bed rail risk assessment (if required)
- UHL Falls risk assessment (if required)
- UHL Adult in patient medication record / EPMA available

In addition to this patient procedure details will be recorded onto the DCS Intellect data management system PATS (This is the BCIS database that operators and radiographers fill out separately)

References to other standards, alerts and procedures:

National Safety Standards for Invasive Procedures, NHS England 2015:
https://www.england.nhs.uk/patientsafety/wp-content/uploads/sites/32/2015/09/natssips-safety-standards.pdf
UHL Safer Surgery Policy: B40/2010
UHL Consent to Treatment or Examination Policy A16/2002
UHL Delegated Consent Policy B10/2013
Surgical Swabs, Instruments, Needles and Accountable Items UHL Policy B35/2007
Sedation UHL Policy B10/2005
UHL Cardiology Guideline C268/2016
UHL Policy on Surgical Safety Standards for Invasive Procedures B31/2016
Ionising Radiation Safety UHL Policy B26/2019
The Ionising Radiation (Medical Exposure) Regulations 2017
The Ionising Radiation Regulations 2017

Further References
Cath Lab Local Rules
Cardiology IRMER procedures

Appendix 1: Procedural Part of Percutaneous Coronary Intervention Pathway (including UHL Safer Surgery Cardiac Catheter Department Checklist)

Procedural Part of
PERCUTANEOUS CORONARY INTERVENTION PATHWAY
(Staple to Admission Document)

PATIENT STICKER

STOP THE LINE

Checklist, Please Tick to signify Checked or State "N/A" if not applicable – SIGN ALL ENTRIES TO VERIFY (EVEN IF N/A)	Tick or N/A	(Sign)
Allergies(Please specify all)		
Weight ....., Height		
On Warfarin INR result		
Baseline Observations (WHO checklist requirement) BP: HR: SaO2: RR: Temp:		
IDDM NIDDM CBG (mmol/l)		
All medication written in Prescription chart		
On Clopidogrel for longer than 1 week		
Loading dose of Clopidogrel / Prasugrel / Ticagrelor given / taken ☐ and/or Aspirin given / taken ☐		
Correct ID bracelet in place		
Allergy band in place (if applicable)		
Infusions prescribed		
R Groin and R Arm Shaved		
Urinary catheter in place (if applicable)		
Current MRSA status known Negative / Positive If positive result – Cath. Lab informed		
COVID-19 status known Negative / Positive If positive result – Cath. Lab informed		
Seen by anaesthetist (If applicable) If YES Universal theatre checklist completed		
Dentures / Crowns Full set / top / bottom site of crowns		
Hearing Aid in place (if applicable)		
Prosthesis		
Make up / nail polish removed		
Investigations available and checked, FBC ☐ U&E ☐ ECG ☐ GROUP & SAVE ☐		
Consent form signed on the ward (inc Transfusion Consent)		
Medical notes with patient		

STOP THE LINE Safe Surgery

Insertion of Cannula (Affix Label Here) **Ensure this is filled in by the person inserting the Cannula**

	Sign
Cannula Flushed – IS PATENT (Ward)	
Cannula Flushed – IS PATENT (A/C Dept)	

"I confirm that I am not pregnant": (If appropriate)

Signed (Patient) ..... Date .....

B		E		S	T		S		H		O	T	
Buttocks		Elbow	Ears	Sacrum	Hips		Shoulders		Heels		Occip	Toes	
L	R	L	R		L	R	L	R	L	R		L	R
(For skin grading please refer to SSKIN bundle assessment)													

BESTSHOT checked by ..... Date .....

Haemorrhage risk assessment: (if yes to any, give details and inform operator)

History of TIA / CVA, Y / N .....

Previous GI Bleed, Y / N .....

Recent Surgery. Y / N .....

Platelets within normal range. Y / N Sign [.....]

All patients attending the Angiocatheter Department for procedures will be for full resuscitation during their attendance.

Is a respect form in place for the patient? Yes / No

If yes, has this been identified to the operator? Yes / No

Any other relevant information: .....

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.....

.....

SIGNATURE: ..... DATE: ..... TIME: .....

STOP THE LINE

Safe Surgery

PATIENT STICKER

UHL Cardiac Catheter Department. Safer Procedure Checklist

NHS University Hospitals of Leicester NHS Trust

Caring at its best

STOP THE LINE

Date: ..... Procedure: .....

SIGN IN

Prior to any cardiac intervention the patient should verbally confirm their identity and planned procedure against wristband and consent form.

- ☐ Confirm patient's name, date of birth and Hospital number
- ☐ Confirm procedure and site with patient
- ☐ Confirm valid consent form matches identity and expected procedure
- ☐ Required implants / instruments available ☐ Yes
- ☐ X-ray equipment working ☐ Yes ☐ N/A
- ☐ Blood results available ☐ Yes ☐ No

GENERAL ANAESTHETIC CHECKS N/A ■

- ☐ Anticipated difficulty airway or aspiration risk
- ☐ Equipment / assistance available
- ☐ Anticipated blood loss >500ml (>7ml/kg in a child)
- ☐ Blood products available if needed
- ☐ Use of cell salvage considered

Read out by: (PRINT) .....

Signed: .....

Staff present:

- ☐ HCA / CLA
- ☐ Scrub Practitioner
- ☐ Scrub Practitioner 2
- ☐ ODP
- ☐ Trainee Cardiologist
- ☐ Con Cardiologist
- ☐ Con Anaesthetist
- ☐ Trainee Anaesthetist
- ☐ Radiographer
- ☐ Cardiac Physiologist
- ☐ Nurse
- ☐ Company Support
- ☐ Other

TIME OUT

After positioning and before skin incision the Cardiologist, Anaesthetist and Cath Lab team members should verbally confirm with reference to the consent form, and wristband;

- ☐ Confirm patient name, Hospital number, date of birth
- ☐ Procedure, site and position
- ☐ Access planned
- DOACs / Anticoagulation ☐ Yes ☐ No
- Dual Antiplatelets ☐ Yes ☐ No
- Known allergy ☐ Yes ☐ No
- Is patient for CPR? ☐ Yes ☐ No
- **Operator**
- ☐ Special equipment requirements ☐ N/A ☐ Yes
- ☐ Expected duration .....
- ☐ Concerns or potential critical events
- **Nurse**
- ☐ Sterility of instruments confirmed ☐ Yes
- **Surgical site care bundle**
- ☐ Antibiotic prophylaxis given ☐ N/A ☐ Yes
- ☐ Patient Warming ☐ N/A ☐ Yes
- ☐ Glycaemic control ☐ N/A ☐ Yes
- ☐ Hair removal with clippers ☐ N/A ☐ Yes
- ☐ Essential imaging displayed or reviewed ☐ N/A ☐ Yes
- ☐ Heparin / VTE discussed
- **Anaesthetist**
- ☐ Patient's ASA status ☐ N/A
- ☐ Patient specific concerns or serious comorbidity

INTRA-PROCEDURAL PAUSES N/A ■

- ☐ Prosthetic check
  - Cardiologist and team member confirm correct implant and expiry date and details entered in the patient record

Read out by: (PRINT) .....

Signed: .....

SIGN OUT

Before any member of the team leaves the operating theatre, and not before completion of the first surgical closing count, the team should verbally confirm:

- ☐ What procedure have you performed and is it correctly recorded
- ☐ The count is correct for all instruments, swabs, throat packs, sharps and accountable items
- ☐ Any equipment issues identified
- ☐ All cannulae and extensions have been flushed / removed and / Clamped
- ☐ Key concerns for recovery and postoperative management, including if higher level of care required
- ☐ Issues for de-brief noted
- ☐ Implant device / stent recorded

Read out by: (PRINT) .....

Signed: .....

PCI Catheter Lab. Safer Surgery 6/21

PATIENT STICKER

1ST OPERATOR: .....

ASSISTANT: .....

SCRUB NURSE: .....

DATE: ...../ ...../ ..... TIME: ....., am / pm

PROCEDURE SUMMARY:

ARTERIAL SITE MANAGEMENT INSTRUCTIONS:

COMMUNICATION TO THE WARD:

SIGNATURE: ..... DATE: ..... TIME: .....

STOP THE LINE Safe Surgery

NURSING PROCEDURE INFORMATION
ANGIOCATHETER SUITE USE ONLY

PATIENT STICKER

Approach / Sheaths (Please document all - circle)

1 Right / Left Brachial / Radial / Femoral Artery / Vein Size: .....

2 Right / Left Brachial / Radial / Femoral Artery / Vein Size: .....

3 Right / Left Brachial / Radial / Femoral Artery / Vein Size: .....

Initial observations: Time .....

Arterial BP ...../..... Heart rate ..... Sats .....%

Heparin: Total dose ..... iu Last time administered .....

Tirofiban: Bolus .....ml Infusion .....ml/hr

Tirofiban to continue for ..... hours

Procedure/Recovery Details (Nursing Handover to the ward):

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Recovery Observations **HR** ..... **BP** ..... **SaO2** ..... **Resp** .....
(If systolic varies by 20mmHg from pre procedure then inform medical team)

Sheath Removal / Closure

Sheath removed with .... Time applied .....

Sheath to be removed by ward ☐ ACT due at .....

SIGNATURE: ..... DATE: ..... TIME: .....

PATIENT STICKER

Femoral / Radial site COMPLICATIONS: If there is any abnormality to the Radial or Femoral site including any Swelling, Bleeding, Excessive Pain, Loss of Perfusion or Pulse. Escalate via normal procedure including calling the on call registrar if necessary, apply pressure if indicated and implement 15 minutes observations. **The nurse in charge should contact the operator or Catheter Lab if complications are not resolved.**

NURSING: ON RETURN TO THE WARD	**Sign as completed:**
Femoral / Radial site checked: No complications present	[.....]
Pedal / Radial pulses present: Left: Yes / No Right: Yes / No	[.....]
Feet / Hand good colour and warm	[.....]
WARD UHL EWS observation: – Score	[.....]
Post-procedural information reiterated.	[.....]
Post-procedural ECG recorded and interpreted as satisfactory.	[.....]
Sit Up Time ..... ACT Time	[.....]
Patient eating and drinking,	[.....]
Get Up Time (If Appropriate)	[.....]
Time: [.....] Date	[.....]

SIGNATURE: ..... DATE: ..... TIME: .....

NURSING: 30 MINUTES AFTER RETURN	**Sign as completed:**
Femoral / Radial site checked: No complications present	[.....]
Pedal / Radial pulses present: Left: Yes / No Right: Yes / No	[.....]
Feet / Hand good colour and warm	[.....]

Documentation of any complications

.....

.....

.....

.....

SIGNATURE: ..... DATE: ..... TIME: .....

STOP THE LINE Safe Surgery

PATIENT STICKER

NURSING: On sheath / TR band removal

ACT result ..... Time .....

UHL EWS pre sheath removal score ..... [.....]

UHL EWS post sheath removal score ..... [.....]

Complications (* please circle)

* Chest Pain Syncope Bleeding / Haematoma Arrhythmias REOPRO

Details: .....

.....

.....

SIGNATURE: ..... DATE: ..... TIME: .....

NURSING: Within 2 – 6 Hours Post Procedure

Sheath / Radial device removed without complication [.....]

Bed rest completed at time: ..... [.....]

Discharge planning continued [.....]

Cannula removed (if applicable) [.....]

Feet good colour and warm [.....]

Foot pulses present: **LEFT**: YES / NO **RIGHT**: YES / NO [.....]

Or Radial pulses **LEFT**: YES / NO **RIGHT**: YES / NO [.....]

No haematoma bruising/bleeding from groin / wrist: [.....]

Discharge plans confirmed [.....]

On Completion:

SIGNATURE: ..... DATE: ..... TIME: .....

STOP THE LINE Safe Surgery

PATIENT STICKER

CARDIOLOGY PROCEDURE SHORT STAY DISCHARGE PLANNER

NURSING: Prior to Discharge

Results and treatment plan discussed by doctor.	[.....]
Pedal / Radial pulses present: Left: Yes / No Right: Yes / No	[.....]
Groin / Arm Site checked: No complications present.	[.....]
Bedrest completed @ Time:	[.....]
Mobilising normally.	[.....]
Passed Urine post procedure.	[.....]
IV cannula removed.	[.....]
Discharge arrangements confirmed.	[.....]
Relatives or carers informed of discharge.	[.....]
Clopidogrel / Prasugrel / Ticagrelor given	[.....]
DAPT Card Given stating to take for ..... (State Months)	[.....]
Discharge medication reviewed and ordered as required.	[.....]
Actions and side effects of any new medications discussed.	[.....]
TTO Medication given if required.	[.....]
Sick certificate given if necessary.	[.....]
Patient copy of discharge letter given.	[.....]
Written patient information given / explained.	[.....]
Patient has all property for discharge.	[.....]
Patient advised who to contact for advice.	[.....]
All discharge arrangements confirmed with patient:-	[.....]
Outpatient appointment documented.	[.....]
GP copy of discharge letter sent.	[.....]
Patient to go to discharge lounge.	[.....]
Patient discharged home	[.....]

Date: ..... Time: ..... Sign: [.....]

STOP THE LINE Safe Surgery

PATIENT STICKER

MEDICAL/NURSING REVIEW POST PROCEDURE: (Date, Time and sign all entries)

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NB: If THE patient IS TO REMAIN IN HOSPITAL for longer than overnight, please transfer to long stay care document WITH LONG STAY MANDATORY ASSESSMENTS. THE OPERATOR OR CONSULTANT CARDIOLOGIST MUST BE INFORMED BY THE NURSE IN CHARGE IF THE PATIENTS TREATMENT PLAN IS CHANGED, ON ANY COMPLICATIONS OR THEIR INPATIENT STAY IS EXTENDED FOR ELECTIVE PATIENTS.

PATIENT STICKER

COMMUNICATION SHEET: (Date, Time and Sign all entries)

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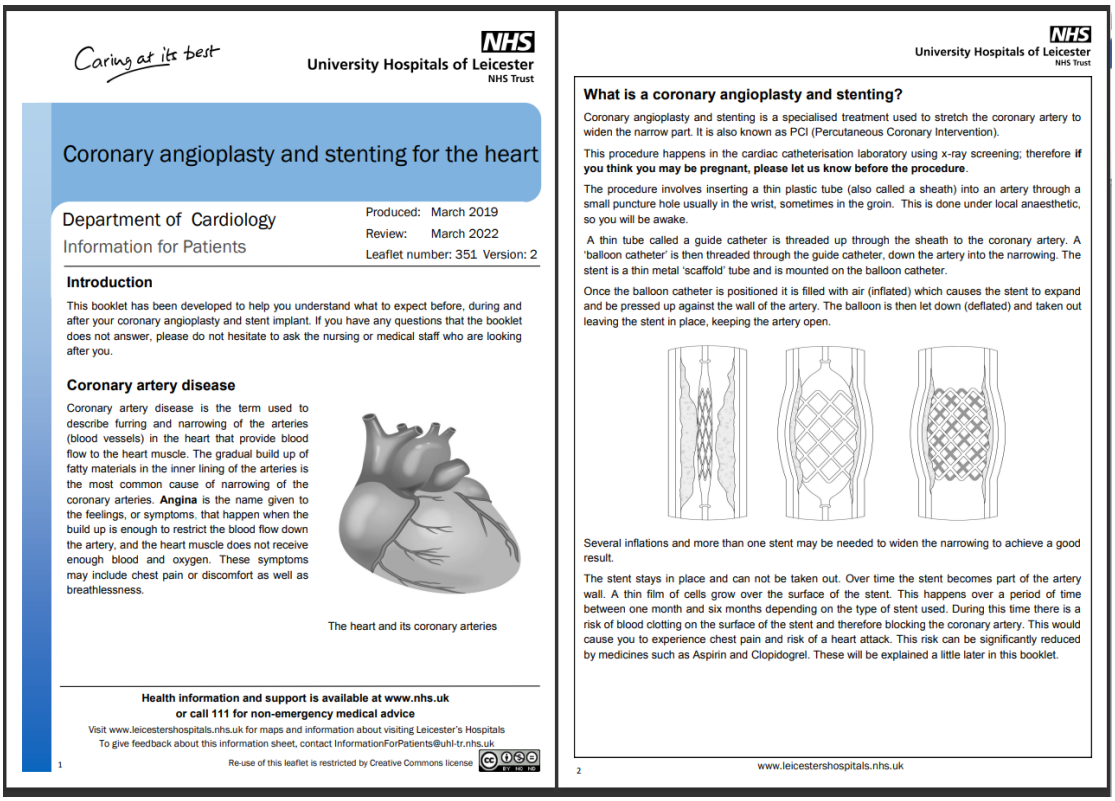
SIGNATURE SHEET		
NAME (PRINTED)	**SIGNATURE**	**DESIGNATION**

STOP THE LINE

Safe Surgery

Appendix 2: Patient Information Leaflet for Coronary angioplasty and stenting for the heart (English & Gujarati) Available at: Coronary angioplasty and stenting for the heart (leicestershospitals.nhs.uk) Coronary angioplasty and stenting for the heart (Gujarati) (leicestershospitals.nhs.uk)



Caring at its best

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Coronary angioplasty and stenting for the heart

Department of Cardiology
Information for Patients

Produced: March 2019
Review: March 2022
Leaflet number: 351 Version: 2

Introduction

This booklet has been developed to help you understand what to expect before, during and after your coronary angioplasty and stent implant. If you have any questions that the booklet does not answer, please do not hesitate to ask the nursing or medical staff who are looking after you.

Coronary artery disease

Coronary artery disease is the term used to describe furring and narrowing of the arteries (blood vessels) in the heart that provide blood flow to the heart muscle. The gradual build up of fatty materials in the inner lining of the arteries is the most common cause of narrowing of the coronary arteries. **Angina** is the name given to the feelings, or symptoms, that happen when the build up is enough to restrict the blood flow down the artery, and the heart muscle does not receive enough blood and oxygen. These symptoms may include chest pain or discomfort as well as breathlessness.

The heart and its coronary arteries

Health information and support is available at www.nhs.uk or call 111 for non-emergency medical advice

Visit www.leicestershospitals.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact InformationForPatients@uhl-tr.nhs.uk

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What is a coronary angioplasty and stenting?

Coronary angioplasty and stenting is a specialised treatment used to stretch the coronary artery to widen the narrow part. It is also known as PCI (Percutaneous Coronary Intervention).

This procedure happens in the cardiac catheterisation laboratory using x-ray screening; therefore **if you think you may be pregnant, please let us know before the procedure**.

The procedure involves inserting a thin plastic tube (also called a sheath) into an artery through a small puncture hole usually in the wrist, sometimes in the groin. This is done under local anaesthetic, so you will be awake.

A thin tube called a guide catheter is threaded up through the sheath to the coronary artery. A 'balloon catheter' is then threaded through the guide catheter, down the artery into the narrowing. The stent is a thin metal 'scaffold' tube and is mounted on the balloon catheter.

Once the balloon catheter is positioned it is filled with air (inflated) which causes the stent to expand and be pressed up against the wall of the artery. The balloon is then let down (deflated) and taken out leaving the stent in place, keeping the artery open.

Several inflations and more than one stent may be needed to widen the narrowing to achieve a good result.

The stent stays in place and can not be taken out. Over time the stent becomes part of the artery wall. A thin film of cells grow over the surface of the stent. This happens over a period of time between one month and six months depending on the type of stent used. During this time there is a risk of blood clotting on the surface of the stent and therefore blocking the coronary artery. This would cause you to experience chest pain and risk of a heart attack. This risk can be significantly reduced by medicines such as Aspirin and Clopidogrel. These will be explained a little later in this booklet.

www.leicestershospitals.nhs.uk

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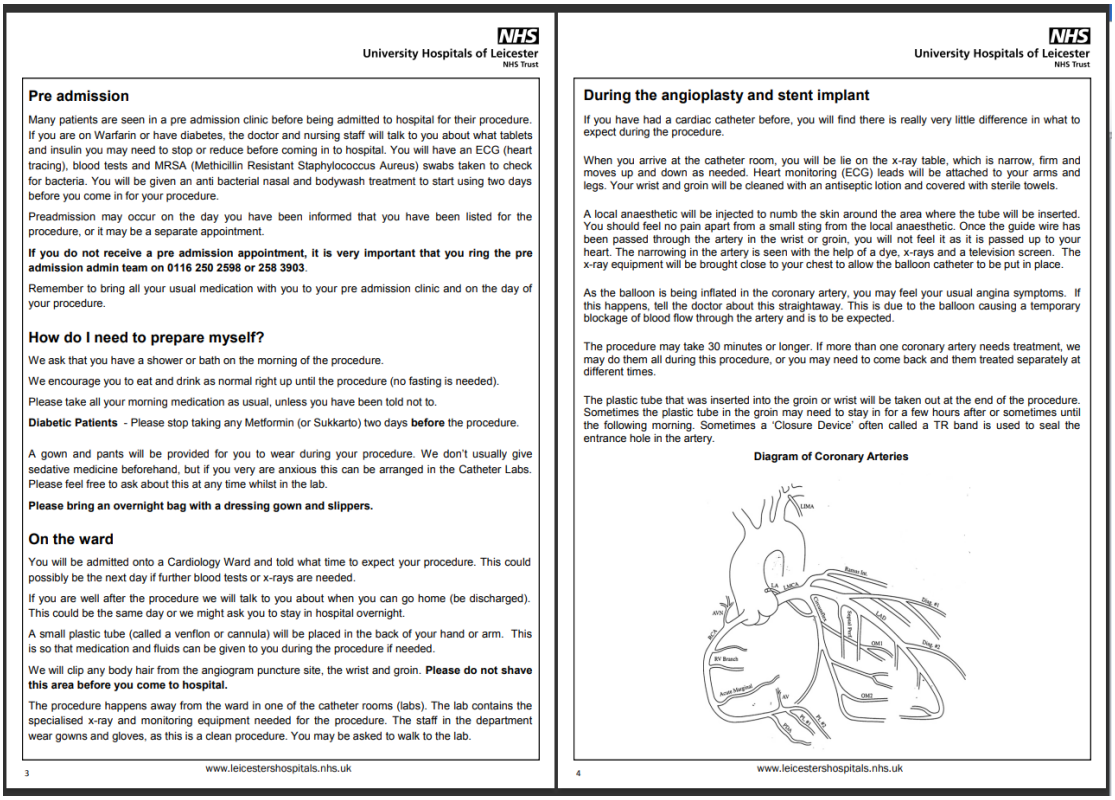

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Pre admission

Many patients are seen in a pre admission clinic before being admitted to hospital for their procedure. If you are on Warfarin or have diabetes, the doctor and nursing staff will talk to you about what tablets and insulin you may need to stop or reduce before coming in to hospital. You will have an ECG (heart tracing), blood tests and MRSA (Methicillin Resistant Staphylococcus Aureus) swabs taken to check for bacteria. You will be given an anti bacterial nasal and bodywash treatment to start using two days before you come in for your procedure.

Preadmission may occur on the day you have been informed that you have been listed for the procedure, or it may be a separate appointment.

If you do not receive a pre admission appointment, it is very important that you ring the pre admission admin team on 0116 250 2598 or 258 3903.

Remember to bring all your usual medication with you to your pre admission clinic and on the day of your procedure.

How do I need to prepare myself?

We ask that you have a shower or bath on the morning of the procedure.

We encourage you to eat and drink as normal right up until the procedure (no fasting is needed).

Please take all your morning medication as usual, unless you have been told not to.

Diabetic Patients - Please stop taking any Metformin (or Sukkarto) two days **before** the procedure.

A gown and pants will be provided for you to wear during your procedure. We don't usually give sedative medicine beforehand, but if you very are anxious this can be arranged in the Catheter Labs. Please feel free to ask about this at any time whilst in the lab.

Please bring an overnight bag with a dressing gown and slippers.

On the ward

You will be admitted onto a Cardiology Ward and told what time to expect your procedure. This could possibly be the next day if further blood tests or x-rays are needed.

If you are well after the procedure we will talk to you about when you can go home (be discharged). This could be the same day or we might ask you to stay in hospital overnight.

A small plastic tube (called a venflon or cannula) will be placed in the back of your hand or arm. This is so that medication and fluids can be given to you during the procedure if needed.

We will clip any body hair from the angiogram puncture site, the wrist and groin. **Please do not shave this area before you come to hospital.**

The procedure happens away from the ward in one of the catheter rooms (labs). The lab contains the specialised x-ray and monitoring equipment needed for the procedure. The staff in the department wear gowns and gloves, as this is a clean procedure. You may be asked to walk to the lab.

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During the angioplasty and stent implant

If you have had a cardiac catheter before, you will find there is really very little difference in what to expect during the procedure.

When you arrive at the catheter room, you will be lie on the x-ray table, which is narrow, firm and moves up and down as needed. Heart monitoring (ECG) leads will be attached to your arms and legs. Your wrist and groin will be cleaned with an antiseptic lotion and covered with sterile towels.

A local anaesthetic will be injected to numb the skin around the area where the tube will be inserted. You should feel no pain apart from a small sting from the local anaesthetic. Once the guide wire has been passed through the artery in the wrist or groin, you will not feel it as it is passed up to your heart. The narrowing in the artery is seen with the help of a dye, x-rays and a television screen. The x-ray equipment will be brought close to your chest to allow the balloon catheter to be put in place.

As the balloon is being inflated in the coronary artery, you may feel your usual angina symptoms. If this happens, tell the doctor about this straightaway. This is due to the balloon causing a temporary blockage of blood flow through the artery and is to be expected.

The procedure may take 30 minutes or longer. If more than one coronary artery needs treatment, we may do them all during this procedure, or you may need to come back and them treated separately at different times.

The plastic tube that was inserted into the groin or wrist will be taken out at the end of the procedure. Sometimes the plastic tube in the groin may need to stay in for a few hours after or sometimes until the following morning. Sometimes a 'Closure Device' often called a TR band is used to seal the entrance hole in the artery.

Diagram of Coronary Arteries

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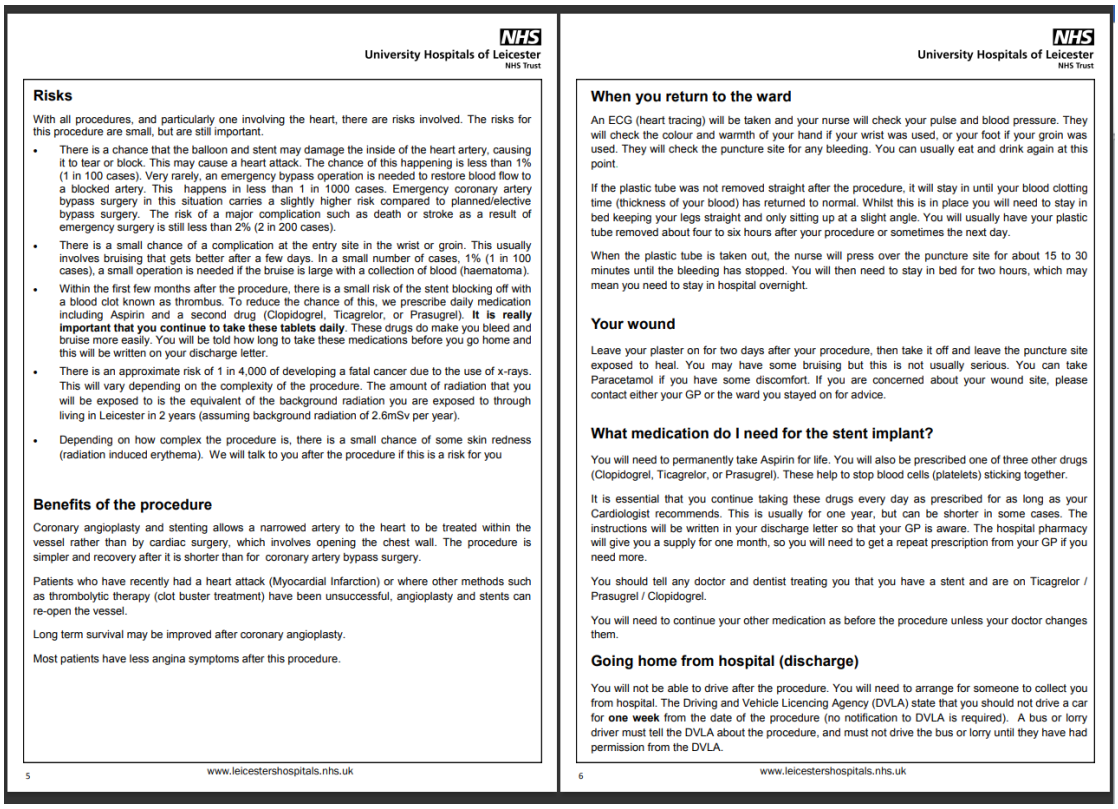

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Risks

With all procedures, and particularly one involving the heart, there are risks involved. The risks for this procedure are small, but are still important.

- There is a chance that the balloon and stent may damage the inside of the heart artery, causing it to tear or block. This may cause a heart attack. The chance of this happening is less than 1% (1 in 100 cases). Very rarely, an emergency bypass operation is needed to restore blood flow to a blocked artery. This happens in less than 1 in 1000 cases. Emergency coronary artery bypass surgery in this situation carries a slightly higher risk compared to planned/elective bypass surgery. The risk of a major complication such as death or stroke as a result of emergency surgery is still less than 2% (2 in 200 cases).
- There is a small chance of a complication at the entry site in the wrist or groin. This usually involves bruising that gets better after a few days. In a small number of cases, 1% (1 in 100 cases), a small operation is needed if the bruise is large with a collection of blood (haematoma).
- Within the first few months after the procedure, there is a small risk of the stent blocking off with a blood clot known as thrombus. To reduce the chance of this, we prescribe daily medication including Aspirin and a second drug (Clopidogrel, Ticagrelor, or Prasugrel). **It is really important that you continue to take these tablets daily**. These drugs do make you bleed and bruise more easily. You will be told how long to take these medications before you go home and this will be written on your discharge letter.
- There is an approximate risk of 1 in 4,000 of developing a fatal cancer due to the use of x-rays. This will vary depending on the complexity of the procedure. The amount of radiation that you will be exposed to is the equivalent of the background radiation you are exposed to through living in Leicester in 2 years (assuming background radiation of 2.6mSv per year).
- Depending on how complex the procedure is, there is a small chance of some skin redness (radiation induced erythema). We will talk to you after the procedure if this is a risk for you

Benefits of the procedure

Coronary angioplasty and stenting allows a narrowed artery to the heart to be treated within the vessel rather than by cardiac surgery, which involves opening the chest wall. The procedure is simpler and recovery after it is shorter than for coronary artery bypass surgery.

Patients who have recently had a heart attack (Myocardial Infarction) or where other methods such as thrombolytic therapy (clot buster treatment) have been unsuccessful, angioplasty and stents can re-open the vessel.

Long term survival may be improved after coronary angioplasty.

Most patients have less angina symptoms after this procedure.

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When you return to the ward

An ECG (heart tracing) will be taken and your nurse will check your pulse and blood pressure. They will check the colour and warmth of your hand if your wrist was used, or your foot if your groin was used. They will check the puncture site for any bleeding. You can usually eat and drink again at this point.

If the plastic tube was not removed straight after the procedure, it will stay in until your blood clotting time (thickness of your blood) has returned to normal. Whilst this is in place you will need to stay in bed keeping your legs straight and only sitting up at a slight angle. You will usually have your plastic tube removed about four to six hours after your procedure or sometimes the next day.

When the plastic tube is taken out, the nurse will press over the puncture site for about 15 to 30 minutes until the bleeding has stopped. You will then need to stay in bed for two hours, which may mean you need to stay in hospital overnight.

Your wound

Leave your plaster on for two days after your procedure, then take it off and leave the puncture site exposed to heal. You may have some bruising but this is not usually serious. You can take Paracetamol if you have some discomfort. If you are concerned about your wound site, please contact either your GP or the ward you stayed on for advice.

What medication do I need for the stent implant?

You will need to permanently take Aspirin for life. You will also be prescribed one of three other drugs (Clopidogrel, Ticagrelor, or Prasugrel). These help to stop blood cells (platelets) sticking together.

It is essential that you continue taking these drugs every day as prescribed for as long as your Cardiologist recommends. This is usually for one year, but can be shorter in some cases. The instructions will be written in your discharge letter so that your GP is aware. The hospital pharmacy will give you a supply for one month, so you will need to get a repeat prescription from your GP if you need more.

You should tell any doctor and dentist treating you that you have a stent and are on Ticagrelor / Prasugrel / Clopidogrel.

You will need to continue your other medication as before the procedure unless your doctor changes them.

Going home from hospital (discharge)

You will not be able to drive after the procedure. You will need to arrange for someone to collect you from hospital. The Driving and Vehicle Licencing Agency (DVLA) state that you should not drive a car for **one week** from the date of the procedure (no notification to DVLA is required). A bus or lorry driver must tell the DVLA about the procedure, and must not drive the bus or lorry until they have had permission from the DVLA.

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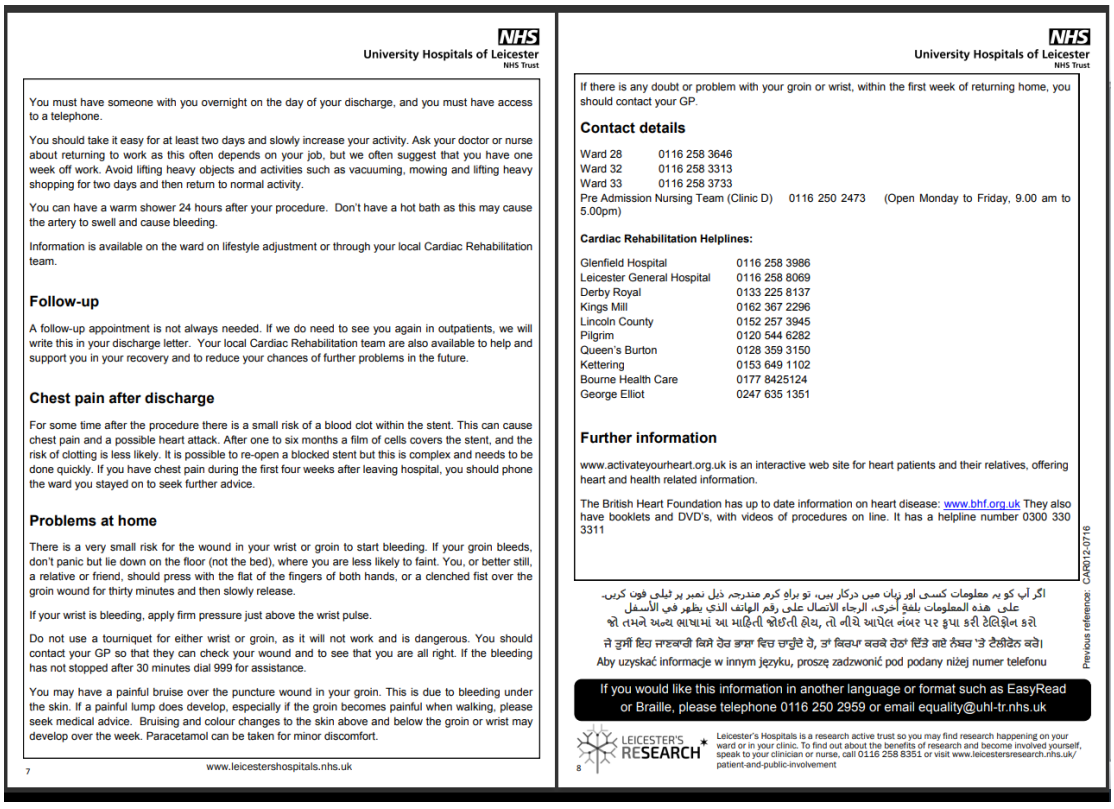

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You must have someone with you overnight on the day of your discharge, and you must have access to a telephone.

You should take it easy for at least two days and slowly increase your activity. Ask your doctor or nurse about returning to work as this often depends on your job, but we often suggest that you have one week off work. Avoid lifting heavy objects and activities such as vacuuming, mowing and lifting heavy shopping for two days and then return to normal activity.

You can have a warm shower 24 hours after your procedure. Don't have a hot bath as this may cause the artery to swell and cause bleeding.

Information is available on the ward on lifestyle adjustment or through your local Cardiac Rehabilitation team.

Follow-up

A follow-up appointment is not always needed. If we do need to see you again in outpatients, we will write this in your discharge letter. Your local Cardiac Rehabilitation team are also available to help and support you in your recovery and to reduce your chances of further problems in the future.

Chest pain after discharge

For some time after the procedure there is a small risk of a blood clot within the stent. This can cause chest pain and a possible heart attack. After one to six months a film of cells covers the stent, and the risk of clotting is less likely. It is possible to re-open a blocked stent but this is complex and needs to be done quickly. If you have chest pain during the first four weeks after leaving hospital, you should phone the ward you stayed on to seek further advice.

Problems at home

There is a very small risk for the wound in your wrist or groin to start bleeding. If your groin bleeds, don't panic but lie down on the floor (not the bed), where you are less likely to faint. You, or better still, a relative or friend, should press with the flat of the fingers of both hands, or a clenched fist over the groin wound for thirty minutes and then slowly release.

If your wrist is bleeding, apply firm pressure just above the wrist pulse.

Do not use a tourniquet for either wrist or groin, as it will not work and is dangerous. You should contact your GP so that they can check your wound and to see that you are all right. If the bleeding has not stopped after 30 minutes dial 999 for assistance.

You may have a painful bruise over the puncture wound in your groin. This is due to bleeding under the skin. If a painful lump does develop, especially if the groin becomes painful when walking, please seek medical advice. Bruising and colour changes to the skin above and below the groin or wrist may develop over the week. Paracetamol can be taken for minor discomfort.

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If there is any doubt or problem with your groin or wrist, within the first week of returning home, you should contact your GP.

Contact details

Ward 28	0116 258 3646
Ward 32	0116 258 3313
Ward 33	0116 258 3733

Pre Admission Nursing Team (Clinic D) 0116 250 2473 (Open Monday to Friday, 9.00 am to 5.00pm)

Cardiac Rehabilitation Helplines:

Glenfield Hospital	0116 258 3986
Leicester General Hospital	0116 258 8069
Derby Royal	0133 225 8137
Kings Mill	0162 367 2296
Lincoln County	0152 257 3945
Pilgrim	0120 544 6282
Queen's Burton	0128 359 3150
Kettering	0153 649 1102
Bourne Health Care	0177 8425124
George Elliot	0247 635 1351

Further information

www.activateyourheart.org.uk is an interactive web site for heart patients and their relatives, offering heart and health related information.

The British Heart Foundation has up to date information on heart disease: www.bhf.org.uk They also have booklets and DVD's, with videos of procedures on line. It has a helpline number 0300 330 3311

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો
ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।
Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk

LEICESTER'S RESEARCH

Leicester's Hospitals is a research active trust so you may find research happening on your ward or in your clinic. To find out about the benefits of research and become involved yourself, speak to your clinician or nurse, call 0116 258 8351 or visit www.leicestersresearch.nhs.uk/patient-and-public-involvement

Previous reference: CARD12-0716

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Appendix 3: Catheter Lab Accountable Items Count Form

Please Affix Patient Label Here	ANGIOGRAM		Please Affix Pack Label Here
	Date:		
	Time:		
	Lab:		

Angio Pack

Description	Pre Op	Additional			
Forceps Artery Mosquito Curved					
Scissors Sharp / Blunt 13cm					
Orange Hypodermic Needle					
Green Hypodermic Needle					
Pink Kimal Needle					
Filter Needle					
Scalpel No.15					
IV Spike					
Swab Gauze 10 x 10cm (5+5)					
Red Tags (1+1)					
Guidewire					

Additional Items

Description	Additional				
Radial Sheath Needle(s)					
Blunt Introducer Needle(s)					
Suture(s)					
Extra Swabs					
Extra Red Tag(s)					
Proglide(s)					
Guidewire(s)					
Guidewire(s)					

	Pre Op	Post Op
Checker 1		
Checker 2		

All guidewires and procedural equipment removed and intact: .....

Operator to sign

Appendix 4: Catheter Lab Team Brief & Debrief Checklist

Catheter Lab Team Brief Checklist

This checklist must be filed in the Cath lab Brief / Debrief folder

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Caring at its best

STOP THE LINE

Cath Lab: .....

Consultant: .....

Date: .....

Time Started: .....

1. Team brief:

At the **beginning of the list** to discuss all cases, led by the theatre team leader.

In emergency theatre –full handover to be **given by transferring registrar** on patient arrival.

- ❑ All team members have introduced themselves by name & role.
- ❑ Issues resolved from last debrief.
- ❑ Anaesthetic machine & drugs checked and ready.
- ❑ Any latex allergies or infection risk.
- ❑ Confirm list order.
- ❑ Dosimetery for all staff.
- ❑ Appropriate PPE Available

Patient name, Number and Procedure		Team Input									Anaesthetic Input
	IP Status	Correct Ward	Equipment Available	Essential Imaging checked & available	Outstanding tests /VTE	Procedure concerns / requirements	Implants / prostheses checked & available	Antibiotics required	Blood Products required	Post procedure care	Anaesthetic plan: Patient specific concerns
1.											
2.											
3.											
4.											
5.											

Staff present:

- ❑ Nurse
- ❑ HCA / CLA
- ❑ Scrub Practitioner
- ❑ ODP
- ❑ Student
- ❑ Trainee Cardiologist
- ❑ Con Cardiologist
- ❑ Con Anaesthetist
- ❑ Trainee Anaesthetist
- ❑ Rep
- ❑ Radiographer
- ❑ Cardiac Physiologist

Team Signature:	Print Name:	Designation:
	Date: / /	Time:

Catheter Lab Team De-Brief Checklist

This checklist must be filed in the Cath Lab Brief / Debrief folder

NHS University Hospitals of Leicester NHS Trust

Caring at its best

Cath Lab: .....

Consultant: .....

Date: .....

Time Started: .....

❑ Post op debrief performed	Yes ☐ No ☐
❑ Any issues arising that need to be addressed	Yes ☐ No ☐
❑ If 'Yes', is Debrief Action Log complete (below)	
❑ All 'Stop the Line' issues recorded and Datixed	

STOP THE LINE

Issue	Action Required	Responsible Person	Due Date	Completed?

Achievements and what went well?	Could we have made this list more productive?

Staff present:

❑ Nurse	❑ Con Cardiologist
❑ HCA / CLA	❑ Con Anaesthetist
❑ Scrub Practitioner	❑ Trainee Anaesthetist
❑ ODP	❑ Rep
❑ Student	❑ Radiographer
❑ Trainee Cardiologist	❑ Cardiac Physiologist

Team Signature:	Print Name:	Designation:
	Date: / /	Time: