**Post Title:** Advanced Cardiothoracic and Transplant   
Surgical Care Practitioner

**Band:** Band 8a/Band 8b

**Hours:** Full time

**Department:** Cardiothoracic Theatres

**Responsible to**

**Clinical Responsibility:** Consultant surgeons

**Managerial Responsibility:** Head of Nursing

**Job summary:**

To provide specialist advice and assistance to the Consultant surgeon and Specialist registrars, during adult cardiac, thoracic and transplant surgeries. The post holder will participate in all aspects of preoperative, intraoperative and postoperative care at an advanced level after relevant training Master’s or equivalent qualification/experience. They will perform duties to a high standard in order to achieve effective and safe patient care and recovery within the areas of the Cardiothoracic Operating theatres, CTCCU, Outpatients Department, Pre-assessment and Cardiothoracic Wards.

The post holder will work autonomously as an independent practitioner but also work closely with the Consultant Surgeons, specialist registrars, junior medical staff and other Surgical Care Practitioners (SCPs) to support the delivery of the cardio-thoracic surgery programme to an advanced level.

The post holder will work closely with the consultant Cardiothoracic and transplant surgeon to provide expert clinical knowledge, support to both the surgeons and other intraoperative clients. To act as an expert specialist resource and educator for surgical colleagues, medical, operating department practitioners, trainee SCPs, nursing students, patients, carers, and families to achieve effective patient care and recovery.

The post holder would be expected to be responsible for planning and organising a broad range of complex surgical activities that will impact across the service. This would include developing and implementing policies, guidelines and procedures.

The post holder will communicate confidential, condition-related patient information according to Trust policy.

**Multidisciplinary team network:**

Consultant Cardiac surgeons, Consultant Thoracic surgeons, Consultant Anaesthetists, Medical staff, Perioperative theatre practitioners, Intensive care staff, Lead Nurse, Head of Nursing, Division, Divisional and Group Managers, Ward staff, Outpatient staff, Laboratory staff, Cardiology staff, Cardiac Rehabilitation staff, Coordinators (Cardiothoracic waiting list, Theatres, Transplant, ECMO, VAD), Patient Liaison groups, Bio-medical devices, surgical company and Pharmaceutical representatives as well as nursing and medical professionals from other trusts.

**Key aspects of the advanced role**

* Autonomously undertaking the decision of harvesting of venous and arterial conduits using open and minimally invasive surgical techniques for coronary bypass grafting surgery.
* Independently making clinical decisions with complex surgical procedures on selecting surgical sites, conduits with appropriate harvesting techniques.
* Taking independent decision in performing the vein mapping on the donor leg and carrying out Allen’s test for the radial artery harvest.
* Independently assess patients’ preoperatively, intraoperatively, and postoperatively in relation to the harvesting and wound care management.
* Implement preoperative assessment process including clinical examination, vein mapping, medicines review (non-medical prescribing as appropriate) and enhanced recovery education as directed by the surgical team and hospital protocols.
* Formulate policies and protocols to support SCP role advancement in line with service needs.
* Support the surgical team with the daily consultant/SPR lead ward round and contribute to the development of management plans and discharge planning.
* Able to autonomously undertake minimally invasive conduit harvesting (Endoscopic vein harvesting).
* Participate in SCP led clinics after appropriate training, assessment and competency achievement.
* Arrangement of appropriate pre and postoperative investigations as part of the multidisciplinary team to enhance patient safety, to facilitate patient- centred care and contribute to the smooth running of the operating lists. This will include advanced preoperative assessment, history taking, vein mapping, and review of ECG, chest X-ray and drug therapy.
* Contribute to the clinical care of the postoperative patient detection of surgical problems such as postoperative bleeding, heart rate complications and wound infection.
* Contribute to wound care, applying expertise in complex wound care management after consulting with the multidisciplinary team.
* Plan, organise and participate in the teaching, training, and supervision of core surgical trainees, junior medical staff, trainee SCPs in the techniques for harvesting the arterial and venous conduits for coronary artery bypass grafting.
* As an experienced skilled practitioner participate in the supervision of junior medical staff and junior SCPs within the theatre suite to facilitate appropriate skill mix and support learners.
* Teaching faculty on cardiothoracic surgical skills for the national, local colleagues at the Society for Cardiothoracic Surgery (SCTS), Association of Cardiothoracic Surgical Care Practitioners (ACT SCP) and Cardiac Advanced Life Support course (MFT).
* Teaching faculty for the Royal College of Surgeons of Edinburgh Basic Surgical Skills (BSS), Northwest Deanery surgical curriculum and universities when required*.*

**Specific clinical competencies required for the role**

Proficiency in:

* Undertake harvesting of conduits for coronary bypass grafting such as long saphenous veins, short saphenous veins and radial artery harvesting.
* Assisting in all major and minor cardiac, thoracic, transplant surgical procedures as a first and second assistant.
* Assisting in all major aortic dissections and aortic root surgical procedures.
* Assisting in Cardiothoracic transplantation cases such as heart transplant, lung transplant and also in ECMO, LVAD and RVAD.
* Assisting in male and female urinary catheterisation.
* Assisting in all emergency surgeries like cardiac tamponade, pneumo/  
  haemothorax.
* Assisting in subclavian, transaortic, axillary and femoral cannulation.
* Assisting in the insertion and removal of Intra-Aortic Balloon Pump (IABP).
* Assisting in Trans-Aortic Valve Implantation (TAVI) in the catheter laboratory.
* Participating in cardiothoracic organ retrieval.
* Undertake the following surgical skills:
  + Surgical incisions for femoral access and above knee access.
  + Assisting and closing the femoral and axillary incisions.
  + Tissue dissection for femoral cannulations.
  + Radial artery and long/short saphenous vein harvesting.
  + Sternotomy incision.
  + Thoracotomy incision.
  + Closure of sternotomy and thoracotomy wounds.
  + Removal of sternal wires.
  + Insertion of chest and leg drains in general.
  + Assisting in wound debridement surgeries.
  + Independently assessing and changing the VAC dressing.
  + Assisting in pericardial window.
  + Assisting in all emergency surgery like cardiac tamponade, Pneumo/haemothorax.
* Specialist harvesting: Cardiac surgery
  + Open vein harvesting.
  + Short saphenous vein harvesting.
  + Radial harvesting.
  + Bridging vein harvesting.
  + Endoscopic vein harvesting with an experience of minimum 250 cases.
* Specialist surgical procedures: Minimally invasive cardiac surgeries
  + Assisting as a first and second assistant of Mini Aortic Valve Replacement.
  + Assisting in Mini Mitral valve repair/replacement.
  + Assisting in Sutureless aortic valve replacement.
  + Prepare and deflate the sutureless aortic valve for surgical implantation.
  + Assisting in Off-pump coronary artery bypass surgery.
  + Assisting in MIDCAB surgical procedures.
* Specialist procedures: Thoracic surgery
  + Assisting in all minimally thoracic procedures such as Video Assisted Thoracoscopy lobectomy, Pleurectomy, Wedge resection, Sleeve resection procedures and Pleurodesis.
  + Assisting in thymectomy surgical procedures.
  + Assisting in Mediastinal scopy, bronchial and tracheal stent insertion.
  + Assisting endovascular bronchial dilatation.
  + Assisting in flexible and rigid bronchoscopy.
  + Assisting in chest wall reconstruction and rib resection.
  + Opening and closing of thoracotomy surgical incisions.
  + Assisting in all cardiothoracic trauma cases.
  + Insertion and removal of chest drains.
  + Assisting in decortication surgical procedures.
* Preoperative assessment:
  + Independently assessing all arterial and venous conduit assessment with and without use of Ultrasound scan.
  + Arterial conduit assessment using the Alan test.
  + Independently performing modified Alan test using pulse oximetry probe.
  + Physical assessment of the patient for cardiac and thoracic surgery.
  + Assisting in ward rounds in regard to surgical intervention.
* Postoperative assessment:
  + Independently assess the patients’ wound assessment postoperatively on daily basis.
  + Tissue viability assessment of the chest and leg wound and refer them.
  + Postoperative wound follow-up and wound management in CTCCU and postoperative ward.
  + Data entry:
    - Dendrite- Preoperative and Intraoperative data entry.
    - SCP patient documentation.
* Undertake urethral and supra-pubic catheterisation male/female.
* Perform ECG and chest x-ray, TOE, angiographic interpretation.
* Request for Cardiothoracic investigation as required.
* Collect data and report the surgical site infection to Public Health England database.
* Developing a new surgical skills policy and protocol in conjunction with development of national new innovation training.

**Management and administration:**

* Responsible for the implementation of quality standards and outcomes whilst developing the key performance indicators for the service to be benchmarked against, within the Cardiothoracic department.
* Responsible for the development of the junior/trainee’s SCP role and service with the directorate.
* To lead in allocating and making up the SCP weekly rota with the SPR.
* Provide specialist expert clinical knowledge to colleagues, patients and other health care workers both within and outside the Trust.
* Effectively manage the *conduit harvesting equipment and consumables* to enable identification of potential quality and cost initiatives.
* Accountable for implementation and evaluation of agreed resource initiatives.
* Lead investigations within the SCP service and be responsible for informed action plans on issues raised and report feedback in a timely manner.
* Accountable for ensuring that staff are competent in their line of expertise and provide opportunities for staff development, whilst developing competencies to meet service needs across the department.
* Support the recruitment, selection and retention of SCP within the Directorate.
* Responsible as a line manager/senior SCP for the management of sickness/absence levels/records of SCPs/trainees with appropriate action in conjunction with Consultants, Theatre manager and HR to reduce incidences and trends.
* To attend and participate in directorate and Trust wide meetings as required. Share the information to the junior staff as required.
* Communicate with multidisciplinary staff in order to provide the highly developed specialist expertise necessary to enable complex scientific evaluation and optimum clinical use of new technology.
* Responsible for maintaining own competence, continuing professional development and clinical practice.
* Use expert clinical skills and knowledge to act as a change agent, promoting and leading the change in both clinical and management practice in order to improve the patient experience.

**Leadership:**

* Responsible for clinical leadership within the area of responsibility that considers and supports opportunities for new ways of working to improve efficiency, effectiveness and quality patient experience.
* To manage the service on a day-to-day operational basis and have responsibility for managing the department resources.
* To monitor, develop and improve the quality of patient surgical care and oversee the general working environment.
* To work closely with the Infection control team to meet the target of reducing the surgical site infection.
* To carry out and evaluate the appraisals and reviews of the junior SCPs. To read and reflect on all the clinical appraisals to assist in planning the following year training.
* To manage any new service development within the department that is directly related to clinical work, liaising with the line manager/Consultants.

**Education and training:**

* Lead in planning, organising and participating in the education and training, supervision of the Trainee SCP, SCP and junior doctors.
* To supervise and teach the latest technology in the Cardiothoracic department.
* Develop the trainee package and booklet.
* Act as a mentor/preceptor and resource person for all surgical team and support staff encouraging a high level of motivation in all involved.
* Facilitate and lead on the development and achievement of KSF/PDP with the SCP, ERTP team-ensuring adherence to policy and targets.
* Responsible for undergraduate and post graduate students on placement, following discussion with universities, teaching the nursing and medical students, assessing them and working with them within the department.
* Understand and train junior staff on the professional and legal implications of changing and evolving professional roles.
* Teaching in national and local level whenever required.
* Design and conduct annual Revision course for trainee SCPs prior to RCS exit exam*.*

**Communication and relationship skills:**

* Communicate complex and sensitive information regarding patient surgery.
* Reassure and empathise with patients undergoing surgery.
* Communicate clinical information to patients and relatives in a way they can understand.
* Provide specialist advice to a range of health care professionals.
* Liaise with the medical staff and members of the multidisciplinary team in order to achieve optimum levels of care.
* Communicate with patient’s pre and post conduit harvesting and pre and postoperative procedure to ensure a full understanding of the procedure they are to have.
* Interpret and record operative procedure/technique in patients case notes.
* Develop external networks with peers to share good practice.
* Maintain effective communication with all members of team, by establishing regular team meetings
* Provide advice, information and support to Trust staff caring for specific client group.

**Clinical practice:**

* Participate in the pre, intra and postoperative management of the surgical patients as required by the surgical team.
* Order and carry out preoperative investigations as per Trust and national policy as part of the MDT.
* Assess plan and implement programmes of evidenced based care for client group.
* Assist during surgery, providing surgical intervention under the supervision of the surgeon.
* Undertake specified surgical procedures under the supervision of the surgeon and in accordance with Trust policy.
* Coordinate evaluation and implementation of new equipment.
* Contribute to the clinical postoperative care, including wound assessment, initial treatment and detection of surgical problems as required by the surgical team.
* Participate and effectively manage the admission and discharge process.
* Develop and evaluate policies/guidelines/protocols for specialty clinical practice and take responsibility for updating and monitoring policies/guidelines/protocols specific to the role.
* Provide a visible clinical profile, having both an advisory and clinical input into patient care as directed by the Lead Nurse.
* Be an active member of relevant Trust committees and groups contributing to developing/implementing local/national strategy.
* Keep relevant records and submit reports in a professionally acceptable manner.
* Participate and contribute in multidisciplinary team (MDT) and surgical activity (SAM) meetings.
* Promote a positive relationship with all stakeholders within the service
* Collect and collate data as required by the specialist function in order to inform internal and external professional and operational bodies.

**Research and audit:**

* Initiate and lead in the measurement and evaluation of current practices through evidence-based practice projects, audits and outcomes measures.
* Take the lead role in designing and carrying out research projects, involving other staff as required.
* Plan, organise, supervise and participate in the research and audit for the junior medical staff and SCPs.
* Take a lead role in the development of clinical Governance and audit plan that ensures the implementation of quality assurance systems and user involvement.
* Supply data to facilitate the National audit for Surgical Site Infection Surveillance, Multi centre studies, thereby contributing to the body of evidence regarding the incidence of infection rate in the department.
* Participate in the evaluation and assessment of new equipment and techniques available for conduit harvesting.
* Lead and initiate audit activities within the department.
* Identify strategies for recruiting patients to research and audit and support the team members in implementing these strategies. Ensure that targets for patient recruitment are achieved.
* Present the research and audit findings at local, national and international conferences.
* Publish research finding in peer-reviewed medical journals.
* Routinely develop clinically relevant research and development programmes in relation to scientific developments in Cardiothoracic surgery.

**Clinical governance:**

* Lead and contribute to the clinical governance process, including adverse incident reporting/investigation and the management of complaints, as appropriate.
* Create a climate for new ideas and the management of change within the specialty.
* Adhere to all elements of risk management and assist in the development of monitoring tools.
* Ensure that the SCP, junior doctors team adhere to Health and safety regulations and regular departmental risk (Health and Safety, Violence, Aggression and Bullying) assessments are completed and acted upon.
* Report deviances of care practices performance or other incidents in a timely manner.

**Analytical and judgemental skills:**

* Involvement in the pre and postoperative assessment of patients.
* Apply expert clinical judgement to identify appropriate clinical interventions, including integrity and suitability of harvested conduits.
* Review the effectiveness of the current conduit harvesting techniques and where appropriate initiate any action that may be required.
* Discuss and evaluate options for best practice with medical colleagues concerning individual case management on a daily basis.
* Highly use of specialist knowledge to inform sound clinical judgements/decision making for complex cases and advise others on it.
* Collaborate with medical colleagues and other health related professionals in the hospital and specialist settings to achieve the maximum advantage of planned and coordinated provision of specialist skills.
* Take responsibility to identify potential areas of risk and take appropriate action to minimise the risk. Report and liaise with the theatre management regarding the effective management of the clinical risk.

**Planning and organisational skills:**

* Plan and identify appropriate time for research and continuing education.
* Lead in planning and organising teaching sessions.
* Shared responsible in daily involvement for the planning and organisation of service developments to enhance the performance of the Cardiothoracic service.

**Physical skills and dexterity:**

* Harvest and prepare the venous and arterial conduit for anastomosis during coronary artery bypass grafting.
* Demonstrate expert eye and hand coordination during a range of complex surgical procedures such as surgical incisions, tissue dissection, and insertion of chest drains.
* Act as first or second assistant to the consultant during very complex and intricate surgeries
* Expert operational and theoretical knowledge of complex surgical equipment and devices.
* Expert theoretical knowledge of specialty and clinical competencies to ensure expert performance of surgical tasks at an advanced practitioner level.

**Responsibility for patient/client care:**

* Undertake or advise on the management of a specific aspect of the care of the patient, working in partnership with the multidisciplinary team to coordinate the care of the patient.
* Participate in the planned programme of patient care, and where appropriate teach and coordinate other members of the team who may be responsible for implementing specific aspects of the patients care.
* Ensure that the environment is conducive to the highest standard of patient care delivery.

**Responsibility for policy/services development:**

* Responsible for ensuring Trust policies and guidelines are implemented by all team members within the clinical and other areas.
* Advise on and initiate/facilitate change in practice within specialist areas.
* Influence and facilitate the development of junior doctors’/trainee SCPs’ practice at directorate level in support of trust objectives.
* Participate with other SCPs in the development, delivery and evaluation of junior doctors’/trainee SCPs’ education programmes at directorate, trust level.
* Contribute at national and local level to influence the development of the SCP role within the NHS.

**Responsibility for financial and physical resources:**

* Monitor and ensure the appropriate use of clinical supplies and equipment within the specialist role.
* Writing a grant application to heart charity organisations to obtain specialist equipment and obtain budgets for endoscopic vein harvesting equipment.

**Responsibility for human resources:**

* Lead in planning, organising PDP, staff appraisal and evaluating them as appropriate for the department and the individual.
* Participate in recruitment, selection and retention of SCP within the area of responsibility and across the division as needed.
* Manage sickness/absence levels/records with appropriate action in conjunction with Consultants, Theatre manager and HR to reduce incidences and trends.
* Ensure appropriate supervision of staff, students and other visitors to the clinical team.
* Responsible for the teaching of specialist training in a range of subjects.

**Responsibility for information resources:**

* Responsible for daily data entry, text processing or storage of data, utilising computer-based data entry systems.
* Use information technology systems relevant to the work of the directorate.
* Responsible for standards of documentation and record keeping to area of responsibility.
* Create and format databases using computerised systems.

**Freedom to act:**

* Work autonomously as independent practitioner within the NMC, HPC code of professional conduct or equivalent regulatory body, Trust policies and procedures.
* Adhere to policies, procedures and guidelines, which govern practice at national and local level, interpreting and implementing these within the area of surgical care.
* Highlight the need for change and implement as appropriate within areas of independent practice.

**Physical effort:**

* Manoeuvring of heavy equipment. e.g. operating tables, monitoring equipment.
* Frequent positioning and transportation of ventilated and sedated patients.
* Standing for very long periods of time whilst assisting in complex major operations.

**Mental effort:**

* Frequently required to concentrate for long periods of time e.g. assisting during surgery, using new equipment for conduit harvesting, establishing haemostasis.
* Concentration required when assessing patients, writing reports.
* Regular interruptions out of the clinical situation to deal with service issues.

**Emotional effort:**

* Able to remain calm and focused during complex clinical procedures with both predictable and unpredictable outcomes.
* Unexpected and traumatic death during surgery.
* Caring for critically ill and/or anxious patients.

**Working conditions:**

* Able to work in extreme fluctuation of temperature in an area with only artificial lighting.
* Use of personal protective equipment (PPE).
* Exposure to bodily fluids and body cavities.
* Exposure to daily needle sticks and sharps injuries.
* Exposure to daily diathermy smoke.

**Health and safety:**

The Trust has a statutory responsibility to provide and maintain a healthy and safe environment for its staff to work in. You equally have a responsibility to ensure that you do nothing to jeopardize the health and safety to either yourself or of anybody else. The Trust’s Health and Safety Policies outline your responsibilities regarding Health and Safety at Work.

The post holder must not willingly endanger him/herself or others whilst at work. Safe working practices and safety precautions must be adhered to. Protective clothing and equipment must be used where appropriate.

All accidents/incidents must be reported to your Senior Manager and documented as per Trust Policy, including the reporting of potential hazards.

**Infection control:**

It is a requirement for all staff to comply with all infection control policies and procedures as set out in the Trust Infection Control manual

**Security:**

The post holder has a responsibility to ensure the preservation of NHS property and resources.

**Confidentiality:**

The post holder is required to maintain confidentiality at all times in all aspects of their work.

**Team briefing:**

The Trust operates a system of Team Briefing, which is based on the principles that people will be more committed to their work if they fully understand the reason behind what is happening in their organisation and how it is performing.

**Smoking control policy:**

The Trust operates a smoking control policy, which applies to all staff, patients and visitors and extends to the hospital grounds as well as internal areas. Staff appointed will agree to only smoke in designated areas.

**THE TRUST IS AN EQUAL OPPORTUNITIES EMPLOYER**

Signed (Employee): Date:

Signed (Manager): Date:

**UNIVERSITY HOSPITAL OF SOUTH MANCHESTER NHS FOUNDATION TRUST**

**Person/Role Specification – Advanced Cardiothoracic and Transplant   
Surgical Care Practitioner** **(Band 8a/Band 8b)**

|  |  |  |
| --- | --- | --- |
|  | **Desirable/Essential** | **Assessment** |
| **Qualifications:** |  |  |
| Surgical Care Practitioner Qualification (PG Diploma in RCS England or MSc in Surgical Practice).  Relevant professional qualification  Educated to Master’s level degree or equivalent or working towards.  Non-Medical Prescribing | Yes (E)  Yes (D) | CV |
| **Experience:** |  |  |
| 5 years’ experience as a Surgical Care Practitioner Band 7.  Portfolio of evidence showing achievements in practice/specialty  Evidence of professional and personal development.  Evidence of delivering teaching programmes to staff groups locally and nationally.  Endoscopic vein harvesting experience minimum of 250 cases. | Yes (E) | CV  Interview  Portfolio |
| **Aptitude/leadership:** |  |  |
| Evidence of proven clinical record  Maintained development of clinical leadership skills  Evidence of diplomacy and negotiation skills  Able to demonstrate imaginative and effective use of resources  Able to articulate personal development needs  Demonstrates knowledge of audit/research recommendations  Excellent communication and leadership skills  Evidence of involvement in change management. | Undertaken a leadership programme e.g. LEO (D) | CV  Interview  Portfolio |
| **IM&T:** |  |  |
| Aware of applications of IT packages such as Microsoft Word and PowerPoint  Good knowledge of clinical information systems e.g. PAS and CWS | Yes (E) | CV  Portfolio |
| **Audit and research:** |  |  |
| Demonstrates ability and knowledge on how to undertake audit and feedback to clinicians  Demonstrates knowledge of research-based practice.  Demonstrates an evidence of published scientific articles in peer review journals.  Demonstrates an evidence of local, national, and international conferences. | Completed course/module in research methods (D)  Yes (E)  Yes (E) | CV  Portfolio  Interview |

**Specific Duties Synopsis – Advanced Cardiothoracic and Transplant Surgical Care Practitioner – Band 8A/Band 8B**

To provide specialist advice and assistance to Consultant Surgeon and specialist registrars during adult cardiac, thoracic and transplant surgeries.

**Clinical**

* To undertake, supervise and train harvesting of conduits for Coronary artery bypass grafting (Long saphenous vein, Short saphenous vein, Radial arteries, Internal mammary arteries)
* To undertake, supervise and teach different types of vein harvesting techniques (Open vein harvesting, Bridging vein harvesting, Endoscopic vein harvesting with more than 250 cases, Laryngoscopic vein harvesting).
* To undertake:
  + Different types of surgical incisions
  + Tissue dissections
  + Radial artery and saphenous vein incisions
  + Sternotomy Incision
  + Thoracotomy Incision
  + Closure of the above
  + Removal of sternal wires
  + Insertion of chest drains during surgical procedures
  + Undertake or assist intra-aortic balloon pump insertion and removal
  + To teach the junior doctors in performing open vein harvesting on Coronary artery bypass grafting
  + To assess the patients preoperatively and postoperatively in relation to the harvesting and wound care management.
* To act as first and second assistant:
  + Coronary artery bypass grafting
  + Aortic Valve surgeries
  + Mitral valve surgeries
  + Redo cardiac and thoracic surgeries
  + Heart and Lung transplantation
  + Other complex cardiothoracic procedures.

**Person specification:**

* Appropriate professional registration.
* Surgical care practitioner qualification.
* Master’s level qualification or working towards.
* 5 years’ experience as a surgical care practitioner.