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| **1. JOB IDENTIFICATION** |
| **Job Title: Associate Practitioner Technologist – Medical Physics - Queen Elizabeth University Hospital****Responsible to: Section Manager, Medical Equipment Management****Department: Department of Clinical Physics and Bioengineering****Directorate: Diagnostics** |
| **2. JOB PURPOSE** |
| The post holder is a member of a team of Technologists working within Medical Equipment Management based in NHS Greater Glasgow and Clyde. To undertake duties associated with a repair and maintenance support service, to a defined range of general medical equipment. (See under Equipment Used Section) under the care of the Medical Physics Department, to support the Department by performing essential duties relating to the Department Quality System. This post will be based in the Queen Elizabeth University Hospital / Royal Hospital for Children campus. |
| **3. ROLE OF DEPARTMENT** |
| The Medical Equipment Services Group, part of the Department of Clinical Physics and Bioengineering, provides a medical equipment management and maintenance service across NHS Greater Glasgow and Clyde. |
| **4. ORGANISATIONAL POSITION** |
| See appendix for direct line chart. |
| **5. SCOPE AND RANGE** |
| The Medical Equipment Services Group, part of the Department of Clinical Physics and Bioengineering, provides a medical equipment management and maintenance service. Services are provided to NHSGGC and to other healthcare establishments in neighbouring Health Boards. It is involved in the specification, selection and procurement, maintenance and performance assurance of medical equipment. Staff are directly involved in clinical support services and provide training for doctors, nurses and other healthcare professionals. Bioengineering staff also support research and development aimed at improving medical technologies and making them easier and safer to use.The Department acts as the point of contact for all branches of clinical staff that use medical equipment for any form of diagnosis or patient treatment.Staff in Medical Equipment Management are expected to be expert on the functioning and clinical use of the equipment so that advice on the use of, and any queries or problems associated with, equipment are dealt with in the manner most effective for the user.Services are provided to all Clinical Directorates in both the Acute and HSCP Sectors and this post will be based in Queen Elizabeth University Hospital. The post-holder may be required to support other sections / shared areas either on their current site or at the other acute sites within the South Sector, to meet service provision demand. |
| **6. MAIN TASKS, DUTIES AND RESPONSIBILITIES** |
| The range of responsibilities will be in support of the clinical technologist team, the post holder will be supervised by a Section Manager.The duties of this post include: –* To perform basic visual, function and electrical safety test of equipment defined as being in the low risk and non-complex patient applied range of medical equipment (Examples include; breast pumps, cast cutters, nebulisers however this list is not exhaustive.)
* Visual inspection and electrical safety testing of equipment for compliance with the Health and Safety at Work Act and Electricity at Work Regulations.
* Repair work of low risk equipment, under supervision.
* To Commission and install new equipmentdefined as being in the low risk range of patient applied medical equipment.
* To maintain accurate records of medical equipment inventory and service history in accordance with the Quality Management system and clinical governance requirements.
* Record and progress work on the Medical Equipment Database
* Responsible for progressing jobs to completion and to the required standards of service
* Responsible for the accurate and timely logging calls for service
* Communicate with hospital staff and external suppliers regarding progress of jobs and general equipment advice.
* To interface with clinical staff on matters relating to medical equipment, determining the urgency of any request and referring requests for complex equipment to senior members of staff.
* To monitor and control stock, equipment and materials within defined parameters for the lab taking appropriate action when stock levels fall below the agreed minimum.
* To support the training of junior members of staff and to act as a mentor for any work placement students.
* Involved in the formulation and introduction of local policies and protocols for the low risk range of medical equipment.
* To undertake the decontamination of medical equipment in accordance with infection control protocols and health & safety at work regulations.
* To assist senior staff
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| **7a. EQUIPMENT AND MACHINERY** |
| Mechanical and electronic workshop tools and machineryAnti static equipmentTest Equipment, Typically , Pressure meters, timers, Pulse oximeter testers, electrical safety testersComputer, Scanner, PrintersOverhead projectorsTelephone |
| **7b. SYSTEMS** |
| * The post holder uses the equipment management database to maintain equipment servicing and inventory records and for the control of purchasing parts and consumables
* Use of Microsoft Office products to produce memos, letters, spreadsheets, etc.
* Compliance of standards including:

ISO Quality Management System operated by the Department. Standards are maintained through the use of standard operating procedures, document control, management of training and competency, parts and supplies control and accurate record keeping.Th*e Health and Safety at Work Act 1974, and Electricity at Work Regulations 1989.*International Standards e.g. IEC 60601-1 MEDICAL ELECTRICAL EQUIPMENT – General Requirements for Safety.Hazard and Safety Action Notices produced by SHS, MHRA, etc. |
| **8. DECISIONS AND JUDGEMENTS** |
| * Work is assigned and reviewed by the Section Manager.
* Calls for service are taken unsupervised and entered on to equipment management database.
* Routine decisions on equipmentdefined as being in the LOW RISK range of medical equipment.
* Interpretation of information and Judgements on data is made when extracting data from service /operator literature and comparing with measured results to determine whether equipment is safe to use in the required environment and on patients.
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| **9. COMMUNICATIONS AND RELATIONSHIPS** |
| The post holder will:* Work closely with the Section Manager, and through them, the Sector Technical Manager of Medical Equipment Management and all Medical Technologists in the Department on a daily basis in aiding the provision of medical equipment management services;
* May compile reports for Section Manager or Sector Technical Manager
* Take part in internal audit of the operational policies as per the Quality Management System - this averages at 2-4 audits (external) per year and 8-12 (internal) audits per year.
* Maintain relationships with external manufacturers, suppliers and agents to facilitate a supply chain for the repair and maintenance of medical equipment defined as being in the low risk range of patient applied medical equipment.
* Cooperate with and communicate basic technical information to a wide range of NHS colleagues including medical and nursing staff, allied healthcare professional, supplies, porters and store staff.
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| **10. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB** |
| **PHYSICAL*** A high level of manual dexterity and accuracy in the manipulation of fine tools / screwdrivers and materials is required.
* Basic proficiency in various engineering and electronic practices is required e.g. the safe use of drills and physically inspecting electronic equipment, etc.
* Some equipment can be heavy or awkward to lift or move, frequently resulting in periods of moderate physical effort. Occasionally heavy medical equipment, in excess of 100Kg, needs to be moved e.g. anaesthetic machines. Occasionally medical equipment must be worked on in cramped and awkward positions.
* Keyboard skills are also required of the post holder.
* Collection and delivery of medical equipment to and from clinical areas

**MENTAL SKILLS*** Periods of concentration are required during inspection and safety testing.

Several times during the day, staffs are subject to interruptions and telephone calls from colleagues, clinical staff, etc. that require immediate attention and disrupt other work.**EMOTIONAL DEMANDS*** Staff may be exposed to distressed and critically ill patients when checking equipment in clinical areas.
* The work requires diligence since unintended actions can have consequences on patient care or result in an incident.

**WORKING CONDITIONS*** Staff must exercise extreme care whilst electrically safety testing medical equipment due to the risk of electric shock.
* The working environment and equipment can often be contaminated with body fluids that must be decontaminated before proceeding. Special precautions must be taken in these circumstances.
* Staffs regularly work with hazardous chemicals and a full knowledge of COSSH is essential e.g. cleaning products during decontamination procedures.
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| **11. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB** |
| * Sustaining concentration during repair or preventive maintenance procedures whilst being frequently interrupted.
* Clinical pressures from anxious medical staff e.g. attending to an emergency breakdown on equipment during a surgical procedure whilst still connected to the patient.
* Working to tight deadlines whilst maintaining high standards of work and assuring patient care.
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| **12, KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB** |
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|  | **Essential**  | **Desirable** |
| **Qualifications** | A relevant technology / engineering -based qualification at S(N)VQ level 2 / 3 or equivalent e.g. a relevant National Certificate or completed Modern Apprenticeship in an appropriate subject.Commitment to undertake further training and education.  | Membership of an appropriate professional body*.*  |
| **Knowledge and Training** | Demonstrable knowledge of electrical, electronic or engineering principles | Knowledge of Electrical Safety or PAT TestingIT / software package experience |
| **Experience** | Relevant practical experience in a service / repair or engineering environment. | * Practical experience on medical equipment.
* Workplace practice and techniques including Health and Safety Regulations.
* Working knowledge of relevant legislation, national standards, professional and other guidelines.
* Quality Management System.
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Staff at this level will continue to develop and update their skills and knowledge.The post holder will be expected to attend relevant study days, short courses and presentations for generic and specific competency on a wide range of medical equipment and their impact on clinical management. |

Line Management Chart South Glasgow

Head of Service, Medical Equipment Management

**Peripatetic Advanced Specialist W&C**

1 x Band 7

**(When on-site)**

Technical Manager, South Glasgow

**Victoria ACH** Team

Band 7 x 1

Band 6 x 1

Band 4 x 1

**Band 3 x 1**

**Scotstar** **Team**

Band 7 x 1

Band 6 x 1

**RHC Team**

Band 7 x 1

Band 6 x 4

Band 5 x 4

Band 4 x 1

Band 3 x 1

**Neuro/Regional Team**

Band 7 x 1

Band 6 x 2

Band 5 x 2

**Surgical Team**

Band 7 x 1

Band 6 x 3

Band 5 x 2

Band 4 x 1

Band 3 x 2

**Medical Team**

Band 7 x 1

Band 6 x 4

Band 5 x 3

Band 4 x 1(including this post)

Band 3 x1