####  **JOB DESCRIPTION**

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| 1. JOB IDENTIFICATION |
| Job Title: Medical Equipment and Technical Services Workshop ManagerResponsible to: Head of Compliance, Medical Equipment and Technical ServicesDepartment(s): Medical Equipment and Technical ServicesDirectorate: Estates, Facilities and Capital ServicesOperating Division: EstatesHours per Week: 37.00No of Job Holders: 1Last Update: 17/02/2025 |

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| 2. JOB PURPOSE |
| The medical equipment department has assigned responsibility for managing all medical devices within NHS Fife and the delivery of technical support to the clinical teams.This post provides operational management of the day-to-day workload within the medical equipment department ensuring that the support service delivered by the medical equipment department meets the user requirements across NHS Fife and is delivered in line with statutory and regulatory requirements applied to the management of medical devices. |

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| 3. DIMENSIONS RELEVANT TO POST |
| The medical devices (>15000 assets) assigned to the responsibility of the medical equipment department are found in all clinical areas across NHS Fife covering a wide range of highly complex technologies.The equipment management aspect of the department handles approximately 7000 technical jobs per annum from simple repairs to much higher-level specialist all-inclusive maintenance on complex devices such as baby incubators, Coronary care monitoring equipment, ITU ventilators etcThere is need to plan and work effectively under pressure of either being in a highly charged clinical environment (e.g. theatre during a case) and /or being able to juggle workload to ensure customer needs are met whilst maintaining high levels of technical standards and people management skills. |
|  ORGANISATIONAL POSITION |
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| 5. ROLE OF DEPARTMENT  |
| The role of the medical equipment department is to undertake the necessary managerial, technical and professional responsibilities associated with providing medical devices that are safe, secure and appropriate for patients and staff for the delivery of healthcare within NHS Fife. The sphere of responsibility includes management of approximately 15000 items of medical equipment, 8 staff members and the full responsibility for equipment maintenance on the full range of medical equipment and delivery of comprehensive technical support to equipment without which the service could not function. To contribute to the review and update of a long-term, prioritised Medical Equipment Asset Management Strategy. This entails planning and implementing appropriate changes to medical devices, and in so doing provide the infrastructure necessary for the delivery of NHS Fife’s Strategic Clinical objectives.To manage a team of medical equipment specialists, as an integrated ‘single system’ for the whole of NHS Fife, that is corporately and professionally responsible for the maintenance and replacement of medical equipment. This will incorporate the management of health and safety, product specific training, asset management, maintenance schedules etc ensuring, as far as is reasonably practicable, that NHS Fife complies with all applicable statutory instruments and mandatory requirements necessary for the safety of patients/clients, staff and visitors. In addition, the department undertakes training of technical and clinical staff on medical equipment use and support with high level technical advice and support to the decision-making process for medical equipment procurement, implementation of safety bulletins involving medical equipment and investigation of equipment related incidents. |

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| 6. KEY RESULT AREAS |
| **Management**Deliver a technical support service on all electro-medical equipment and devices used in the diagnosis and treatment of patients in all settings throughout NHS Fife. This includes responsibility for:* + - 1. Management of medical equipment technical staff across all of NHS Fife daily with allocation, progress and supervision of work being a major component of the post
			2. Undertake performance appraisal of all technical staff under their control and be first line manager to deal with any grievance or operational issues that staff may have
			3. Participate in recruitment and selection of staff for posts under their remit through developing job descriptions and assessing applicants at interview and judging the suitability of applicants to the post applied for, through informal discussion and application form assessment
			4. Manage day to day attendance requirements for staff feeding info to SSTS system, conducting staff interviews as required and approving annual leave
			5. As workshop manager, take the lead role in linking with management and clinical staff ensuring satisfactory solutions are provided to equipment related issues which affect clinical service delivery
			6. Provision of departmental performance statistics with action plans for the department quality management system
			7. Ensure that job information on the equipment management data base is kept up to date and information is accurately recorded by staff
			8. Ensuring that equipment is serviced in accordance with NHS guidelines and national and international technical standards.
			9. Ensuring that all test equipment is calibrated and fit for purpose
			10. Maintaining a stores system in each sector ensuring correct parts are available for equipment support
			11. Supporting the evaluation of new equipment with the user prior to selection and purchase
			12. Authorise orders and invoices for payment to a value of £1000
			13. Support investigations on accidents and incidents involving electro-medical equipment
			14. Identify staff training needs with the requirement to deliver technical training as required.

**Technical** * + - 1. Carry out specialist maintenance and repairs to highly sophisticated and expensive medical devices including Anaesthetic apparatus, Coronary care and ITU monitoring systems, medical investigation equipment etc as found in departments across NHS Fife.
			2. Communicate effectively with all grades of clinical staff and external agencies to assess faults, expedite repairs and deal with incidents at the level of urgency required
			3. Undertake advanced fault-finding through application of specialist knowledge and skills to diagnose problems, including those beyond the scope of manufacturer supplied information.
			4. Exercise judgement to determine the causes of faults in highly complex devices with multiple, complex and inter-related systems such as Anaesthetic systems involving different technologies which may be due to user error, equipment failure or environmental issues (e.g. Temperature, Radio Frequency interference).
			5. Carry out technical investigations into incidents involving electro-medical equipment and provide a written report to department head.
			6. Investigate and rectify highly complex equipment faults using knowledge and experience in conjunction with high level skills involving manual dexterity and manipulation skills on intricate and expensive equipment.
			7. Verify that all equipment under the remit of medical equipment is safe to use and fit for purpose and that equipment performs to manufacturer’s specification.
			8. Support evaluation of trial equipment before use in clinical areas.
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| 7a. EQUIPMENT AND MACHINERY |
| Electronic Test Equipment: Electrical Safety Analyser, Digital Oscilloscope, Digital Multimeter, Frequency/Timer Counter, Infusion Device Analytical Equipment, Gas Analysis Equipment, Surgical Diathermy Analyser, Defibrillator Analyser, Pacemaker Analyser, Electrocardiograph Equipment Analyser, Tympanic Thermometer Calibration Equipment, Pressure Measurement Equipment, Foetal Monitor Performance Analyser. Oxygen Saturation Analyser.Medical Equipment; Patient Ventilator, Anaesthesia Systems, Infusion Systems (Syringe Drivers & Volumetric Pumps), Ultrasound Scanners, Patient Monitoring Equipment, Baby Incubators, Fetal Monitors, Defibrillators, Electrocardiograph Equipment, Blood Pressure Monitoring Equipment, Oxygen Therapy Equipment, Suction Equipment (Electrical & Pipeline), External Pacemakers, Flexible Endoscopes, Temperature Measurement Equipment, Operating Microscopes, Ophthalmic Lasers Ultraviolet Phototherapy equipment. Fluid Management Systems, Theatre Camera Systems, Pain Therapy Systems, Laboratory Equipment, Haemofiltration System.IT Equipment:Personal Computers, Computerised Test EquipmentSoftware:Microsoft Powerpoint, Microsoft Excel, Microsoft Word, Specialist Service Software |

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| **7b. SYSTEMS** |
| 1. Medical Equipment Database (eQuip) used to manage our medical equipment, spare parts and service history
2. Datix Risk Management System used to manage Hazard & Safety Action notices.
3. Pecos used for purchase order processing
4. Human Resources systems to be able to comply with recruitment, sickness and discipline procedures
5. SafetyHub (Toolbox talk system)
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| 8. ASSIGNMENT AND REVIEW OF WORK |
| 1. The major proportion of workload is set against daily management of technical staff and workload, carrying a high degree of autonomy within a broad range of objectives at operational level. (75% of Workload)
2. Workload is managed rather than directed.
3. Judgements made when prioritising work often under pressure of several highly complex items of equipment not working and patients waiting to be attended (weekly)
4. The post holder is responsible to the Head of Compliance, Medical Equipment and Technical Services, for work review and formal appraisal of performance via objectives achieved.
5. Management of workload and supervision of progress across workshops involving highly complex analysis and judgements on technical problems and workload management.
6. Management and development of technical staff through performance monitoring, training needs assessment and CPD with high level input to performance appraisal of all technical staff
7. The post holder will in conjunction with the Head of Compliance, Medical Equipment and Technical Services and other staff, decide on appropriate maintenance levels for the variety of equipment held using judgement and analysis of staff technical capability, consequences of failure, resources available to do workload and set up a maintenance regime for all equipment.
8. The standard of work and ability to meet objectives is reviewed by the Head of Compliance, Medical Equipment and Technical Services on an ongoing basis and through regular 1-1 meetings.
9. The post holder will have regular contact with public and external bodies such as Scottish Government, National Services Scotland, other NHS Boards and Professional Organisations, Consultants and Suppliers both formally and informally for negotiation and advice.
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| **9. DECISIONS AND JUDGEMENTS** |
| 1. See Section 6
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| 10. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB |
| The most challenging parts of the job are :1. Balancing the control of improving working conditions/service to comply with the Health & Safety at Work Act 1974, subsequent legislation, regulations and approved codes of practice against cost, time and resources within the organisation.
2. Balancing the working priorities between preventative and reactive work received from the different departments across NHS Fife.
3. Motivating others to provide information and take ownership of their own Health & Safety in the workplace.
4. Keeping pace with new technology in the medical equipment field.
5. Motivating staff to perform at the highest standards through periods of change and uncertainty.
6. Being flexible self-motivated and adaptable.
7. Ensuring risk assessment is completed on a consistent basis across NHS Fife.
8. Getting information fed back from all the different parts of the Department.
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| **11. COMMUNICATIONS AND RELATIONSHIPS** |
| **Internal Communications**1. Communicates complex technical instruction & information on theoretical and practical issues involving medical equipment to a variety of disciplines e.g. Clinical, Management, Nursing, Medical & Professions Allied to Medicine, risk management, etc as required
2. Reports to Head of Compliance, Medical Equipment and Technical Services, on a regular basis on department issues e.g. performance, complaints, HR and staffing issues.
3. Supports training of in-house technical staff on medical equipment maintenance and test procedures.
4. Supports training of medical & nursing staff on the safe use & operation of medical equipment e.g. infusion devices, patient monitors, etc.

**External Communications**1. Communicates with a variety of associated healthcare professionals within the NHS and related agencies to maintain professional competency
2. Communicates with external contractors and suppliers on service support and sales issues
3. Communicates with equipment specialists on highly complex technical issues
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| **12. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB** |
| 1. Frequent moderate physical effort expended when moving and lifting heavy awkward patient connected Electro-medical equipment.
2. Frequent working in a restricted position for short periods of time when working on medical equipment in a cramped environment (kneeling, crouching, twisting, bending and stretching.)
3. Frequent exposure to hazardous materials – blood, microbial contamination (MRSA, Hep C) and chemical spills.
4. Exposure to hazardous chemicals during cleaning, decontamination of contaminated medical equipment prior to repair.
5. Standard keyboard use - Typing skills normally acquired through practice.
6. Use of specialist test equipment / tools- skills requiring hand/eye co-ordination, normally acquired through practice.
7. Manipulation of fine tools, where accuracy is important through developed skills.
8. Advanced soldering skills normally acquired through practice.
9. Frequent light physical effort when walking between hospital locations
10. Exerts intense physical effort for short periods when pushing/pulling equipment or trolleys (>15Kg)
11. Prolonged concentration required frequently when fault finding on complex devices
12. Attending to emergency situations in Theatres, Intensive Care Area and Resuscitation Unit with severely injured patients and occasionally corpses present
13. Intense concentration is required during procedures on equipment in the patient environment which can be distressing requiring the ability to focus on the job in hand without being emotionally affected by patients
14. Concentration required on technical or administrative work when subjected to unpredictable work patterns and frequent interruptions.
15. Dealing with staff performance issues which require empathy, motivational and negotiating skills and the ability to be emotionally detached under emotionally distressing circumstances
16. Frequent exposure to highly distressing circumstances when attending to emergency problems in critical care patient areas, (A&E; ITU; Theatres; CCU; SCBU) requiring intense concentration to highly complex equipment and its application in the patient environment, often with critically ill or injured patients undergoing care or treatment.
17. Counselling/Mentoring staff members when they have personal problems that affect their work and seeking solutions or advising them of various options available to them.
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| 13. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB |
| **Qualifications**A Degree in Medical Technology, or another related discipline e.g. Applied Physics or Electrical & Electronic Engineering plus post graduate qualification and /or relevant experience equivalent to master’s level. HNC/HND, or equivalent qualifications, will be considered provided the knowledge, training and experience profile matches the required person specification.Registered on The Voluntary Register of Clinical Technologists held by Institute of Physics and Engineering in Medicine (Preferred)Incorporated Member of the Institute of Physics and Engineering in Medicine (Preferred)**Knowledge and Training**Advanced knowledge gained by professional qualifications, continuing professional development, practical experience and training include:1. A record of generic and specific competency on a wide range of complex, and highly complex, medical equipment demonstrating understanding of their operation, technical function and application
2. Comprehensive knowledge of relevant legislation, national standards, professional and other guidelines related to medical equipment management
3. The development of departmental policies and practices for medical equipment management
4. The development of medical device service provision, including planned preventive maintenance (PPM), inspection, testing, calibration and repair
5. Complete level of understanding of risk management issues relating to medical device technology at the patient/equipment interface
6. Demonstrate a good understanding & knowledge of human anatomy & physiology.

**Experience**Minimum of 5 years relevant post-qualification experience for Degree and HNC/HND holders is required with at least 2 years’ experience as a specialist in Medical Physics Technology.Relevant experience includes:1. Practical experience on a broad range of complex, and highly complex, medical equipment
2. Experience of the day-to-day management of other technical staff and work allocation
3. Experience of workplace practice and techniques including Health and Safety regulations
4. Experience of the application of a range of technologies utilised in medical equipment within a healthcare environment
5. Training of clinical, nursing or other technical staff as individuals or in groups
6. Presentations on medical equipment technology to clinical, nursing or other health care professional staff
7. Delivery of performance indicators within a Quality Management System
8. Experience of dealing with clinical staff involved in using equipment and often with equipment problems under pressure of a busy clinical list
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| **14. JOB DESCRIPTION AGREEMENT** |
| Job Holder’s Signature: Head of Department Signature: | Date:Date: |