

Job Details

Job Title: Senior Medical Engineering Technician

Hours of Work: 37.5 hours per week

Band: Band 6

Department: Medical Electronics / Equipment Loan Store

Division: Estates & Facilities

Location: Trust Wide

Reporting Arrangements

Managerially Accountable to: Team Lead

Professionally Accountable to: Medical Equipment

Manager

Responsible for: None

Job Purpose

The primary function of this post is to work with and support the Team Leader in providing a cost-efficient repair and maintenance service on medical equipment within the trust this will include working on specialist equipment. The post involves acceptance testing of new equipment, new product evaluations, installation, commissioning, servicing and repairs on a broad range of complex, multifaceted medical equipment and devices to be used by others. This will involve a practical test of the equipment on completion of any work and the completion of relevant test reports prior to delivery to the end user.

Medical Electronics Department is primarily concerned with providing evaluation and selection, acceptance checks, repair, calibration, and Preventive maintenance to a wide range of medical devices and equipment's across the Trust.

WWL aims to continuously provide safe quality care to all patients. Over £220 million is spent each year on a diverse range of reputable general and specialist acute services.

Medical Electronics primarily offers medical engineering support to the Royal Albert Edward Infirmary, Leigh Infirmary, Wrightington Hospital, Thomas Linacre Centre, Boston House, and a few other clinical sites.

The position holder will be required to work at all sites in service regions covered by service level agreements.

Organisation Chart



Duties and Responsibilities

The post holder will be responsible for all remedial repairs, Planned Preventative Maintenance, and calibration of a wide range of medical devices. This will include Anesthesia Machines, Ultrasounds, ventilators, patient monitors, etc... In addition, the acceptance testing and configuration of newly delivered medical devices.

The position holder will participate in the department's rota, which involves performing daily rounds to attend to reported faults and troubleshooting various types of medical equipment, from sophisticated to basic models.

The post holder will be a person with a broad range of training and experience on complex, multi-faceted medical equipment and have a background in electronic/electrical engineering that is able to plan and organize his/her own work using their own initiative and experience to manage his/her own workload.

He/she will demonstrate an understanding of and have the ability to develop further the technical aspects of the post.

He/she will need to be committed to flexibility and pursue continuing development of their technical knowledge and develop new skills whilst undertaking their duties as part of a team, these will be including liaising with colleagues and other staff members and provide on occasion training and instruction to medical and nursing staff and other colleagues when appropriate.

The post holder will work towards the highest possible standards of patient care.

Key results from the job holder

Ensure that by examination you are satisfied equipment is clean and has been decontaminated in accordance with department procedures to ensure that equipment is safe for yourself and other engineering technicians to carry out their duties and to prevent cross infection to patients when returned to clinical areas.

Service, repair and calibrate a broad range of delicate and complex multifaceted medical equipment some of which is specialised. Diagnose faults using your skills of dexterity and co-ordination with the aid of precision tools, specialised test equipment and dedicated computer software provided.

Attend manufacturer's training courses to update one's knowledge in respect of the use of equipment to take a lead role in those areas where additional expertise and knowledge is held.

Collect the facts and circumstances of how and why equipment failed whilst in use to develop your skills of analysis for diagnosing faults on medical equipment both in the clinical environment and the workshop, decide and implement the appropriate action required.

The post holder will be involved in the creation and updating of written procedures for the performance and functional verification of medical devices as and when necessary.

Carry out electrical safety testing on serviced and repaired complex medical equipment that is to be used for patient care with the test equipment provided to ensure that the results obtained are within the stated limits and values.

Guide and advise colleagues within the department on fault finding, repair, planned maintenance and safety testing complex and unusual configurations of equipment.

Carry out maintenance and repairs at the main acute hospital, other hospital sites and community premises using the department's vehicle when appropriate. This will involve communicating technical related information and instructions to suppliers, technical / non-technical staff and your own colleagues using your technical expertise to accurately convey any relevant information.

Undertake technical evaluation on medical equipment and provide feedback and advice to clinical staff on its suitability for their needs.

Design, develop and manufacture test equipment to aid fault diagnosis and repair of medical equipment.

Planning and Organisational Duties

Using your own planning and organisational skills work as part of the medical electronics team in providing an effective response to the breakdown and repair of medical equipment by planning your own workload including the tasks issued to you by the Team Leader whilst taking into account priorities of the patient and the urgency of other requests.

Act independently, promptly and efficiently in the response to an emergency and unpredictable situations as reported by Clinicians and Senior Nursing Staff.

Liaise with other healthcare professionals to obtain access to medical equipment for the purpose of performing planned preventative maintenance and repairs of equipment.

Ensure the technical safety of the equipment under your control or jurisdiction, verifying that it is within the prescribed specification as laid down in the relevant statutory documentation.

Participate in the implementation of DB9801 "Medical Devices and Equipment Management for Hospital and Community Based Organisations", DB2000 (02) Medical Devices and Equipment Management: Repair and Maintenance Provision and adhere to the Trust's Management of Medical Devices Policy.

Lead Technician for Maintenance/Repair of infusion devices that include patient controlled analgesia pumps and syringe drivers.

Liaise with equipment manufacturers and external organisations regarding equipment to be returned for service and/or repair and organise documentation.

Responsibility for Finance Information & Human Resources

Maintain the statutory and general records appertaining to the work of the medical electronics department / equipment loan store that will include equipment history, maintenance, test results, technical updates, mandatory upgrades and modifications, development costs and stock control.

Collect and analyse information relating to incidents that involve medical equipment and feedback to the staff or department concerned and give advice where appropriate. Recommend corrective action to prevent further occurrences.

For the purpose of improving effectiveness and efficiency of the medical electronics department and the equipment loan store the post holder will participate in welfare, education and training as necessary.

In the absence of the team leader the post holder will be required to deal with any emergency work that may arise; delegating work to other technicians within the department as necessary.

In addition the post holder may be required to resolve other immediate issues that may arise that cannot be deferred to a later date for the team leaders attention.

The post holder will provide technical guidance to less experienced staff within the medical electronics department and the equipment loan store as necessary.

Provide instructions and training to nursing and clinical staff on the safe and correct use of complex medical equipment and provide technical support and instruction to other colleagues within the department.

Participate in department meetings as necessary to:

- a) propose when necessary changes in practice and procedures
- b) review the effective use of labour, materials and resources at the disposal of the department
- c) communicating decisions and information to, and receiving requests, suggestions and complaints from any member of staff

Physical, Mental & Emotional Effort, Patient Care

- An occasional amount of moderate effort for short periods during a shift is required to fulfil this role sometimes working in awkward positions lifting heavy and cumbersome equipment.
- Due to the complexity of the equipment to be maintained there will be frequent periods of concentration whilst servicing, calibrating and fault-finding. This concentration being disrupted due to interruptions from third parties when there is a need to provide a response for emergency repairs.
- There is occasional exposure to highly unpleasant conditions these being body fluids and blood on equipment and accessories. There will be frequent unavoidable exposure to working on live medical equipment and other lethal electrical hazards.
- Exposure to distressing situations is frequent, as this post requires that the individual deal with faults on medical equipment that is still connected to patients on wards; i.e. accident and emergency, the intensive care unit, coronary care unit, special care baby unit and operating theatres.

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- The individual will be responsible for transporting, maintaining and calibrating complex medical equipment for use on patients or clients within the Trust.
 - Set and agree through discussion with (clinical) users of medical equipment software options and protocols for the configuration of such equipment.

Responsibility for Health & Safety

Compliance with the Health & Safety at Work Act 1974 – the post holder is required to fulfil a proactive role towards the management of risk in all of their actions. This entails the risk assessment of all situations, the taking of appropriate actions and reporting of all incidents, near misses and hazards, and a statutory duty of care for their own personal safety and that of others who may be affected by their acts or omissions.

Responsibility for Teaching

- May be required from time to time to show and explain technical aspects and / or how to operate a number of medical equipment to clinical staff.

Work Circumstances & on-call

None

Standard Duties & Responsibilities

The Trust operates a No Smoking Policy.

All Wrightington Wigan and Leigh NHS Foundation Trust staff employed within Clinical Environments and have contact with children, vulnerable adults; service users and their families must familiarise themselves, be aware of their responsibilities and adhere to Local Safeguarding Children's Board, Local Safeguarding Adult Board and WWL Procedures for Safeguarding and Protecting Children which are available on the Trust Policy Library.

In accordance with Part 7 of the Immigration Act 2016, employees who are required to interact regularly with the public, both face to face, and by telephone, are required to be able to speak English to an appropriate standard relevant to their role, i.e. with confidence and accuracy, using correct sentence structures and vocabulary, and without hesitation.

Compliance with the Data Protection Act 1998 and Information Governance – the post holder is not entitled to use for their own benefit or gain, or to divulge to any persons, firm or other organisation whatsoever, any confidential information belonging to the Trust or relating to the Trust's affairs or dealings which may come to their knowledge during employment.

Compliance with the Health & Social Care Act 2008 – Code of Practice on the Prevention and Control of Infections and related guidance – the post holder is required to fulfil a proactive role towards the reduction and management of healthcare related infection in all of their actions. This entails compliance with Trust Infection Prevention and Control policy and related Standard Operating Procedure (SOP's); along with risk assessment of all situations; as staff have a statutory duty of care for their own personal safety and that of others who may be affected by their acts or omissions. Staff must be fully compliant with Trust Infection prevention and Control eLearning policy.

All applicants to any post within the Trust are required to declare any involvement either directly or indirectly with any firm, company, relevant person or organisation which has any interest with the Trust, the services provided by the Trust or any element of patient care. Failure to do so may result in an employment application being rejected, or if it is discovered after appointment the omission of such information could lead to dismissal. This includes any form of private practice relating to medical care.

Compliance with Trust Policies and Procedures including the Code of Conduct.

Compliance with Standing Financial Instructions (SFIs) – The SFI's identify the financial responsibilities which apply to everyone working for the Foundation Trust and its constituent organisations including trading units. Failure to comply with Standing Financial Instructions can in certain circumstances be regarded as a disciplinary matter that could result in dismissal. Compliance with the SFIs is monitored by the Finance Department and post holders are therefore required to understand their responsibilities outlined within this document and ensure compliance with its instructions.

Responsibility for all records (including patient health, financial, personal and administrative) that they gather or use as part of their work within the trust. The records may be paper, electronic, microfiche, audio or videotapes, x-ray images.

Any other duties appropriate to the grade. The range of duties and responsibilities outlined above are indicative only and are intended to give a broad flavour of the range and type of duties that will be allocated. They are subject to modification in the light of changing service demands and the development requirements of the postholder.

This document is also available in audio, large print, Braille and other languages upon request. For more information call 01942 773106.

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