

JOB DESCRIPTION

Job Title	Medical Engineering Technician (PPM) – QEHB Site
Pay Band	5
Department	Medical Engineering
Division	Estates
Reports to	Team Manager
Professionally Responsible to	Trust Medical Engineering Manager

JOB SUMMARY

To perform planned preventative maintenance on a wide range of medical equipment for both UHB NHS Foundation Trust and external Service Level Agreements (SLA).

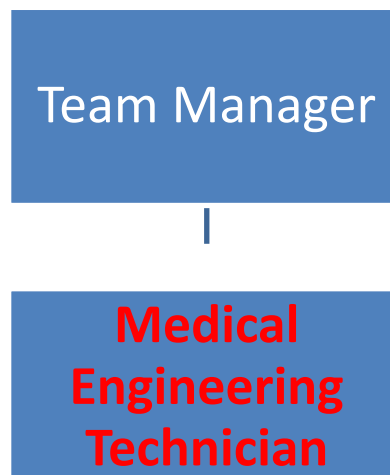
In addition the post will be responsible for the commissioning of medical equipment before use; some supervised basic repairs and servicing of medical equipment. These schemes are mainly undertaken in patient areas and may occasionally require work outside normal hours.

Support the use and implementation of the Departmental Equipment Management System.

Have the knowledge of and support the use of the Department’s Quality Management System.

The postholder will gain knowledge of all Departmental procedures, health and safety regulations and any legislation that is relevant to the job.

TEAM/DEPARTMENT STRUCTURE CHART



KEY SKILLS

To carry out planned preventative maintenance and calibration schemes to ensure the electrical safety and correct operation of medical equipment within UHB NHS Foundation Trust and external SLA sites.

KEY RESPONSIBILITIES

1. Liaise with hospital staff at both UHB NHS Foundation Trust and external SLA sites in planning appropriate times for carrying out planned preventative maintenance.

2. To locate, inspect and electrically safety test, on an annual basis all items of electrical medical equipment and all mains leads, used within UHB NHS Foundation Trust and external SLA sites.
3. To carry out, on a 6monthly basis, inspections and safety and facility function tests on all the Defibrillators used within UHB NHS Foundation Trust and external SLA sites.
4. To record the readings and observations obtained during all Planned Preventative Maintenance (PPM) checks.
5. To maintain accurate records regarding the progress of all the PPM checks.
6. To identify and provide updates to the equipment inventory to the Systems Manager.
7. To instruct engineers in PPM level 1 and level 2 checks and electrical safety testing; and in the use of the testing equipment.
8. Ensure that the test equipment is calibrated as per manufacturers guidelines.
9. Take necessary actions to correct any defects identified by inspection and testing of medical equipment.
10. To carry out retrospective checks on “in house” equipment around the hospitals as requested.
11. To highlight potentially dangerous situations or practices via the Trust incident reporting process.
12. Ensure that all equipment within Medical Engineering is safety tested on an annual basis.
13. Ensure appropriate measures are in place for carrying of heavy test equipment and medical equipment.
14. The supervised basis repair and servicing of medical equipment used throughout the UHB NHS Trust and SLA sites. This work requires specialist knowledge of any of the following Analogue, Digital Electronics, Microprocessor, pneumatics and mechanical techniques. It involves faultfinding, diagnosing and repairs of complex and delicate medical equipment to component level.
15. Functional and safety testing of new and repaired medical equipment prior to use within UHB NHS Foundation Trust and external SLA sites.
16. To undertake training to gain understanding of vital signs and physiological measurements in relation to medical equipment repairs. There is a requirement to know how equipment works clinically as well as from a maintenance point of view.
17. Occasional work carried out on equipment within the critical areas and theatres with equipment connected to patients. These are stressful conditions where high concentration, accuracy and quick decision making are needed.
18. On a daily basis participate in goods inwards/outwards procedures of the department, particularly for medical equipment and spare parts. Ensure that only parts received are accurate against the order and take any necessary action that maybe required for dealing with any anomalies.
19. To assist with the collection and return of equipment within and outside the hospital and occasional transport of heavy goods during new installations or department migrations. Manual handling of heavy



equipment will be required in confined patient areas.

20. Using departmental/Trust computer system for record keeping, equipment testing/upgrades and communication. Responsibility for keeping accurate and up to date job details on the departments Equipment Management System .
21. Ordering of components and spares through SAGE and keeping stocks in order and up to date.
22. To keep records of all work carried out, update manuals and diagrams and to provide such necessary documentation as may be required to ensure a cost-effective service.
23. Liaise with hospital staff, company reps, and suppliers to ensure safe and proper use of medical equipment. Provide basic fault diagnosis over the phone when required. Dealing with equipment on loan/hire to UHB NHS Foundation Trust and external SLA sites and handling appropriate Indemnity forms.
24. To work in a safe manner and consider his/her own, colleagues and others health and safety in the workplace. To adhere to and safely use decontamination, waste disposal, infection control and other Trust policies when handling medical equipment.
25. Have the knowledge of and support the use and implementation of departmental procedures, Trust policies and other legislation related to medical equipment or work practices.
26. To adhere to the Departments Quality Management System, propose changes and take part in internal auditing as per BSI ISO 9001:2000 Quality Management System.
27. To participate in the “work shadowing” of other engineers as part of continuous professional development.
28. To have professional electronics/specialist knowledge and experience across wide range of medical equipment and also wide range of models within each group.

BUDGETARY AND RESOURCE MANAGEMENT

N/A

MANAGEMENT , SUPERVISORY, TEACHING, TRAINING RESPONSIBILITIES

N/A

RESEARCH AND DEVELOPMENT

N/A

EFFORT

Physical Effort

Moderate Physical effort is required frequently such as:

- Moving of anaesthetic machine’s which weigh over 150 kilogram’s.
- Working in awkward positions for example, under bed’s and in confined spaces.
- Lifting/removing of heavy equipment that can weigh over 15 kilogram’s, in some cases from a height of over 6-foot.

Mental Effort

On a daily basis high concentration, accuracy and quick decision making is required, and decisions made can have an impact on patient care. The pattern of all these can be unpredictable.

Emotional Effort

The job entails dealing regularly with faults on equipment, which can be connected to distressed patients.

Normal Working Conditions

Frequent exposure too unpleasant conditions such as:

- Dust
- Fumes
- Body fluids externally/internally in equipment
- Compressed gases
- Unavoidable exposure to electrical hazards.

Frequent requirement to use road transportation.

TRUST VISION & VALUES

DO NOT AMEND THIS SECTION

The Trust is clear on its vision and values and aims to make sure that they are reflected in all areas of activity. Our vision is simple; building healthier lives. Our values apply to every member of staff and help us in all we do and how we do it. They are:

Kind: The kindness that people show to each other every day

Connected: The connections we build with everyone around us

Bold: The ability to be bold in how we think, speak and act

ADDITIONAL INFORMATION

This job description is designed to assist post holders with understanding what is expected of them in their role. University Hospitals Birmingham NHS Foundation Trust may ask them to undertake other duties, as required, which are not necessarily specified on the job description but which are commensurate with the grade of the post.

The job description itself may be amended from time to time in consultation with the post holder, within the scope and general level of responsibility attached to the post.

All post holders must take responsibility to ensure that they are aware of and adhere to all Trust policies, procedures and guidelines relating to their employment regardless of their position within the Trust.

Last Updated: 2nd August 2022

PERSON SPECIFICATION

JOB TITLE:	
TRAINING, QUALIFICATIONS AND PROFESSIONAL REGISTRATIONS	
ESSENTIAL	DESIRABLE
<ul style="list-style-type: none"> • Manufacturer approved technical training on a range of medical equipment. • Evidence of attendance of short courses and regular updating of training required. • Professional electronics knowledge acquired through HNC/HND in electronics or equivalent. 	<ul style="list-style-type: none"> • Degree in electronic/mechanical/clinical engineering or equivalent, OR knowledge at this level gained through extensive relevant experience. Enrolled on the Register of Clinical Technologists
EXPERIENCE & KNOWLEDGE	
ESSENTIAL	DESIRABLE
<ul style="list-style-type: none"> • Experience in the repair and maintenance of a wide range of equipment • A sound understanding and competence in the electrical safety testing, repair and maintenance of electronic and electrical equipment. Ability to record and analyse work data. • Relevant knowledge and competence in analogue and digital electronics. • Experienced in the use of electronic Test & Measurement/fault diagnosis equipment and practical experience in electronic/mechanical repair procedures. • Knowledge of current Health & Safety legislation including safe systems of work. 	<ul style="list-style-type: none"> • Experienced in evaluation of new medical devices including assessment of clinical suitability, reliability, life time costs etc. • Experienced in the use of computerised equipment management systems. • Experienced in maintenance and repair of medical equipment • Understanding of use of IT within an engineering context, including the use of spreadsheets, databases, e-mail and on-line resources. • Understands current legislation governing the purchase and use of medical devices.
SKILLS & ABILITY	
ESSENTIAL	DESIRABLE
<ul style="list-style-type: none"> • Dexterity and good hand-eye coordination required to work on a range of complex equipment • Problem solving skills • Practical Electrical and Electronics skills (e.g. soldering and component recognition) 	<ul style="list-style-type: none"> • Ability to plan own workload and prioritise tasks accordingly.
OTHER SPECIFIC REQUIREMENT	
ESSENTIAL	DESIRABLE
<ul style="list-style-type: none"> • Ability to work and communicate with Clinical and Nursing staff, • Ability to work under pressure on occasions, • Accepts supervision, • Good written and verbal communication skills, 	

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| <ul style="list-style-type: none">• Interest in further training,• Ability to get the job done,• Commitment to health and safety,• Capable of producing high standards of work,• Self-motivated with the ability to work as part of a team• Flexible attitude to the job.• Ability to travel to multiple sites• Ability to work under pressure and deal with stressful situations• Willing and able to attend external training courses, staying away overnight occasionally.• Willing and able to work a limited amount of overtime as required. | |
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