

The Newcastle upon Tyne Hospitals NHS Foundation Trust**Job Description****1 Job Details**

Job Title	Medical Engineering Team Manager
Pay Band	7
Directorate	Estates
Ward/Dept Base	Medical Engineering Department (EME)
Hospital Site	Trustwide

Essential Requirements

- A Bachelor's Level qualification, or HNC in Electronics or Medical Engineering related subject plus knowledge and experience equivalent to Bachelor's Level in a similar role.
- Significant experience as a Senior/Specialist Technician in a Medical Engineering field.
- Evidence of CPD including completion of management/leadership and specialist manufacturers training courses.
- Experience of managing in an ISO 9001 environment.
- Possess a comprehensive knowledge of all relevant standards, regulations and codes of practice relating to the management of medical devices and associated technologies.
- Possess a comprehensive knowledge of Department, Trust and NHS policies and procedures.
- Ability to lead a team of highly skilled technicians and be able to resolve difficult situations involving the maintenance of a wide range of medical equipment.
- Excellent analytical skills combined with a comprehensive knowledge of current analogue and digital electronics is essential along with a sound working knowledge of mechanical, pneumatic and electro-mechanical applications.
- An ability to communicate effectively and professionally with staff, suppliers and customers at all levels under all conditions of urgency.
- Report writing skills.
- Adaptable/flexible approach to work.
- Computer use including database, word processing, internet and e-mail.
- Good interpersonal skills, in person and by telephone.
- Current full UK driving licence
- Calm under pressure.
- Ability to organise and delegate.
- Possess a logical and analytical approach to problem solving.
- Positive to change.
- Positive to team working.
- Respectful of colleagues.
- Alignment to Trust Values and Core Behaviours

Desirable Requirements

- A recognised IT competency qualification.
- Supervisory or teaching/presentation skills.
- Membership of the Institute of Physics and Engineering in Medicine or other relevant institute.
- Registration on the Register of Clinical Technologists.
- Teaching & Presentation skills
- Interest in Health & Safety matters

2 Job Purpose

- Part of the Leadership and Management Team within Medical Engineering, the Team Manager's role is to support the management of the EME/Dialysis/Loan Library/Instrument Curator departments and take full responsibility in the absence of the Medical Engineering Service Manager and carry out daily management responsibilities.
- The Medical Engineering Team Manager is responsible for the maintenance and repair of a broad spectrum of medical electronic devices, which are highly specialised, complex and technologically advanced requiring an in-depth knowledge of current engineering techniques.
- Plan, manage and carry out planned maintenance, repair and servicing of specialist medical equipment and acceptance test new equipment.
- Train medical and technical staff in the use of medical devices.
- Take a lead role in major installations.

3 Dimensions

- Part of a multidisciplinary team of technicians who deliver high quality maintenance support for over 48,000 medical devices and other electronic equipment including Audio/Visual & CCTV Trustwide with an asset value totalling more than £140m.

4 Organisational Arrangements

Accountable to; Head of Medical Engineering (EME)

Reports to: Medical Engineering Service Manager.

Staff Responsible for: All technician grades/Admin staff/students/apprentices.

5 Knowledge Training and Experience

- See essential requirements

6 Skills

Communication and Relationships

- Liaise with medical, technical, supplies department, risk management staff and equipment manufacturers regarding technical information including investigating

and reporting of adverse incidents and equipment defects and failures to the Medicines and Healthcare Products Regulatory Agency (MHRA).

- Discuss problems and possible resolutions and negotiate with suppliers and staff regarding service requirements, loan equipment and user / technical training.
- Ability to give technically detailed reports, involving the clarification of complex issues, both written and verbal. Must have presentation skills developed through experience and/or formal training.
- Trains medical staff in the correct use of new equipment.
- An ability to communicate effectively and professionally with staff, suppliers and customers at all levels and under all conditions of urgency.

Analytical and Judgemental Skills required for the post

- An ability to assess and diagnose in depth faults on highly complex medical devices at the leading edge of technology, devices may interact with other equipment, hospital networks or be connected directly to patients.
- Evaluate new equipment and promote standardisation within the Trust.
- Problem solve/analyse a series of events, which led to the fault occurring and advise staff on the correct course of action to take.

Planning and Organisational skills required for the post

- Day-to-day management of the Medical Electronics Maintenance workshops, personnel and equipment resources to ensure the service operates in an efficient and effective manner.
- Plans, co-ordinates and implements a programme of planned maintenance including personal responsibility for the maintenance of specialist equipment or departments.
- Implement necessary remedial actions recommended in Department of Health Safety Alert Bulletins or manufacturer's alerts, modification or software updates.
- Commission/install new equipment.
- Plans asset audits to ensure equipment is operating at the required software and hardware levels.

Physical dexterity skill requirements

- Diagnose and repair faults down to component level on all types of medical equipment using precision tools and calibration/test equipment requiring good levels of manual dexterity.
- Assemble new medical equipment.

7 Key Result Areas

Patient / Client Care

- Provides advice on equipment purchases and approves pre-acquisition questionnaires (PAQ) prior to the purchase of new equipment by the Supplies Department
- Carry out calibration, repair and maintenance of medical equipment used in the diagnostic and therapeutic treatment of patients.
- Provide advice to medical staff and patients on the correct use of medical equipment.

Policy and Service Development

- Proposes changes to Trust policies and procedures to ensure equipment is used

in a safe and efficient manner. Changes may impact on other professions e.g. Major Radiology installations, Anaesthetic machine acceptance procedures.

- Participate in user group meetings to give advice to other professions.
- Responsible for Service software (CAFM) development.

Financial and Physical Resources

- Responsible for the safe use of highly complex medical equipment many of which are at the forefront of technology, worth anything up to £500,000
- Authorised signatory (can be more than £1000 per month).
- Maintains stock levels, re-orders spare parts and accessories for medical devices (up to £34k /year).
- Responsible for the repair and maintenance of physical assets, total value in excess of £140m.

Human Resources

Management

- Daily management of subordinate technicians, apprentices and students.
- Allocate workload as required.

Education

- Participate in the technical training and assessment subordinate technicians, apprentices and students. Required to train technicians and medical staff in the correct use of equipment.
- NVQ assessor, recommends training for subordinate technicians.

Leadership

- Provide support, supervision and guidance to all members of staff.
- Required to lead a team of technicians and other disciplines in major installations.
- Takes an active role in recruitment and selection e.g. short listing and interviews.
- Conducts regular staff review meetings (probation, appraisals, 1-2-1s etc.)
- Conducts return to work interviews after sickness.

Information Resources

- Required to implement and develop the Estates information computer system (CAFM) to meet the on-going requirements of the Electronics and other departments, and take the lead role as system administrator.
- Responsible for accurately recording, documenting and maintaining equipment service records including test results and documentation from manufacturers.
- Responsible for compiling data from existing records to produce reports for risk management, modifications and safety bulletins and to assist in decisions on future equipment purchases.
- Required to create databases/spreadsheets for use in the Equipment Library and Medical Electronics.

Research and Development

- Provide technical evaluations and reports on new medical devices prior to purchase.
- Regularly undertakes equipment trials/testing on new and loan equipment (2-3 times a month).

8 Freedom To Act

- Required to use own initiative to ensure medical equipment is maintained in accordance with manufacturer recommendations, Electronics Department written standard procedures and Medicines and Healthcare Products Regulatory Agency (MHRA) guidelines.
- Guidance may be sought from the Medical Engineering Service Manager but this is not always possible as the Medical Engineering Team Manager is often the most knowledgeable about a specialist piece of equipment.
- Required to work an on-call out of hour's service when no support from Medical Engineering Service Manager or the manufacturer is available.
- Required to exercise own judgement when carrying out external work for customers in other establishments.

9 Effort and Environment

Physical

- Required to carry out routine tests on medical devices
- Working on large devices e.g. x-ray systems, ultrasound machines, anaesthetic machines, lithotripter and heart bypass equipment often requires lying on the floor or bending over in cramped positions to enable repairs to be carried out.
- A lot of medical equipment is heavy (> 15Kg) and needs to be transported to the Medical Engineering Department and then lifted by hand onto a bench to enable repairs to be carried out (at least once a day).

Mental

- Required to carry out complex fault analysis for most of the day (75%). This is interrupted by frequent requests for emergency repairs to equipment either on a patient or required urgently for a patient.

Emotional

- Required to diagnose faults on life support equipment that is connected to critically ill patients in an ITU or clinical environment. (1-2 times a week).

Working Conditions

- Daily exposure to equipment that has been in contact with body fluids/biohazards.
- Exposure to electrical hazards, harmful chemicals, solvents, nitric oxide, calibration and compressed gases.
- To attend approved specialist manufacturers technical training courses and participate in Trust training courses identified in the post holders Personal Development Plan to update the knowledge and skills required to promote the continuous development of professional competence.

AGREED POST HOLDER:

AGREED MANAGER:

DATE:

DATE:

The Newcastle upon Tyne Hospitals NHS Foundation Trust Person Specification

JOB TITLE: Medical Engineering Team Manager**DIRECTORATE:** Estates**DEPARTMENT:** Medical Engineering (EME)**SITE:** Trustwide

<u>Requirement</u>	<u>Essential</u> Requirements necessary for safe and effective performance of the job	<u>Desirable</u> Elements that contribute to improved/ immediate performance in the job	<u>Assessment</u>
Knowledge & Experience	<ul style="list-style-type: none"> Degree level knowledge. Significant experience as a Senior/Specialist Technician in a Medical Engineering field. A comprehensive knowledge of all relevant standards, regulations and codes of practice relating to the management of medical devices and associated technologies. A comprehensive knowledge of Department, Trust and NHS policies and procedures A comprehensive knowledge of current analogue and digital electronics. A sound working knowledge of mechanical, pneumatic and electro-mechanical applications. A full understanding of the operation and calibration of diagnostic test equipment. Experience of managing in an ISO 9001 environment. Evidence of CPD including completion of management/leadership and specialist manufacturers training courses Extensive knowledge of medical device management and related issues. Awareness of risk management and Health & Safety protocols. 	<ul style="list-style-type: none"> Management experience. Interest in Health & Safety matters 	
Skills & Abilities	<ul style="list-style-type: none"> Supervisory, Management and Organisational skills. Good interpersonal skills, in person and by telephone. Ability to communicate effectively and professionally with staff, suppliers and customers at all levels under all conditions of urgency. Ability to lead a team of highly skilled technicians and be able to resolve difficult situations involving the maintenance of a wide range of medical equipment. Excellent analytical skills. Report writing. Computer use including database, word processing, internet and e-mail. 	<ul style="list-style-type: none"> Teaching and presentation skills. 	
Qualifications & Education	<ul style="list-style-type: none"> A Bachelor's Level qualification, or HNC in Electronics or Medical Engineering related subject plus knowledge and experience to Bachelor's Level in a similar role. 	<ul style="list-style-type: none"> Recognised IT competency qualification. Membership of the Institute of Physics 	

	<ul style="list-style-type: none">• Current full UK driving licence	<ul style="list-style-type: none">• and Engineering in Medicine or other relevant institute• Registration on the Register of Clinical Technologists.	
Values / Behavioural / Attitudes	<ul style="list-style-type: none">• Ability to organise and delegate.• Possess a logical and analytical approach to problem solving.• Calm under pressure.• Self-motivated.• Positive to change.• Positive to team working.• Respectful of colleagues.• Adaptable/flexible approach to work		
Core Behaviours	<ul style="list-style-type: none">• Alignment to Trust Values and Core Behaviours		

CANDIDATE:
SIGNED BY:
DESIGNATION:

REFERENCE NO:
DATE:

