

Head of Clinical Engineering

Job Description & Person Specification –

A summary of the role responsibilities and person specification

Why Our Trust?

Terms and conditions

Post – Head of Clinical Engineering

Division – Diagnostics and Therapies

Department – Medical Physics and Bioengineering

Band – 8D

Salary - £78,192 – 90,387

Location – Bristol Royal Infirmary

Annual leave – Up to 33 days dependent on NHS Service

Pension - The NHS Pension Scheme is a defined benefit scheme. Further details and outline of benefits can be found at: www.nhsbsa.nhs.uk/pensions

Job Purpose

The Head of Clinical Engineering will be responsible for the management and strategic development of services to the Trust and external customers and will provide leadership in the specialised field of healthcare technology management and medical illustration services.

They will give strategic direction, lead research and innovation, develop new knowledge, services, policies, protocols and procedures in response to changes in clinical service needs and legislation to improve patient care. The service provides scientific and engineering support for medical device management, design, development and modification, patient safety and risk management and delivers user training to clinical staff and has input into research projects and clinical trials.

About us

Our mission is to improve the health of the people we serve by delivering exceptional care, teaching and research every day.

What you'll love about working here

UHBW has been rated by the CQC as 'Good' - our staff are proud to deliver excellent care. As a forward-thinking multi-award winning Trust, our world-leading research and innovations are having a positive local and global impact. Our hospitals are spread across Bristol and Weston-super-Mare, join us and you can enjoy the very best of both worlds; city living within a stone's throw of the countryside or beside the seaside, both with easy access to all that the South West has to offer.

A digital exemplar- Being appointed as a Global Digital Exemplar means we can realise this vision by implementing digital technologies that will help us to transform the way we work and how we relate to our colleagues, patients and partner organizations.

Sustainable healthcare - We have joined the international movement to declare a climate emergency, recognising the impact climate change is having on the world. Climate change is labelled as the greatest threat to health in the 21st century, with a range of conditions related to heat, cold, extreme weather and air pollution predicted to rise. To lead the way in healthcare the Trust has set ambitious goals to become carbon neutral by 2030.

Access to further opportunities with the Trust - Apprenticeships are a great way to learn and earn on the job. UH Bristol and Weston provides a range of apprenticeships to support a huge number of career opportunities in clinical and non-clinical support services with apprenticeships starting at level 2 through to level 7. As an organisation we encourage further development of all employees to progress upward within their chosen field.

Diversity & Inclusion

A core principle of the Trust is to ensure that patients and staff are treated with dignity and respect. Promoting equality, diversity and human rights and challenging any form of inequality, discrimination, harassment or abuse are central to the Trust's Values.

'Committed to inclusion in everything we do' is the ambition set out in the Trust's Workforce Diversity & Inclusion Strategy.

We are
Supportive
Respectful
Innovative
Collaborative

Version Issued: November 2021



Head of Clinical Engineering

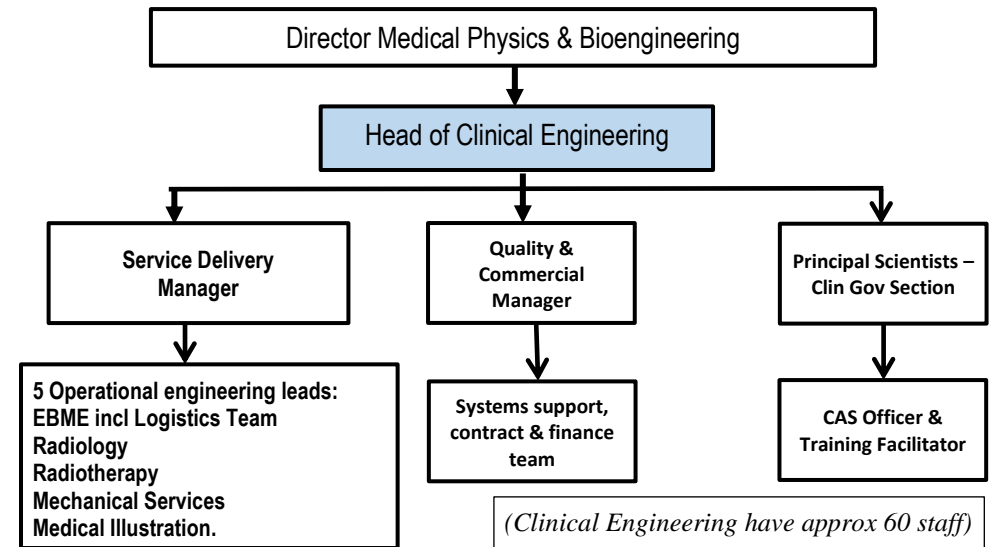
Job Description & Person Specification –

A summary of the role responsibilities and person specification

Main Duties and Responsibilities: Leadership and Management

- Be responsible for strategic and business planning for Clinical Engineering services, with a focus on sustainability as well as core clin eng services
- Recruit, train and develop staff to achieve an appropriate skill-mix for meeting current and future service demand
- Ensure maximum benefit from medical technology whilst minimising risks
- Create an environment in which all staff in the department have opportunities to influence development and planning by ensuring open and effective working
- Develop and maintain effective working partnerships with clinical staff and managers in other divisions, corporate services and external service
- Identify resource needs for clinical and service developments , leading on bids for funding for staffing, equipment and projects
- Review service provision and produce a service strategy
- Be responsible for developing and managing an Equipment Library
- Provide leadership for Medical Device User Training and ensure training records meet CQC requirements
- Prioritise service work in accordance with departmental and Trust requirements. Formulate and adjust plans and strategies for delivering and developing services in response to emerging clinical, political, scientific, technical and business requirements
- Ensure staff are appraised and managed effectively and that individual training and development plans are in place
- Follow Trust procedures and policies including disciplinary and grievance procedures, complaints against staff and staff recruitment policies
- Produce reports, business cases and policy documents in relation to incidents, service development, legislation, procedures, performance review and audit

Organisational Structure, (current post shaded)



Key Relationships

The post holder has overall responsibility for the designated Medicines and Healthcare products Regulatory Agency (MHRA) MDSO (Medical Devices Safety Officer) and CAS Officer for medical devices. They will lead on the development and implementation of relevant policies, including monitoring and ensuring conformance to relevant external standards including CQC and NHSLA standards, through working with senior clinicians, clinical users, managers, Trust groups and committees relevant to medical device management. Increasingly relationships with information Technology services are essential. The Service investigates and advises on adverse incidents involving medical devices and assists in medical device procurement and external contract management. The postholder will be an active researcher and will work collaboratively with the Trust R&D teams. The postholder will develop relationships nationally & across the evolving integrated care system.

Head of Clinical Engineering

Job Description & Person Specification –

A summary of the role responsibilities and person specification

- Attend management meetings as required, including regular meetings with senior managers in Medical Physics and Bioengineering.

Clinical and Scientific

- The post holder will work closely with the Executive Director responsible for Medical Devices to establish and develop a Trust wide medical equipment strategy
- Be professionally accountable for ensuring the safe use of medical devices in the Trust. Act as Trust expert for all medical device issues including those related to regulation and risk
- Provide expert scientific advice and managerial/administrative support to departmental and Trust committees related to medical device management
- Develop policies and procedures relating to medical devices and their regulation. Use the highest level of judgement to analyse, interpret and compare conflicting information where expert opinion differs and present highly-complex information to trust committees enabling their understanding of the key issues
- Ensure that suitably qualified staff within the service undertake the actions required of the CAS Officer & MHRA MDSO for medical devices to ensure Trust compliance through a robust system to ensure MHRA Medical Device Alerts and information from other relevant sources, including manufacturers and safety organisations, are efficiently disseminated, progress on actions is monitored to ensure implementation can be reported by the required deadline
- Anticipate the impact of future regulation and legislation on working practices, identify resource implications and formulate long-term strategic plans for the development of policy

- Develop scientific and risk-based approaches to improving the cost-effectiveness of equipment maintenance and other equipment management activities and implement these with clinical and non-clinical departments
- Advise and support the Trust (including clinical managers; Capital, Estates and Facilities; IT, Procurement; and Senior Managers) and external customers on all aspects of medical devices, including risk assessment and safety issues in the areas of medical equipment selection, specification for procurement, installation arrangements, user training, appropriate maintenance arrangements and decommissioning
- In co-operation with the Patient Safety Advisers, Health and Safety Advisers for the trust and the clinical governance and risk management committees', ensure advice and support is provided to adverse incident investigations involving medical devices. This will include the provision of expert knowledge regarding device design, manufacturing and production standards and interactions with other devices and/or the environment associated with an adverse incident.
- Ensure that a Quality Management System is maintained within the Clinical Engineering Service and across all MEMO teams and Medical Illustration to minimise clinical risk to patients and organisational risks to the Trust.

Financial and resource management

- Has responsibility, as budget holder, to ensure by forward planning, routine monitoring and appropriate action, that budgets, the income from SLAs and external contracts are balanced against expenditure
- Ensure a robust system for recording, analysing and reporting staff activity is maintained and used to improve effectiveness and efficiency in the use of staff and other resources and also accurate reporting of the Key Performance Indicators required by service users

We are
Supportive
Respectful
Innovative
Collaborative

Version Issued: November 2021



Head of Clinical Engineering

Job Description & Person Specification –

A summary of the role responsibilities and person specification

- Ensure financial recording and management of activities within the service and relevant equipment assets is organised to comply with Standing Financial Instructions, is auditable and enables the service to deliver the required services within agreed budget arrangements
- Ensure development of a robust medical device management system to track medical devices through purchase, maintenance, repair, clinical incidents in use and decommissioning. This will include devices loaned to the community and owned by other organisations.
- Monitor areas in which Clinical Engineering can offer its services to external customers enabling expertise to be maintained within the service and generating additional revenue for the Trust.

Professional

- Keep abreast of the latest developments in science, technology and equipment management methodologies and their application to medicine and healthcare
- Attend and participate in relevant seminars and courses as part of Continuing Professional Development and personal development plans to further the work of the department
- Engage in regional and national groups to develop relevant standards and guidelines, including discussions with regulatory and professional bodies.

Innovation and research

- Pursue an active research portfolio, applying for grants and undertaking research in line with service strategies
- Develop relationships with relevant partners and academic organisations which lead to writing and undertaking collaborative research work that furthers the Trust and department's standing with regard to professional

knowledge, workforce training, innovation and research

- Support and assist clinical departments in research and development, ensuring that novel instrumentation, equipment and technology is safe and appropriate before use (either for research or clinical trial)
- Oversee projects to develop prototype or novel medical devices and ensure that development work within the Service is carried out within a structured quality system covering device design and manufacture
- Identify and obtain development funding as required and ensure intellectual property issues are resolved
- Oversee the design of prototype medical devices, including the modification of existing equipment. Integrate conflicting elements and work to national standards when identifying, evaluating and selecting solutions

Miscellaneous

- Ensure workforce planning is in place, including the development of new roles
- To support, represent and act for the Director of Medical Physics and Bioengineering as appropriate and perform other appropriate duties which may be required from time to time by the Director
- Work hours necessary for the proper and efficient performance of the work. In practice, the appointee will occasionally be required to perform duties outside the normal working hours of the Department.

We are
Supportive
Respectful
Innovative
Collaborative

Version issued: November 2021



Head of Clinical Engineering

Job Description & Person Specification –

A summary of the role responsibilities and person specification

Personal Profile - (E) = Essential (D) = Desirable *The role profile sheet gives you the opportunity to expand on the key duties outlined in the JD. This document follows the NHS Job Evaluation 16 Factor format to assist with the evaluation process. You do not need to provide information for each and every one of the 16 factors. Only give additional information where you feel that it will provide further understanding/clarity about the job role and will consequently assist with the Job Evaluation process. Please indicate whether the criteria are Essential (E) or Desirable (D).*

Knowledge and Experience

- Highly specialised theoretical and practical knowledge of clinical engineering, including practical clinical applications of medical devices and equipment management in a healthcare setting, {E}
- Significant proven track record as a senior clinical scientist/Chartered Engineer, with proven management experience in the highly specialised field of Medical Equipment Management at a senior level. {E}
- Experience in running an advanced technology based clinical scientific and/or technical support service for a large teaching hospital. {E}
- Extensive experience in quality management systems (eg ISO 9001 and ISO 13485), {E}
- Expert knowledge and understanding of relevant legislation , national standards, professional and other guidelines relating to the use and application of healthcare technologies (including MHRA safety document, BS EN 60601-1, EC Medical Device Directive, Risk Management Standards, Care Quality Commission) {E}
- Highly advanced knowledge of risk management processes and understanding of patient and staff risks arising from use of healthcare technologies and extensive experience in managing such risks, {E}
- Experience in a commercial equipment management environment, {D}
- Experience teaching at degree and masters level, {E}
- Ongoing participation and success in academic or NHS research and development, eg grants/ publications, {E}

Version Issued: November 2021

Skills and Abilities

- Excellent communication and interpersonal skills, including written and verbal reporting and presentation skills, with ability to demonstrate fluency, clarity and effectiveness at all levels, {E}
- Well developed leadership, management, negotiating and influencing skills, {E}
- Able to work on and manage a diverse range of highly complex activities at one time, meeting deadlines whenever required, examples would include: introduce a new clinical service, developing policy documents, overseeing a complex procurement project, managing a large team, {E}
- Proven ability in delivering service development and/or significant organisational change, {E}
- Highly developed skills demonstrating sound judgement of complex facts and situations requiring high levels of analysis, interpretation and comparison, {E}
- Able to act independently and to instigate effective continual improvement programmes, {E}
- Fully competent in standard IT application packages and able to effectively employ information management systems (eg asset management software) to optimise service delivery, {E}
- Able to create a safe environment by allocating the right resources in the right place eg. workforce, equipment, technology and training, {E}
- Able to work with full concentration under stressful situations – eg negotiate successfully at senior level, {E}

We are
Supportive
Respectful
Innovative
Collaborative



Head of Clinical Engineering

Job Description & Person Specification –

A summary of the role responsibilities and person specification

Aptitudes

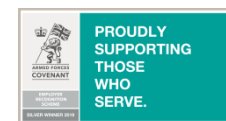
- Fair and consistent in dealing with all staff and clients in order to generate trust in staff and the service {E}
- Able to talk things through with people and encourage them to learn from successes as well as from conflict and difficult experience{E}
- Consistently express an optimistic and 'can do' attitude and encourage others to do the same {D}
- Able to deal with complex and unpredictable situations E
- Highly developed physical accuracy and dexterity, able to use fine tools for adjustment, and make accurate measurements using sophisticated test equipment {D}
- Safe working with hazards such as high voltages, bio-hazards, compressed medical gases, ionising radiation {E}
- Able to lift medium weight equipment {E}
- Able to work under emotionally stressful conditions {E}

Qualifications and Training

- BSc Hons degree in Engineering or Physical Science {E}
- Scientific education and training in Medical Engineering subject area to PhD level or equivalent experience including significant research activity {E}
- Registration as a Clinical Scientist with the Health and Care Professions Council and/or Registration as a Chartered Engineer (CEng) {E}
- Management qualification to Diploma or Masters level {E}
- Fellowship of Professional bodies, or with the potential to achieve this imminently, {D}
- Membership of or eligibility to join the AHCS higher specialist scientist register, or equivalent, {D}

We are
Supportive
Respectful
Innovative
Collaborative

Version Issued: November 2021



Head of Clinical Engineering

Job Description & Person Specification –

A summary of the role responsibilities and person specification

Transforming Care

Delivering sustainable healthcare services to our patients, which are effective, efficient and driven by excellence, is at the heart of our organisation. Transforming Care is the Trust's overarching programme of transformational change. It enables staff to use a structured approach to continuously improve and innovates their services, strengthen our capability, and deliver our Trust's mission to improve the health of the people we serve by delivering exceptional care, teaching and research, every day.

Our Quality Improvement Academy is open to all staff and leaders across the Trust, and provides training to lead or take part in improvement and transformation activities in their departments and across the Trust. We will support staff to develop the skills and tools to improve services to deliver the best care to our patients and public.

Information Governance

It is the responsibility of all staff to respect the confidentiality of patients and staff, as specified in the Caldicott Principles, Data Protection Act 2018 and the Human Rights Act. It is the duty of every employee to:

- Only access person identifiable information as required in the execution of their duties.
- Disclose information appropriately, in line with the Data Protection Act 2018.
- To ensure good quality data by recording, promptly and accurately, clinical and non-clinical information within agreed timescales to PAS, the health record or the appropriate clinical or non-clinical information system
- Always trace patient notes on the Patient Administration System

Maintain the confidentiality of their passwords / usernames and if in possession of a 'Smartcard' abiding by the terms and conditions of its use.

Workplace Wellbeing

The Trust Workplace Wellbeing Framework encourages all colleagues to look after their own wellbeing as well as supporting the wellbeing of colleagues. Line managers will oversee the wellbeing of their team, making wellbeing a priority when considering ways of working and will undertake regular health and wellbeing conversations that are supportive, coaching-style one-to-one discussions focused on building team resilience. To assist this, the Trust offers comprehensive wellbeing provision for employees, students, volunteers and managers.

Safeguarding Children and Vulnerable Adults

The Trust is committed to safeguarding and promoting the welfare of all children, young people and vulnerable adults, and as such expects all staff and volunteers to share this commitment.

Quality and Clinical Governance

Quality in the NHS has three core dimensions: Patient Safety, Patient Experience and Clinical Effectiveness. Clinical Governance is about the systems, processes and behaviours to ensure that high quality services are provided to patients. Every member of staff has a role to play in striving for excellence: it is important that everyone is aware of and follows policies and procedures that govern their work; and if something goes wrong, everyone has an obligation to report it so lessons can be learned from mistakes, incidents and complaints. If any member of staff has concerns on any clinical governance matters, they should raise them with their line manager, professional adviser, or a more senior member of management. Reference should be made to the Trust's guidance on Raising Concerns about provision of patient care.

Health and Safety

Under the provisions contained in the Health and Safety at Work Act 1974, it is the duty of every employee to:

- Take reasonable care of themselves and for others at work
- To co-operate with the Trust as far as is necessary to enable them to carry out their legal duty
- Not to intentionally or recklessly interfere with anything provided including personal protective equipment for Health and Safety or welfare at work.

Everyone has a responsibility for contributing to the reduction of infections.

Senior Management is responsible for the implementation throughout the Trust of suitable arrangements to ensure the health, safety and welfare of all employees at work and the health and safety of other persons who may be affected by their activities. Where health and safety matters cannot be resolved at Senior Management level the appropriate Executive Director must be notified.

Line Managers are responsible for the health and safety management of all activities, areas and staff under their control. This includes responsibility for ensuring risk assessments are completed and implementation of suitable and sufficient control measures put in place. Health and safety issues are dealt with at the lowest level of management practicable. Where health and safety matters cannot be resolved at a particular management level the appropriate

We are

Supportive
Respectful
Innovative
Collaborative

Version Issued: November 2021

