

# JOB DESCRIPTION

JOB DETAILS	
Job Title	Principal Clinical Scientist, Lead Physicist for
	Treatment Planning
Reports to	Head of Medical Physics/Operational Lead
Band	B8b
Department/Directorate	Medical Physics / Clinical Specialist Services

# **JOB PURPOSE**

The post-holder will work at a senior level with responsibility for the leadership and management of the highly specialised area of Treatment Planning.

The post holder will be an experienced Medical Physics Expert (MPE).

Responsible for managing resources across the speciality, including line management and supervision of clinical, scientific and technical staff, and will liaise with other staff on managing risk, resources and performance across the department.

Responsible for the development and implementation of relevant policies, strategies, processes and procedures, and for adopting and sharing best practice.

Represent the department and the Trust and deputise as required.

# **KEY RESULT AREAS/PRINCIPAL DUTIES AND RESPONSIBILITIES**

- Overall responsibility for professional, scientific, developmental, operational and clinical management of services in specialty area of treatment planning, mould room and mechanical workshop
- Provide managerial, professional and scientific (MPE) level working and advice in all areas of radiotherapy physics. With higher level expertise in treatment planning.
- As part of the leadership team, help to ensure legislative compliance and quality management system.
- Liaise and coordinate with the Lead Brachytherapy Physicist and Lead QC and Dosimetry Physicist to provide balanced, safe and effective radiotherapy service overall.
- Undertake a lead role in the R&D of radiotherapy techniques, clinical trials and in the implementation of new radiotherapy services
- Ensure the safe and effective operation of our radiotherapy network infrastructure, medical devices, software systems and related information governance
- Drive service development in specialty area, in accordance with department and trust strategy
- Taker a lead role in the training and development of staff across radiotherapy physics
- Deputise for the Head of Radiotherapy Physics/Operational Lead when required

# **KEY WORKING RELATIONSHIPS**

Areas of Responsibility: Radiotherapy Physics

No. of Staff reporting to this role: 12

The post holder is required to deal effectively with staff of all levels throughout the Trust as and when they encounter on a day-to-day basis. In addition, the post holder will deal with the wider healthcare community, external organisations and the public. This will include verbal, written and electronic media.

Of particular importance are working relationships with:

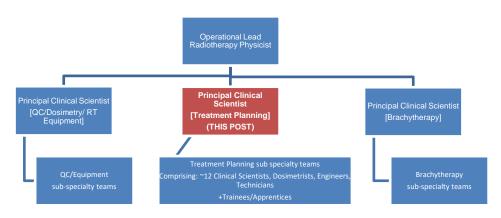
#### Internal to the Trust

- Healthcare scientists and trainees
- Clinical/Medical professions, incl. oncologists, nursing, pharmacy and allied health professionals
- Specialist, technical and technical support staff, incl. infection control, recruitment, finance, estates, IM&T and procurement
- Clinical and general managers
- Patients

#### **External to the Trust**

- External clients, partners and equipment suppliers
- Peer group and the wider scientific community
- Research and Trials Organisation
- Neighbouring trusts and radiotherapy departments
- Regulators and auditors

# **ORGANISATIONAL CHART**



#### **FREEDOM TO ACT**

- The post holder is the lead physicist for their specialty and therefore works with a high degree of autonomy.
- The post holder has freedom to work within a set of parameters to ensure patient, staff and public safety and will manage and develop work practices for their area.

# COMMUNICATION/RELATIONSHIP SKILLS

- Communicate highly complex scientific information relating to own specialty, within the department and with any/all other staff groups, patients and carers as required.
- Communicate highly complex radiation safety and regulatory advice with medical and other staff, patients and carers as required.
- Communicate highly complex governance, performance and improvement information, including the results of audit, peer review, quality improvement (QI) and research.
- Present work at professional and scientific meetings and conferences and in peer reviewed literature, collaborating with colleagues within and out with the Trust.
- When working in other departments and on other sites, the post holder will behave professionally and courteously at all times and will observe local policies, rules and working practices.

### **ANALYTICAL/JUDGEMENTAL SKILLS**

- Make judgements in highly complex situations involving the analysis and interpretation of highly complex clinical and scientific data.
- Analyse, communicate and manage the performance of own area. Optimisation of radiation services for own area.

 Provide advice on procuring, commissioning, accepting and routine quality assurance of highly complex clinical equipment including the assessment, interpretation and communication highly complex information.

# PLANNING/ORGANISATIONAL SKILLS

- Plan and organise the work of own area including workload and the allocation of work.
- Responsible for prioritisation of own work and that of others.
- Adjusts plans and strategies in response to changing circumstances and organisational priorities.
- Support the commissioning of highly complex clinical equipment which may involve leading on projects.
- Manage and participate in project work, including audit, research and QI.
- Participate in annual service and business planning processes, eg, service and workforce plans and equipment procurement and replacement plans.
- Plan, organise and run meetings.

#### PATIENT/CLIENT CARE

- Provide highly specialist healthcare science services for own area.
- · Act as a MPE for own area.
- Act as a MPE to support other areas as part of a networked system.
- This involves advising medical staff or other healthcare professionals on highly specialised clinical technologies and their application.
- Act as an "Operator" as defined under IRMER 17 as required.
- Work with and assist trust appointed Radiation Protection Advisors in their duties.
- Use and develop the quality management system (QMS), or equivalent governance controls (reference ISO9001 and BS70000), to ensure that services are provided to the appropriate standards and are subject to external scrutiny.
- Work with ionising and non-ionising radiation and other hazardous resources, taking all precautions minimise risk to oneself and others.
- Occasionally work and communicate with ill and anxious patients and carers.

# POLICY/SERVICE DEVELOPMENT

- Lead on policy and strategy development and implementation for own area, contributing to an overall plan for the department.
- Lead on QI and service development for own area, contributing to an overall plan for the department.
- Use benchmarking and QI techniques to seek out and implement best practice.
- Embrace 'continuous improvement' as described by QMS standards such as ISO9001 and BS70000.
- Be aware of relevant legal and statutory issues, international standards, and guidelines for best practice.

### FINANCIAL/PHYSICAL RESOURCES

- Responsible for the safe use of highly complex clinical and test and measurement equipment when assigned to the team.
- Specify, commission, test and verify highly complex clinical and test and measurement equipment
- Selection and requisition of specialist equipment and materials.
- Manage physical assets in own area.
- Manage a delegated budget for the specialty.

### **HUMAN RESOURCES**

- Work autonomously; planning, prioritising and managing own work.
- Day to day and line management of staff within own specialty, including recruitment, managing attendance and performance and supporting personal professional development.
- Supervise staff under the post holder's direction and sign off work and reports as required.

- Use coaching and mentoring techniques to support staff within and out with own specialty.
- Teach and train healthcare scientists, including, for example, apprenticeship programmes and programmes accredited through the National School for Healthcare Science (NSHCS).
- Organise and deliver specialist teaching and training for other staff groups and clients.
- May need to have difficult conversations with staff and deal with sensitive and challenging behaviours and situations.
- Ensure that practices comply with Health and Safety legislation and other relevant regulations, including IRR17 and IRMER 2017.

# **INFORMATION RESOURCES**

- Specify, procure, commission, use, test and manage computer systems and software including systems which are used to record and process data relating to own specialty.
- Configure and/or write software to process, analyse and report highly complex datasets.
- Effectively manage data availability, integrity and confidentiality.
- Use and develop the QMS, or equivalent governance controls, to effectively manage document control.

### **RESEARCH AND DEVELOPMENT**

- Lead on QI and service development for own specialty including initiating, undertaking and supervising research projects.
- Initiate and participate in clinical and service audit.
- Participate in, support and supervise clinical trials as required.
- Introduce and commission new processes, procedures, protocols and techniques.
- Specify, commission, test and verify highly complex clinical and test and measurement equipment.
- Present work at professional and scientific meetings and conferences and in peer reviewed literature, collaborating with colleagues within and out with the Trust.
- Responsible for own continuous professional development (CPD) and for maintaining professional registration and certification.

# PHYSICAL SKILLS

- Highly-developed physical skills are required, to carry out testing procedures and scientific measurements where a high degree of precision and accuracy is essential.
- Perform minute adjustments to medical equipment or instrumentation.
- Execute and coordinate equipment-based clinical measurements.
- Perform analysis of complex pieces of information and take prompt action as required to maintain safe and effective clinical operations.
- Advanced keyboard skills.

#### PHYSICAL EFFORT

Ability to handle and manoeuvre moderately heavy measurement equipment (10kg). High degree of dexterity required for some specialist QC activities.

#### **MENTAL EFFORT**

Frequently required to concentrate for long periods of time in complex situations (clinical and non-clinical), often with time pressure and with incomplete information.

#### **EMOTIONAL EFFORT**

Able to deal with emotionally distressing circumstances involving cancer patients.

Able to deal with work-based and pastoral issues of team members and direct reports covering a wide variety of circumstances.

# **WORKING CONDITIONS**

Able to work safely under legislation and local protocols to ensure safe practice, working closely with radiation.

Able to work flexibly to accommodate the needs of the service, including occasional weekends and bank holidays.

#### **OTHER RESPONSIBILITIES**

Take part in regular performance appraisal.

Undertake any training required in order to maintain competency including mandatory training, e.g. Manual Handling

Contribute to and work within a safe working environment

You are expected to comply with Trust Infection Control Policies and conduct him/herself at all times in such a manner as to minimise the risk of healthcare associated infection

As an employee of the Trust, it is a contractual duty that you abide by any relevant code of professional conduct and/or practice applicable to you. A breach of this requirement may result in action being taken against you (in accordance with the Trust's disciplinary policy) up to and including dismissal.

You must also take responsibility for your workplace health and wellbeing:

- When required, gain support from Occupational Health, Human Resources or other sources.
- Familiarise yourself with the health and wellbeing support available from policies and/or Occupational Health.
- Follow the Trust's health and wellbeing vision of healthy body, healthy mind, healthy you.
- Undertake a Display Screen Equipment assessment (DSE) if appropriate to role.

# **APPLICABLE TO MANAGERS ONLY**

Leading the team effectively and supporting their wellbeing by:

- Championing health and wellbeing.
- Encouraging and support staff engagement in delivery of the service.
- Encouraging staff to comment on development and delivery of the service.
- Ensuring during 1:1's / supervision with employees you always check how they are.

#### DISCLOSURE AND BARRING SERVICE CHECKS

This post has been identified as involving access to vulnerable adults and/or children and in line with Trust policy successful applicants will be required to undertake a Disclosure & Barring Service Disclosure Check.

# **GENERAL**

This is a description of the job as it is now. We periodically examine employees' job descriptions and update them to ensure that they reflect the job as it is then being performed, or to incorporate any changes being proposed. This procedure is conducted by the manager in consultation with the jobholder. You will, therefore, be expected to participate fully in such discussions. We aim to reach agreement on reasonable changes, but if agreement is not possible, we reserve the right to insist on changes to your job description after consultation with you.

Everyone within the Trust has a responsibility for, and is committed to, safeguarding and promoting the welfare of vulnerable adults, children and young people and for ensuring that they are protected from harm, ensuring that the Trusts Child Protection and Safeguarding Adult policies and procedures are promoted and adhered to by all members of staff.

At the Royal Devon, we are committed to reducing our carbon emissions and minimising the impact of healthcare on the environment, as outlined in our Green Plan available on our website. We actively promote sustainable practices and encourage colleagues to explore and implement greener ways of working within their roles.

# PERSON SPECIFICATION

Job Title Principal Clinical Scientist, Lead Physicist for Treatment Planning

Requirements	Essential	Desirable
QUALIFICATION/ SPECIAL TRAINING	E	
Degree in Physics or a related subject	<b>C</b>	
MSc in Medical Physics or related subject	E	
State registered Clinical Scientist (HCPC)	E	
MPE Registration in Radiotherapy Physics (RPA200)	E	
Further specialist training allied to Medical Physics at PHD level		D
Corporate member of IPEM	E	
HSS Registered (AHCS), or previous consultant level experience		D
Chartered Physicist (CPhys)		D
Chartered Scientist (CSci)		D
KNOWLEDGE/SKILLS  Advanced theoretical and practical knowledge in relevant area of medical physics sufficient for the role of Medical Physics Expert (MPE).	Е	
Expert understanding of relevant legislation, national standards, professional and other guidelines.	E	
Specialist theoretical and practical knowledge of highly complex clinical equipment and systems and specialist test and measurement equipment.	Е	
Specialist theoretical and practical knowledge of relevant medical physics processes, procedures and techniques.	E	
Specialist theoretical and practical knowledge relating to the assessment of risk applied to medical physics.	E	
Ability to use word processing, spreadsheet and database software and relevant software tools for analysis and development.	E	
Dose		
<b>EXPERIENCE</b> Extensive post registration experience acting as a MPE and to fulfil any additional specialist roles.	Е	
Extensive experience using highly complex clinical equipment and systems and specialist test and measurement equipment.	E	
Extensive experience dealing with governance and regulatory compliance matters.	Е	
Experience in introducing/commissioning new equipment and techniques.	Е	

Experience in service improvement / research and development.  Experience of clinical trials.	Е	
Experience in the structured management of work activities, eg, ISO9000 quality management system.		
Experience in delivering specialist teaching and training including professional presentations.		
Experience with software medical device management	E	
PERSONAL ATTRIBUTES Highly motivated with positive attitude to change.	E	
Able to work under stressful-time sensitive conditions.	E	
Able to work as part of a team.	E	
Able to inspire confidence in clinical, scientific and managerial colleagues.	E	
Able to work with people with illness without becoming unduly distressed.	E	
Able to self-reflect and act on constructive feedback	E	
OTHER REQUIREMENTS Full driving licence / able to travel to different working locations with equipment.	Е	

# Complete the table below as appropriate

		FREQUENCY			
			are/ Occ derate/ F		
WORKING CONDITIONS/HAZARDS		R	0	M	F
Hazards/ Risks requiring Immunisation Screening					
Laboratory specimens	N				
Contact with patients	Y				
Exposure Prone Procedures	N				
Blood/body fluids	Y		Х		
Laboratory specimens	N				
Hazard/Risks requiring Respiratory Health Surveillance					
Solvents (e.g. toluene, xylene, white spirit, acetone, formaldehyde and ethyl acetate)	N				
Respiratory sensitisers (e.g isocyanates)	N				
Chlorine based cleaning solutions	N				
(e.g. Chlorclean, Actichlor, Tristel)					
Animals	N				
Cytotoxic drugs	N				
Risks requiring Other Health Surveillance					
Radiation (>6mSv)	N				
Laser (Class 3R, 3B, 4)	N				
Dusty environment (>4mg/m3)	N				
Noise (over 80dBA)	N				
Hand held vibration tools (=>2.5 m/s2)	N				
Other General Hazards/ Risks	ì				
VDU use ( > 1 hour daily)	Υ				Х
Heavy manual handling (>10kg)	Υ		Х		
Driving	Υ	1	Х		
Food handling	N				
Night working	N				
Electrical work	N				
Physical Effort	Υ		Х		
Mental Effort	Υ				Х
Emotional Effort	Υ			Х	
Working in isolation	Υ		Х		
Challenging behaviour	Υ	Х			