



HEALTHCARE SCIENCE
PRACTITIONER APPRENTICE
(RADIOTHERAPY)

INFORMATION FOR CANDIDATES



ABOUT THE TRUST

The Shrewsbury and Telford Hospital NHS Trust (SaTH) is the main provider of acute hospital services for around half a million people in Shropshire, Telford & Wrekin and mid Wales.

Encompassing some of the most picturesque parts of England and Wales, the Trust's catchment stretches from the Cambrian Mountains in the west, to Newport and the fringes of the Black Country in the east.

The main towns include: Bridgnorth, Ludlow, Market Drayton, Oswestry, Shrewsbury and Whitchurch (in Shropshire); Newport, Telford and Wellington (in Telford & Wrekin); and Newtown and Welshpool (in Powys) – all beautiful and unique.

Our main service locations are The Princess Royal Hospital (PRH) in Telford and The Royal Shrewsbury Hospital (RSH) in Shrewsbury which are located 20 minutes drive apart. Together they provide 99% of our activity. Both hospitals provide a wide range of acute hospital services including accident & emergency, outpatients, diagnostics, inpatient medical care and critical care.

We also provide services such as consultant-led outreach clinics at Telford, the Robert Jones and Agnes Hunt Orthopaedic Hospital, Gobowen and the Bridgnorth, Ludlow and Whitchurch Community Hospitals.

We employ more than 6,000 people, and hundreds of colleagues and students from other organisations also work in our hospitals. We benefit from around 1,000 wonderful volunteers, and our main charitable partners are the League of Friends at The Royal Shrewsbury Hospital, Friends of The Princess Royal Hospital, and the Lingen Davies Cancer Appeal which is based at The Royal Shrewsbury Hospital.



OUR VISION AND VALUES

The Shrewsbury and Telford Hospital NHS Trust is an organisation that strives to provide high quality, safe care for our patients in an environment which our staff are proud to work in

Our Vision:

"To provide excellent care for the communities we serve"

Our Values:



OUR VISION

We believe that by adhering to our Vision and working with our Values in mind we can behave in a way which will ensure the right results for the people that matter most – our patients and their families.

OUR VALUES

Our Trust Values provide a guide for our daily lives which we are all expected to uphold, both at work and when we are representing the Trust.

Our Values were developed by staff and our patients, so they represent what is important to us within the organisation and the way we should all behave towards patients, carers, visitors, partners and each other.

You will see our Values throughout the Trust; they are not just words on a page, they represent what we are about here at SaTH. We want patients and their families to say that the care and service they receive from all of us is consistently high-quality, safe, effective, and personalised, so the feelings behind the Values shouldn't come as a surprise to anyone working in the NHS.

The reason why it is important that they are clearly written down is, so we all know what's expected, and none of us are surprised if we are asked to explain any unacceptable behaviour. Ultimately, if we follow our Values, we will provide services that are better for our patients and better for each other.



A MESSAGE FROM OUR CEO

Thank you for your interest in this role.

Our Trust's Vision is to provide excellent care for the communities we serve. We are striving to provide high quality, safe care for our patients in an environment which our colleagues are proud to work in.

We are looking for an inspiring, motivated individual who demonstrates our values, and who can provide clear vision and direction as we continue to move forward.

You will know that our Trust is on an improvement journey. Our recent Care Quality Commission inspection demonstrates that we are making progress towards our aim of Getting to Good, despite the challenges of a pandemic. We also know that we have more to do and that we must sustain the changes if we are to keep on improving. We are wholeheartedly committed to this and have plans in place to support this including our exciting Hospitals Transformation Programme. This will support the reconfiguration of where and how we deliver our services and the modernisation of our facilities and infrastructure, so that we can deliver better quality care for all of our communities.

It is a really exciting time to be a part of our Trust. I hope that you will join us to help steer and support us on our journey.

Louise Barnett

Louise Barnett CHIEF EXECUTIVE OFFICER



COLLEAGUE BENEFITS

27 days annual leave entitlement at joining, increasing with length of service, plus 8 bank holidays

Flexible working policies

Generous maternity pay and 2 weeks full pay paternity leave

Colleague recognition scheme and long service awards

Option to buy and sell additional annual leave

Greener travel initiative, including cycle to work scheme and lift share

Childcare information and support available, including onsite nurseries

Discounted bus passes with Arriva

Access to various local and national discounts via various external websites

- Blue Light Card
- Health Service
- Discounts NHS

Salary sacrifice schemes for home electronics and bikes

Generous Pension scheme

Access to a financial support booklet

Pre-retirement courses

Free Will writing service

Savings and Loan schemes

PSYCHOLOGICAL SUPPORT

- Coaching
- Mental Health First
- Aiders Chaplaincy

PHYSICAL SUPPORT

- Fast track physiotherapy service Free
- eye test vouchers

HEALTHY LIFESTYLES AND EMOTIONAL SUPPORT

- Slimming World referral scheme Staff
- cervical screening service Long Covid
- support
- Access to wellbeing/rest rooms
- Menopause support including advocates, webinars, toolkits, clinics, and bi-monthly meet ups Men's
- Health Bi-monthly forums and men's MOT
- Sleep School Wellbeing Support

Discounts with local gyms

COACHING AND MENTORING

Opportunities to grow, develop and perform at your best

LEADERSHIP ACADEMY

Leadership and management training for all levels of staff

ACCESS TO ELEARNING COURSES

Many eLearning modules to learn from with access available at home

APPRENTICESHIPS

There are a growing number of apprenticeship opportunities at SaTH across all disciplines

Secondment and acting-up opportunities

Support to complete qualifications such as NVQ, Masters etc. whilst on the job

HEALTH AND WELLBEING

GENERAL

LEARNING AND DEVELOPMENT



JOB DESCRIPTION

Job Title	Healthcare Science Practitioner Apprentice (Radiotherapy)
Band	Band 5 Annex 21
Directorate	Service Delivery Directorate
Accountable to	Head of Radiotherapy Physics
DBS Required?	Yes, Enhanced DBS

JOB PURPOSE

The post-holder will participate in a three-year, apprenticeship program. This will focus on aspects of the work of the Radiotherapy Physics service but will also introduce the trainee to all aspects of medical physics. The trainee will be expected to attend an accredited, part-time BSc Healthcare Science degree (Radiotherapy Physics). The work requires close collaboration with other staff involved with the provision of Radiotherapy Physics service and other medical physics colleagues. The post-holder will carry out the duties in accordance with the written policies and procedures of the department.

Radiotherapy Physics involves the calibration and maintenance of radiotherapy equipment, treatment planning, patient immobilisation and verification that the treatment given matches the treatment plan. The Radiotherapy Physics Practitioner provides scientific and technical services to ensure the delivery of high

quality and appropriate radiotherapy to patients. The Radiotherapy Physics Technologist is involved in a range of activities within radiotherapy physics. Including dose planning for external beam megavoltage therapy, mould room, brachytherapy, machine quality assurance (QA), in vivo dosimetry, routine dosimetry and virtual simulation.

Key Duties

To participate in the following activities, under appropriate supervision, thereby gaining education and skills required to be a Healthcare Science Practitioner in Radiotherapy Physics.

1. Patient/Client care

To gain under supervision agreed levels of competence in a wide range of dosimetric techniques – including:

Dose Planning

- Check the relevance of patient data and patient related data to ensure validity, consistency, and completeness.
- Provide treatment parameters and dosimetric data for patients to undergo radiotherapy.
- Transfer of data from imaging equipment to computerized treatment planning systems.
- Outlining anatomical structures for standard situations.
- Design individual treatment plans for standard treatment techniques.
- Perform simple dose calculations for standard treatment techniques using data provided by a clinical scientist.
- Transfer data to and from the treatment planning system.

Mould Room

- Operate a broad range of mould room equipment, including vacuum forming machines, workshop equipment and hand tools if available.
- Understand the principles of immobilisation and where appropriate undertake specific procedures and treatments. Direct patient contact is a key area when assisting with immobilisation devices or attending pre-assessments.

Brachytherapy

- Calculation of standard treatment times for brachytherapy.
- Familiarity with the delivery methods of brachytherapy treatments using a range of applicators and treatment equipment.
- Understand the requirement for safe care and custody for all sealed sources on site including record keeping, stock control and disposal.
- Have knowledge of the cleaning and sterilisation of brachytherapy applicators.
- Provide brachytherapy technical support in theatre.

Quality Control of Radiotherapy Systems

- Undertake quality control, following specified procedures, for CT scanners, simulators, treatment-planning systems, radiotherapy treatment units, and dosimetry equipment.
- Check equipment is operating within agreed tolerances.

Dose Measurements

• Perform dose measurements to support radiation treatment.

- Use a wide range of dosimeters for a variety of dose measurements types in accordance
 with established procedures which include TLD, semi-conductor diodes, electronic portal
 imaging devices, film and ionisation chambers. This involves in-vivo dosimetry
 measurements for patients, beam characterization and beam calibration.
- Know procedures to be followed for out of tolerance measurements.
- Correctly read and interpret measurements from the range of equipment used.

Image Guidance

- Observe clinical process of patient position and organ verification; including EPID based processes and Cone Beam process.
- Understand principles of margins and set up errors.
- Generate appropriate reference images for image matching protocols.
- 1.1. Participate in the administrative work of the service as necessary.
- 1.2. Use Microsoft Office applications (Excel, Word and PowerPoint), or similar, and develop simple applications when required (e.g Excel spreadsheets for radioactive waste calculations or the analysis of non-imaging patient studies).
- 1.3. Acquire an up-to-date knowledge of own specialist area including the main provisions of legislation, standards, and national guidance.

2. Policy and Service Development and Implementation

- 2.1. Participate in maintaining and improving the clinical and technical quality of the procedures carried out by the Radiotherapy Physics department.
- 2.2. Participate in reviewing existing procedures and the development of new procedures relevant to the provision of the service.
- 2.3. Keep abreast of the latest clinical and technical developments in own specialist area. Attend suitable seminars and courses for the purpose of service and personal development. Report the knowledge acquired to colleagues and recommend development of service policies and procedures as appropriate.
- 2.4. Contribute to the maintenance of statistical information as required for audit, clinical governance, and management purposes.

3. Physical and Financial Resources

- 3.1. Be responsible for the operation of equipment during training procedures with individual value in excess of £1m.
- 3.2. Carry out quality assurance tests on the radiotherapy equipment as required. Review the outcome of these tests and take action, if necessary, according to departmental procedures.

4. Human Resources

- 4.1. Participate in an accredited, BSc(Hons) in Healthcare Science (Medical Physics Technology), with a specialism in Radiotherapy. Undertake training and assessment against the competences in the department.
- 4.2. Manage personal effectiveness by reflection and review of practice and participating in continuing professional development.

4.3. The trainee is responsible for their own work and progression through the scheme.

5. Information resources

- 5.1. Participate in the maintenance of accurate records.
- 5.2. Assist with the maintenance of the security and integrity of computer data within the service.
- 5.3. Use standard computer applications programs for the preparation, presentation, and analysis of information, as required.

6. Research and Development

- 6.1. Undertake Radiotherapy Physics quality assurance as part of approved research studies, adhering to the study protocol as required. Prepare associated data for transfer to the investigators.
- 6.2. Participate in the research projects within the service.

WORKING CONDITIONS

The post holder is guided by broad legislation and occupational policies.

The post holder will be required to use VDU equipment for significant periods of time on most days.

The post holder will be exposed to radiation and/or laser and ultraviolet and intense light sources, controlled through being contained or subject to specific health and safety regulations. The post holder may be exposed to radiation in an uncontrolled manner in the event of a radiation/contamination incident.

The post holder will frequently have to concentrate for prolonged periods when working on, for example, detailed reports on equipment performance, patient dose calculations and complex business cases.

The post holder will occasionally have to move test equipment weighing between 6 and 15kg to undertake equipment testing.



PERSON SPECIFICATION

The following pages contain a description of the qualifications, skills, experience, knowledge and other attributes a candidate should ideally possess to successfully perform this role.

QUALIFICATIONS

ESSENTIAL	DESIRABLE
 GCSE or equivalent grade C or above (9-4) in Maths, English and two science subjects. 3 A Level passes, in Maths, physics or biology, plus another. (A science subject would be desirable). BTec Level 4 Diploma in Healthcare Science with a pass. Ability to work/study at Master's level and complete associated academic qualification for role within a set timeframe. This includes both clinical and academic criteria to become a Healthcare Science Practitioner. 	

EXPERIENCE AND KNOWLEDGE

ESSENTIAL	DESIRABLE
 Understand the concept of quality in both healthcare and scientific settings and practical approaches to assuring quality in applied science. Have information technology skills to operate word processing, and ecommunication packages commonly found in the workplace and to use spreadsheets to record and analyse complex data. Be able to manage own workload under supervision and through direction and ensure this meets the required standards. 	

SKILLS

ESSENTIAL	DESIRABLE
 Practical spatial and manipulation skills to use the equipment associated with the role. Be able to work within safe systems of work and report any deficiencies in 	
 Able to work with Standard Operating Procedures and contribute to their review and implementation. Advanced numeracy skills associated 	
 with A level mathematics or a physical science degree. Able to work individually and as part of an extended team. Have well developed manual dexterity 	
 Ability to work accurately and to deadlines under pressure of time. Advanced verbal communication skills 	
to convey complex information to a variety of specialist and non-specialist listeners. Able observe when communication has failed and to adopt different communication strategies under those circumstances.	

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OTHER

ESSENTIAL	DESIRABLE
 Ability to perform a wide range of duties according to the Job Description High levels of hand eye coordination and excellent spatial awareness. Able to undertake occasional light physical effort, for example moving test objects and pushing trolleys. Able to work flexibly in several locations. 	DESIRABLE
 Requirement to work in radiation- controlled areas with patients within infection prevention and control guidelines. 	
 Willingness to undertake and satisfactorily complete the Apprenticeship within 3 years. 	
 Willingness to develop new skills and undertake the Apprenticeship program including attendance at university. 	
 A professional and tidy appearance, punctual and positive attitude to learning. 	

- Must not hold a qualification at the same or higher level in the vocational subject area.
- Cannot already be on an Apprenticeship or any Government funded training.

GENERAL CONDITIONS

As they undertake their duties, all our people are required to uphold and demonstrate the Trust's core values of: Partnering, Ambitious, Caring and Trusted. Collaboration and partnership are also central to our approach in delivering our fundamental activities of patient care, teaching, and research.

HFAITH & SAFFTY

As an employee of the Trust, you have a responsibility to:

- take reasonable care of your own Health and Safety and that of any other person who may be affected by your acts or omissions at work; and
- co-operate with the Trust in ensuring that statutory regulations, codes of practice, local policies and departmental health and safety rules are adhered to; and
- not intentionally or recklessly interfere with or misuse anything provided in the interests of health and safety

INFECTION PREVENTION AND CONTROL (IPC)

The prevention and management of acquired infection is a key priority for the Trust. As an employee of the Trust, you have a responsibility to:

- ensure that your work methods are compliant with the Trust's agreed policies and procedures and do not endanger other people or yourself; and
- be aware of infection prevention and control policies, practices, and guidelines appropriate for your duties and you must follow these at all times to maintain a safe environment for patients, visitors and colleagues; and

- maintain an up-to-date knowledge of infection prevention and control, policies, practices, and procedures through attendance at annual mandatory updates and ongoing continuing professional development; and
- challenge poor infection prevention and control practices of others and to report any breaches, using appropriate Trust mechanisms (e.g. incident reporting policy)

INFORMATION GOVERNANCE

The Trust is committed to compliance with Information Governance standards to ensure that all information is handled legally, securely, efficiently, and effectively. You are required to comply with the Trust's Information Governance policies and standards.

- Confidentiality and Security Your attention is drawn to the confidential nature of
 information collected within the NHS. Whilst you are employed by the Trust you will come
 into contact with confidential information and data relating to the work of the Trust, its
 patients or employees. You are bound by your conditions of service to respect the
 confidentiality of any information you may come into contact with which identifies
 patients, employees or other Trust personnel, or business information of the Trust. You
 also have a duty to ensure that all confidential information is held securely at all times,
 both on and off site.
- Disclosure of Information To ensure that information is only shared with the appropriate
 people in appropriate circumstances, care must be taken to check the recipient has a legal
 basis for access to the information before releasing it. Upon leaving the Trust's
 employment and at any time thereafter you must not take advantage of or disclose
 confidential information that you learnt in the course of your employment, to protect
 yourself and the Trust from any possible legal action.
- Information Quality and Records Management You must ensure that all information handled by you is accurate and kept up-to-date and you must comply with the Trust's recording, monitoring, validation and improvement schemes and processes.

PROFESSIONAL STANDARDS AND PERFORMANCE REVIEW

As an employee of the Trust, you have a responsibility to:

- participate in continuous personal development including, statutory and mandatory training as appropriate for the post; and
- maintain consistently high personal and professional standards and act in accordance with the relevant professional code of conduct; and
- take responsibility for the maintenance and improvement of personal and professional competence and to encourage that of colleagues and subordinates

SAFEGUARDING CHILDREN AND VULNERABLE ADULTS

We all have a personal and a professional responsibility within the Trust to identify and report abuse.

As an employee of the Trust, you have a responsibility to ensure that:

- you are familiar with and adhere to the Trusts Safeguarding Children procedures and guidelines
- you attend safeguarding awareness training and undertake any additional training in relation to safeguarding relevant to your role

SOCIAL RESPONSIBILITY

The Trust is committed to behaving responsibly in the way we manage transport, procurement, our facilities, employment, skills, and our engagement with the local community so that we can make a positive contribution to society. As an employee of the Trust, you have a responsibility to take measures to support our contribution and to reduce the environmental impact of our activities relating to energy and water usage, transport and waste.

CONTINUOUS IMPROVEMENT

The Shrewsbury and Telford Hospital NHS Trust is committed to creating a culture that puts Continuous Improvement at the forefront of our transformational journey and our aim is to empower colleagues at all levels have the confidence, capability, passion, and knowledge, to test changes and make improvements at SaTH and in the communities we serve.

Following a successful five-year partnership with the Virginia Mason Institute in the USA, SaTH continues to further develop and embed the Trust's approach to Continuous Improvement at all levels of the organisation. You will be supported by an Improvement Hub, which will provide the necessary expertise to support you make improvements, while also providing training at various stages of your time at SaTH, as part of your continuing professional development.

EQUAL OPPORTUNITIES AND DIVERSITY

The Shrewsbury and Telford Hospital NHS Trust is striving towards being an equal opportunities employer. No job applicant or colleague will be discriminated against on the grounds of race, colour, nationality, ethnic or national origin, religion or belief, age, sex, marital status or on the grounds of disability or sexual preference.

Selection for training and development and promotion will be on the basis of an individual's ability to meet the requirements of the job.

The Shrewsbury and Telford Hospital NHS Trust the post-holder will have personal responsibility to ensure they do not discriminate, harass, bully, or contribute to the discrimination, harassment or bullying of a colleague or colleagues, or condone discrimination, harassment or bullying by others.

The post-holder is also required to co-operate with measures introduced to ensure equality of opportunity.

NO SMOKING POLICY

There is a no smoking policy in operation within the Trust. Smoking within the Trust's premises or within the Trust's grounds is not permitted.

MISCELLANEOUS

This job description is an outline of the key tasks and responsibilities of the post and is not intended to be an exhaustive list. The job may change over time to reflect the changing needs of the Trust and its services as well as the personal development.







The Royal Shrewsbury Hospital

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