

Clinical Technologist

(Radiotherapy)

An abstract graphic at the bottom of the page composed of several overlapping triangles in various shades of blue and green. The triangles are of different sizes and are arranged in a way that creates a sense of depth and movement, with some pointing upwards and others downwards.

A BETTER **CAREER** STARTS HERE

At Gloucestershire Hospitals NHS Foundation Trust, we take great pride in delivering high quality acute services and we understand just how precious life is.

People entrust their lives to our care every day and they have the right to expect the very best experience and outcomes. That's why our ambition and the pursuit of excellence is the foundation of everything we do.



Dear candidate,

I am delighted you are interested in a Clinical Technologist (Radiotherapy) position here at Gloucestershire Hospitals NHS Foundation Trust. This information pack contains all the information you need to apply for the post, I would actively encourage you to read the information and make contact with me for an informal conversation.

We provide physics and engineering services throughout the Trust, including the two large district general hospitals, Cheltenham General Hospital and Gloucestershire Royal Hospital. Radiotherapy is carried out both at Cheltenham General and our satellite centre in Hereford.

We are a supportive department, who value and develop our employees and aim to provide a high quality physics service.

Best wishes

Tony Dix

Job details

Job Title:	Clinical Technologist (Radiotherapy)
Division	Diagnostics and Specialities
Department:	Gloucestershire Medical Physics
Responsible and accountable to:	Head of Radiotherapy Physics
Band:	Band 5
Location:	Cheltenham General Hospital
Hours:	37.5 pw

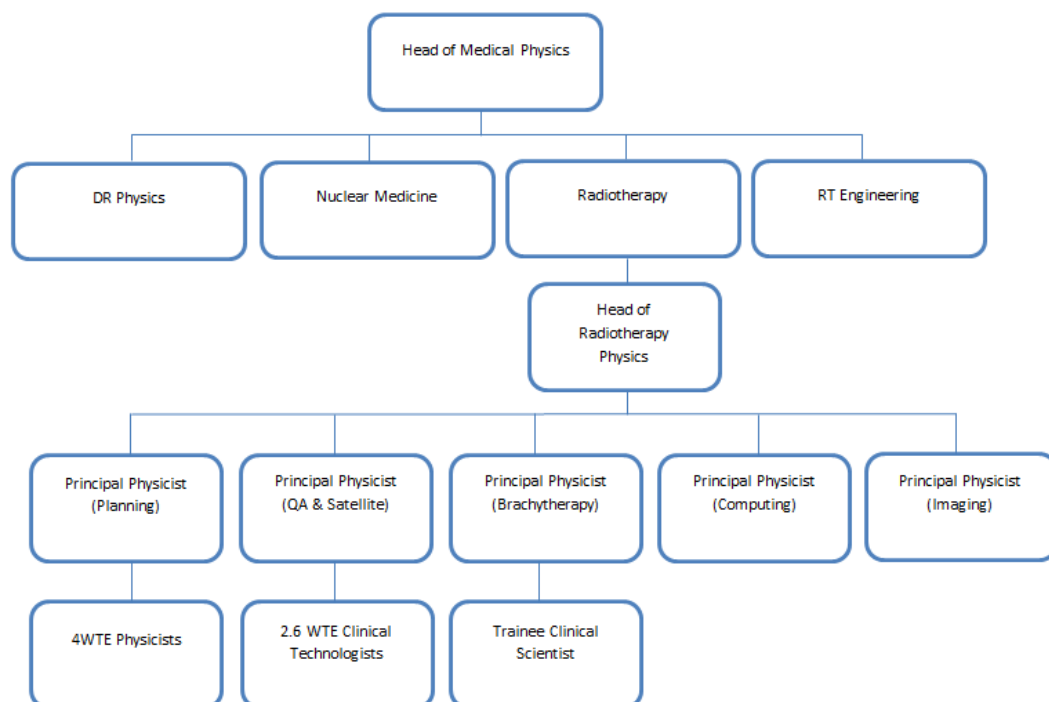
Job purpose

- ▶ To provide Radiotherapy Physics services to the Gloucestershire Oncology Centre so that patients' Radiotherapy can be delivered safely, accurately and efficiently using modern techniques and equipment and to provide scientific advice to other staff groups.

Dimensions

- ▶ The post-holder is required to use an extensive range of complex, computer-controlled, equipment safely (e.g. 5 radiotherapy treatment machines, typical value over £1.5 million each).
- ▶ The post-holder has the legal responsibilities of an operator under the 'Ionising Radiation (Medical Examinations) Regulations 2017.'
- ▶ The post-holder is required to work some Saturdays, approximately 6-8 per year following machine service, and may be required to work outside of normal working hours.

Organisation chart



Knowledge, skills and experience required

Qualifications

- ▶ The post holder must be qualified to vocational degree, physics degree or equivalent. (e.g. HNC level in a relevant science subject and additional relevant experience).
- ▶ Specialist knowledge is acquired through short courses and updates.
- ▶ The postholder should be on the Register of Clinical Technologists or eligible for inclusion after the qualifying period.
- ▶ Membership of IPEM is desirable

Experience

- ▶ Relevant experience in radiotherapy physics.

Other Skills

The post holder must have

- ▶ Good knowledge of patient dosimetry, treatment planning and treatment machine QC acquired through attendance at specialist short courses and in-house training
- ▶ Ability to use all standard office software to a minimum of ECDL standard or equivalent.
- ▶ Ability to manipulate data using mathematical calculations
- ▶ The ability to concentrate for long periods of time on complex work is essential.

Physical skills

- ▶ The post holder uses a range of specialised equipment.
- ▶ Manual dexterity is required to handle delicate precision instruments, including the use of dosimeters on both phantom materials and patients. The post holder is required to work to a high level of accuracy i.e. to within less than 1mm.

- ▶ Speed and precision are both required when handling radioactive sources.

Communication skills

- ▶ Must be able to communicate clearly verbally and in writing to convey to other members of staff problems which have been encountered with work; e.g. giving appropriate advice regarding radiotherapy equipment performance issues, and explaining to trainees aspects of departmental work.

Organisational skills

- ▶ The post holder must have the ability to organise and complete work to timetable and tight deadlines and handle unexpected work associated with a crisis or machine breakdown.
- ▶ The post holder may be required to travel to other Trust sites including Gloucester Royal Hospital and Hereford County Hospital and a driving license is desirable.

Knowledge

- ▶ The post holder must have a knowledge of current Radiation Protection legislation, including IRR2017 and IR(ME)R 2017, sufficient to enable them to work safely.
- ▶ The post-holder must maintain an up to date knowledge of Radiotherapy Physics and relevant Radiation Protection legislation in order to carry out the duties of the post. This will be achieved by attending relevant local and National meetings and by private study. The post-holder must keep an accurate Continuing Professional Development Portfolio as evidence of this and should be enrolled on an appropriate CPD scheme.

Key result areas

1. The post holder will manage their own work and prioritise it on a day to day basis working flexibly where necessary.
2. Carry out acceptance testing, commissioning and quality control of Radiotherapy treatment machines, CT Scanners and treatment planning computers and calculate analyse and document the results so that the treatment machines deliver the correct dose of radiation to cancer patients. Acceptance test work will be done under the direction of the principal physicist (treatment machines). Process quality assurance and commissioning data measured by others using Excel spreadsheets etc. Commissioning and other complex work will be done under the supervision of a senior member of the department
3. To check a range of treatment plans calculated by radiographers, physicists and clinical technologists and to plan a restricted range of radiotherapy treatments.

When checking a plan the post-holder is responsible for verifying that the treatment has been planned correctly, information has been correctly identified from radiographs, CT scans and other sources, is accurate and complies with current good practice. Calculating and checking doses requires the post-holder to use their clinical knowledge and judgement to ascertain that the correct balance has been made between minimising dose to normal tissue and treating the target volume as accurately as possible. Provide a report for consultant oncologists in the form of a treatment plan which the consultant will use to prescribe the patient's treatment.

4. To make in-vivo dose measurements on individual patients when requested by a senior physicist. Explain the procedure to the patient, analyse and report the results, in order to confirm that the correct dose of radiation is delivered.

To participate in the training of trainee physicists and technologists at the request of the trainee supervisor.

5. To participate in radiation protection advice and training of other GHNHSFT staff
6. To inform the most senior radiotherapy physicist immediately when any error is either detected or suspected and to inform the Clinical Oncologist responsible for the patient's care if no other member of the physics staff is immediately available.
7. To assist with radiation protection measurements relevant to Radiotherapy and to assist the Gloucestershire Oncology centre in its compliance with the Ionising Radiation Regulations 1999, the Ionising Radiations (Medical Exposure) Regulations 2000 and other relevant legislation.
8. To undertake tasks/projects allocated to them by the Head of Radiotherapy Physics. Write any relevant reports or protocols required as a result of this work and communicate the results to other physics and oncology staff where relevant. To undertake audit, both clinical and non-clinical.
9. To provide physics support to the Oncology Centre's Gynae HDR Brachytherapy service as directed by the lead brachytherapy physicist. This may include QC or on set calculation checks depending on the work requirements. Awareness of radiation protection issues when working with radioactive sources is essential. This work will be carried out under the general direction of the senior brachytherapy physicist and involves a multidisciplinary team of physicists, oncologists, and radiographers
10. To keep abreast of scientific and technical developments and attend suitable seminars and courses as part of training and personal development and to further the work of the department.
11. Ensure all work activities are carried out within a quality framework and meet regulatory requirements, professional standards and accepted guidelines. Ensure compliance with accredited quality systems in the areas of work for which the post holder carries responsibility. Participate in the development and routine operation of quality systems including writing new procedures for their area of work.
12. To inform the most senior member of the Radiotherapy Physics Department immediately when any problems or errors are either detected or suspected in the course of the post holder's work.
13. There is a requirement to cover daily departmental work, as directed by the Head of Radiotherapy Physics, implement and follow Departmental and Trust policies and procedures, and any suggest any changes which you believe would improve the service.
14. To adhere to all Trust policies and procedures and professional code of conduct

Improving quality and developing practice

- ▶ Comply with requirements to register with the HCPC and identify own learning needs and ensuring own professional development is maintained by keeping up to date with practice developments.
- ▶ Work with senior staff undertaking audit and research projects if requested, to further own and team's clinical practice.
- ▶ Contribute to the Clinical Governance and Quality agenda by active participation in service initiatives, health and safety and risk management.
- ▶ Develop and share own clinical knowledge with other members of the wider clinical team both locally and nationally.
- ▶ Identify own development needs, aligning these to service requirements and personal aspirations. Proactively develop and improve own practice using all available resources
- ▶ Understand and contribute to the development, implementation, monitoring and evaluation of policies/ protocols/ guidelines relevant to their area of work
- ▶ Openly question and challenge practice in a constructive way so that standards of patient care are continually evaluated and improved.

Communications and working relationships

The post-holder will liaise with:

- ▶ Other local Medical Physics staff, Radiotherapy Radiographers, Consultant Oncologists, Oncology Nurses and other medical staff working in the Oncology Centre.
- ▶ Other Medical Physicists and technologists employed nationally.
- ▶ Manufacturers of major items of Radiotherapy equipment and radioactive sources (e.g. obtaining information, quotes and ordering items).

Most challenging part of the job

Confidently carrying out work whilst being aware that any accidental errors or omissions could affect the outcome of the treatment of cancer patients.

Physical effort and working conditions

- ▶ The post involves working with radiation and radioactive sources. Direct handling of sources is carried out within the constraints of radiation protection training to avoid or minimise exposure to staff and public. The post holder may be involved with managing radiation hazards following an accident.
- ▶ The post involves the use of heavy dosimetry phantoms (up to 20kg) which need careful handling and positioning. They may need to be repositioned up to 20 times during the course of a set of measurements. This is required once a week on average. There is an occasional requirement to move (push) heavy equipment trolleys (30kg or occasionally substantially more).
- ▶ VDUs are used on a daily basis

- ▶ The post-holder is required to have a flexible attitude to working hours to minimise disruption to patient services. This may involve starting work early, finishing late or working the occasional Saturday.

Job description agreement

Job holder's signature:	Date: DD / MM / YYYY
Head of department signature:	Date: DD / MM / YYYY

Person specification: Senior Clinical Technologist (Radiotherapy)

Key to terms: E: Essential, D: Desirable. *How is it assessed?* I: Interview, A: Application

Qualifications

BSc Physics or equivalent	E	A
Qualification as technologist	D	A
HCPC Registered Clinical technologist	D	A/I

Experience

12 months experience in Radiotherapy	E	A
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Knowledge, Skills, Abilities

Demonstrates a good all-round knowledge of Radiotherapy Physics	E	I
Demonstrates a clear understanding of what Medical Physics is and the post on offer	E	I
Good verbal and written communication skills	E	A/I
Flexible attitude towards working hours	D	I
Clean driving licence (car ownership is not essential)	D	I
Ability to lift Phantoms (20kg)	E	I
Good knowledge of Microsoft packages including spreadsheets	E	A/I
Ability to manage own work and project work	E	A/I
Ability to deliver presentations or tutorials	D	A/I
Ability to establish good working relationships with other people in the department including other physicists, clinical staff, and patients	E	I
Appreciation of need to follow Trust policies in all areas (e.g. Health & Safety, child protection etc., and the importance of undertaking mandatory training).	E	I

Qualities

Enthusiastic and self-aware	E	I
Creative and Flexible	E	I
Resilient under pressure	E	I
Team focused	E	I
Reliable, Adaptable and Dependable	E	I

Confidentiality

In the course of your employment, you may have access to, see or hear confidential information concerning the medical or personal affairs of patients and/or staff. Unless acting on the instruction of an authorised officer, on no account must such information be divulged or discussed except in the performance of normal duties. Breaches of confidence, including improper passing of registered computer data, will result in disciplinary action, which may lead to dismissal. You should be aware that regardless of any action taken by your employing authority, a breach of confidence could result in a civil action for damages.

In addition, records, including VDU screens and computer printouts of registered data, must never be left in such a manner that unauthorised persons can obtain access to them. Written records must either be destroyed or retained in safe custody when no longer required, VDU screens should always be cleared when unattended.

Terms and conditions of service

The principle terms and conditions of your appointment will be those set out in the Agenda for Change national agreement as amended from time to time by the NHS Staff Council. These terms and conditions are set out in the NHS Terms and Conditions of Service Handbook, which is available on the Trust's intranet and NHS Employers website.

Health and Safety

It is the duty of every employee to work in such a way that accidents to themselves or others are avoided, and to co-operate in maintaining their place of work in a tidy and safe condition, thereby minimising risk. Employees will, therefore, refer any matters of concern through their respective line managers.

Data quality

As part of your employment, you may be required to record Patient Information (computerised or on paper). You have a responsibility to ensure that information is entered accurately, completely and consistently. It is particularly important that patients' demographic details are kept up-to-date. Problems should be reported to your manager.

NB

This job description is not intended to form part of the contract of employment or to be a complete list of duties and responsibilities, but it is a good guide for information to the job. It will be periodically reviewed in the light of developing work requirements in the department. The officer in the post will be expected to contribute to the review.

Gloucestershire Hospitals NHS Foundation Trust operates a no smoking policy. Smoking is not permitted anywhere within the buildings and grounds of all Trust sites. These restrictions include all areas up to the boundaries of all sites.

Job share

As part of its commitment to Equal Opportunities in employment, Gloucestershire Hospitals NHS Foundation Trust has a policy on Job Sharing. Under this policy, all posts, unless exempt, are open to Job Share.

Should you wish to apply for this post on a Job Share basis, please write "Job Share" on the application form in the box "Application for the post of".

Shortlisted Job Share applicants may be invited to attend for a second interview with a potential partner so that working arrangements etc. can be discussed.

Copies of our leaflet "Job Share Policy - A Guide for Staff" are available on request from the Personnel Department.

DBS (formally CRB)

This post is subject to the Rehabilitation of Offenders Act (Exceptions Order) 1975 and as such it will be necessary for a submission for Disclosure to be made to the Disclosure and Barring Service to check for any previous criminal convictions.