

## ***Position Description: Principal Medical Physicist***

Business area:	Cancer Care Centre
FTE:	As per Conditions of Employment
Reports to:	Chief Physicist

### ***Position Objective:***

*To perform the day-to-day scientific tasks associated with radiotherapy in order to ensure:*

- that equipment is commissioned for clinical use*
- treatment equipment is calibrated and working within specification*
- assistance is provided with planning and checking individual patient treatment plans*
- the service offered to patients is developed*

Our Vision	Leading cancer care in Aotearoa – we bring inspiration and innovation together to positively impact the lives of New Zealanders.
Our Mission	To be the patient's choice for world class cancer care delivered by people with passion.
Our Values	<p>Excellence</p> <ul style="list-style-type: none"> <li>We deliver outstanding care to our patients with a focus on continuous improvement.</li> </ul> <p>Resilience</p> <ul style="list-style-type: none"> <li>We are flexible and responsive to the needs of our patients and our people.</li> </ul> <p>Collaboration</p> <ul style="list-style-type: none"> <li>We work in partnership with our patients, their whanau, and our staff.</li> </ul> <p>Integrity</p> <ul style="list-style-type: none"> <li>We act with authenticity and to the highest standard of performance and conduct.</li> </ul>

### ***Functional Relationships:***

<b>Internal:</b>	<b>External:</b>
<ul style="list-style-type: none"> <li>Radiation Therapists,</li> <li>Radiation Oncologists</li> <li>Clinical Scientists</li> <li>Information Technology colleagues</li> <li>Administration colleagues</li> <li>Other colleagues in the Cancer Care Centre</li> </ul>	<ul style="list-style-type: none"> <li>Office of Radiation Safety</li> <li>Engineers</li> <li>Technical support personnel</li> <li>Manufacturers and suppliers of Radiation Oncology equipment</li> <li>Other Radiation Oncology centres</li> </ul>

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### *Key Areas of Accountability:*

<b>Area of Accountability</b>	<b>Expected Results</b>
<b>General</b>	<ul style="list-style-type: none"> <li>Competently utilises the basic operation of the patient management system.</li> <li>Provides scientific advice and training to colleagues and students associated with St. George's Cancer Care Centre.</li> <li>Liaises and coordinates work with the Cancer Care Centre IT Support team.</li> <li>Engage in and lead major projects projects as instructed by the Chief Physicist.</li> </ul>
<b>Treatment Planning</b>	<ul style="list-style-type: none"> <li>Engage in and lead the development of systems of work and protocols used in treatment planning.</li> <li>Prepares clinical treatment plans using the treatment planning system.</li> <li>Engage in and lead the development of safe systems of checking to avoid treatment errors.</li> </ul>
<b>Dosimetry</b>	<ul style="list-style-type: none"> <li>Performs commissioning measurements on all kinds of radiotherapy equipment in order to verify that the equipment is operationally configured and suitable for clinical use.</li> <li>Collects and analyses complex data from radiotherapy treatment equipment to enable accurate manual and computer calculation of the treatment settings.</li> <li>Performs highly accurate routine and non-routine dosimetry and geometric quality control of the radiotherapy equipment to ensure that it remains within clinically acceptable tolerances.</li> <li>Performs on-going calibration and quality control of clinical dosimeters in order to maintain the accuracy and traceability of the dosimetry chain.</li> <li>Advises radiation therapists on technical aspects of complex treatment planning and use of the treatment planning system. Provides advice on treatment methods and on individual patient treatments to other professionals involved in radiotherapy.</li> </ul>
<b>Research and Development</b>	<ul style="list-style-type: none"> <li>Keeps an up-to-date knowledge of the latest technical and scientific developments in order to identify improvements to the service.</li> <li>Engages in and leads R&amp;D projects agreed by the Chief Physicist.</li> <li>Promotes the work done at the Cancer Care Centre through scientific publication and through presentations at local, national and international meetings.</li> </ul>
<b>Interpersonal Relationships/Leadership and Teamwork</b>	<ul style="list-style-type: none"> <li>Models and ensures our Values (Excellence, Resilience, Collaboration, Integrity) are integrated throughout the administration team through daily practices, interactions and decision making.</li> <li>Support the Chief Physicist               <ul style="list-style-type: none"> <li>Coordinate between the physicists and the Chief Physicist.</li> <li>Keep the Chief Physicist informed of any issues.</li> <li>Organize the physics roster to make sure that clinical duties are covered.</li> <li>Provide advice to the Chief Physicist for strategic decisions.</li> </ul> </li> <li>Promotes harmonious working relationships within the department and with clinicians and other colleagues.</li> <li>Appreciates and respects the contribution of others within the team.</li> <li>Contributes positively to the goals of the team and the organisation.</li> <li>Communicates effectively, honestly and openly with other team members.</li> <li>Fosters co-operation across clinical and administrative groups.</li> <li>Models the Cancer Care Centre's values.</li> </ul>

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<b>Quality Improvement</b>	<ul style="list-style-type: none"> <li>Reviews incidents, safety and quality concerns and provides advice on these matters to Chief Physicist.</li> <li>Maintains operational and quality assurance procedures within the quality management system and proposes changes and improvements to procedures as necessary.</li> <li>Participates actively in quality improvement activities by planning, implementing and evaluating improvements.</li> <li>Initiates, participates in design and evaluates audits and applies outcomes to improve service provision.</li> <li>Participates actively in Ministry of Health Certification and Accreditation process.</li> <li>Documents and reports incidents accurately in accordance with hospital policy.</li> <li>Participates actively in the development/review of policies and procedures.</li> <li>Performs routine quality assurance of imaging systems in radiotherapy, including the CT scanner, EPID and CBCT systems.</li> <li>Performs quality assurance on the treatment planning computers in accordance with departmental procedures based on internationally recognised guidelines.</li> </ul>
<b>Professional Development</b>	<ul style="list-style-type: none"> <li>Maintains professional standards at all times by applying the standards of practice as laid down by the professional body and the organisation.</li> <li>Demonstrates and facilitates contemporary knowledge and skills.</li> <li>Understands and adheres to all legislative requirements and follows St George's Hospital policies and procedures.</li> <li>Participates in an annual performance appraisal and the setting of performance objectives aligned to the goals of the organization.</li> <li>Identifies own learning requirements/deficits and discusses development plan with Manager.</li> <li>Attends CPR updates and familiarises self with emergency equipment.</li> <li>Attends relevant study days and in-service education.</li> <li>Fosters an environment conducive to learning, enquiry and research.</li> <li>Participates in approved research programmes as requested.</li> </ul>
<b>Organisational Culture</b>	<ul style="list-style-type: none"> <li>Fosters co-operation across the organisation.</li> <li>Is customer focused, understands and promotes the concept of internal and external customers (i.e. patients, colleagues and clinicians).</li> <li>Maintains confidentiality in respect to St George's operations, business, colleagues, clients and patients.</li> <li>Models St George's values and adheres to St George's policies and procedures.</li> </ul>
<b>Cultural safety and Te Tiriti o Waitangi</b>  To promote cultural awareness within St George's Cancer Care Centre	<ul style="list-style-type: none"> <li>Demonstrates an understanding of and commitment to our responsibilities of Te Tiriti o Waitangi</li> <li>Respects diversity of cultural, this may include age, gender, sexuality, ethnicity, culture, disability or beliefs.</li> </ul>
<b>Health &amp; Safety</b>  <b>Radiation Safety</b>	<ul style="list-style-type: none"> <li>Complies with current New Zealand radiation protection legislation and codes of practice.</li> <li>Complies with and supports all health and safety policies, guidelines and initiatives.</li> <li>Ensures all incidents, injuries and near misses are reported in our H&amp;S reporting tool.</li> </ul>

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<b>Organisational effectiveness</b>	<ul style="list-style-type: none"> <li>Looks for ways and means to actively and effectively promote cost effectiveness.</li> <li>Actively promotes the activities of the hospital to internal and external stakeholders, and seeks additional business opportunities.</li> <li>Organises preventative maintenance in collaboration with manufacturer.</li> </ul>
<b>Other Duties</b>	<ul style="list-style-type: none"> <li>To undertake other duties as requested by the Chief Physicist from time to time.</li> <li>Performs such duties in a timely, accurate manner and in accordance with St George's Hospital policies and procedures.</li> </ul>

### *Qualifications, Experience and Personal Qualities*

	<b>Essential</b>	<b>Desirable</b>
<b>Qualifications</b>	<ul style="list-style-type: none"> <li>A postgraduate degree (MSc or higher) in a relevant subject.</li> </ul>	
<b>Experience &amp; Knowledge</b>	<ul style="list-style-type: none"> <li>Substantial (8+ years) post graduate experience in Radiotherapy Physics and be able to demonstrate practical experience and significant knowledge of radiotherapy physics, have the ability to perform scientific measurements accurately and have good computing skills.</li> <li>Hold or be eligible to obtain a license to use Ionising Radiation from the Office of Radiation Safety.</li> </ul>	<ul style="list-style-type: none"> <li>Registration of a recognized body such as ACPSEM</li> <li>Experience with MR</li> </ul>
<b>Personal Attributes</b>	<ul style="list-style-type: none"> <li>Able to lead and influence</li> <li>Good organisational skills</li> <li>Effective interpersonal skills and be able to work as part of a small team.</li> <li>Self-directed and high degree of personal motivation.</li> <li>Able to work effectively and efficiently under occasional periods of pressure.</li> <li>Good oral and written communication skills.</li> <li>Prepared to work flexible hours.</li> <li>Innovative and have the ability to lead research and development.</li> <li>Appreciate the need for sensitivity when dealing with patients and their relatives.</li> </ul>	