



HSS Registered

Programmer

Position Details

Position Number: **004299**
Classification: **Level G-6**
Agreement: **Health Salaried Officers Agreement**
Directorate: **Radiation Oncology**
Department: **Medical Specialties Division**
Location: **Sir Charles Gairdner Hospital**

Reporting Relationships

This position reports to:

004014	Director of Physics Research	HSO Level G-11
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Primary Purpose of the Role

Undertaking programming in support of Radiation Oncology research and development, and clinical activities.



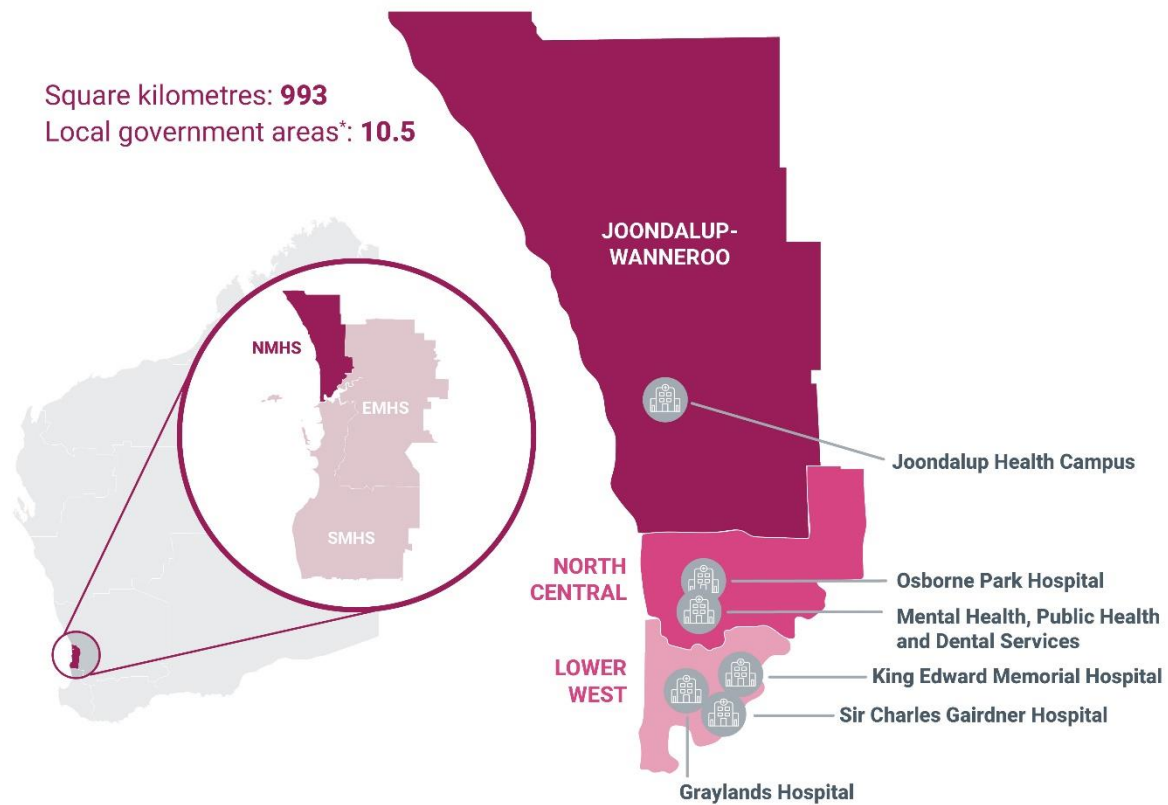
Vision

A trusted partner, delivering excellent health care for our people and our communities.



Mission

To promote and improve the health of our people and our communities.



North Metropolitan Health Service

Since our establishment in 2016, NMHS has embraced best practice to deliver improved clinical outcomes in the face of rising challenges for all healthcare providers. With a budget of \$2.16 billion and 8,917 full-time equivalent (FTE) staff, we serve a population of 736,907 people (about 28% of Western Australia's total population) within a catchment area of almost 1,000 square kilometres. The population we serve is projected to increase by 17% between 2021 and 2031, and the number aged 65 years and older will increase by 41% over the same period. NMHS provides a comprehensive range of adult specialist medical, surgical, mental health and obstetric services in WA, delivered across three tertiary hospitals and two secondary hospitals, all fully accredited. NMHS oversees the provision of contracted public health care from Joondalup Health Campus operated under a public-private partnership. A range of statewide, highly specialised multidisciplinary services is offered from several NMHS hospital and clinic sites.



Our values



Care

We show empathy, kindness and compassion to all.



Respect

We are inclusive of others and treat everyone with courtesy and dignity.



Innovation

We strive for excellence and are courageous when exploring possibilities for our future.



Teamwork

We work together as one team in a spirit of trust and cooperation.



Integrity

We are honest and accountable and deliver as promised.

Please refer to [NMHS Values – Organisational/Individual Behaviours](#) for information on individual behaviours that reflect the organisation's values.

Our strategic priorities

We are focussing on six strategic priorities for the 2020-2025 period:



Enabling healthy communities

We build healthy and engaged communities



People-centred care

We will place our consumers' and their carers' best interests and experience at the core of all we do



Integration and connection

We will build strong connections and partnerships



Innovation and adaptive models of care

We will use research and technology to improve outcomes



Trusted, engaged and capable people

We will invest in our people and our culture



Sustainable and reliable

We will reduce harm, waste and unwarranted variation



Key Accountabilities

1. General

- 1.1 Undertakes programming activities for Radiation Oncology research, development and clinical projects under the direction of the Director of Physics Research.
- 1.2 Reports on activities to the Director of Physics Research.
- 1.3 Participates in internal meetings and working parties as required.

2. Technical

- 2.1 Advises the Radiation Oncology department on appropriate developments involving technical programming.
- 2.2 Develops algorithms and programming techniques as required for Radiation Oncology research, development and clinical projects.
- 2.3 Leads development of software applications to manipulate and analyse data objects extracted from radiotherapy treatment planning data.
- 2.4 Responsible for developing and maintaining remote (web-based) file management and interaction systems.
- 2.5 Responsible for ensuring the overall operability of developed software systems including maintenance and error reporting/repairing and undertaking validation of developed algorithms.
- 2.6 Ensures the integrity and security of archived data and the processes utilised for remote access of data.

3. Support and Communication

- 3.1 Communicates with internal and external users responding to requests for development of maintenance of software components.
- 3.2 Facilitates interaction of internal and external users with developed software tools including enabling access to remote database systems.
- 3.3 Provides educational support for software developers and users.
- 3.4 Maintains documentation of developed resources including user documentation and technical documentation of developed code.

4. Research and Development

- 4.1 Assists with projects being undertaken within Radiation Oncology
- 4.2 Provides expert support for research and development activities regarding programming, software systems, mathematical and analytical techniques, statistics, data archiving and querying.
- 4.3 Undertakes collaborative research work with internal and external collaborators.
- 4.4 Participates in external workshops and seminars, presenting the work of the Radiation Oncology Department.
- 4.5 Contributes original ideas and concepts to ongoing and new research and development projects.
- 4.6 Leads and assists in the development of presentations and publications of outcomes.



5. NMHS Values: *Care, Respect, Innovation, Teamwork, Integrity*

5.1 Reflect the NMHS values in the way you work, behave and make decisions.

6. NMHS Governance, Safety and Quality Requirements

6.1 Participates in the maintenance of a safe work environment.

6.2 Participates in an annual performance development review.

6.3 Supports the delivery of safe patient care and the consumers' experience including participation in continuous quality improvement activities in accordance with the requirements of the National Safety and Quality Health Service Standards and other recognised health standards.

6.4 Completes mandatory training (including safety and quality training) as relevant to role.

6.5 Performs duties in accordance with Government, WA Health, North Metropolitan Health Service and Departmental / Program specific policies and procedures.

6.6 Abides by the WA Health Code of Conduct, Occupational Safety and Health legislation, the Disability Services Act and the Equal Opportunity Act.

7. Undertakes other duties as directed.



Work Related Requirements

The following criteria should be considered in the context of the NMHS Vision, Mission and Values.

Essential Selection Criteria

1. Tertiary Qualifications in computer science or closely related field (e.g. physics, mathematics, data science, software engineering).
2. Well-developed communication and interpersonal skills.
3. Ability to work effectively as part of a multidisciplinary team and independently.
4. Well-developed analytical and organisational skills.
5. Excellent knowledge of computer programming (Python) and algorithm development.
6. Demonstrated high-level application development including complex data archive and retrieval, image processing, graphical display and analytical methods.
7. Excellent demonstrated knowledge of database development including remote access and SQL query, web service development.
8. Knowledge and understanding of continuous quality improvement principles and their practical application.

Desirable Selection Criteria

1. Demonstrated understanding of concepts in Radiation Oncology treatment planning.
2. Relevant postgraduate qualification and/or proven record in research and development.
3. Experience in handling DICOM formatted data.
4. Experience developing with machine learning and deep learning libraries.
5. Current knowledge and commitment to Equal Opportunity in all aspects of employment and service delivery.

Appointment Prerequisites

Appointment is subject to:

- Provision of the minimum identity proofing requirements.
- Successful Criminal Record Screening Clearance.
- Successful Pre-Employment Integrity Check.
- Successful Pre-Employment Health Assessment.

Certification

The details contained in this document are an accurate statement of the duties, responsibilities and other requirements of the position.

Manager/Supervisor

Name:
Signature/HE:
Date:

Dept./Division Head

Name:
Signature/HE:
Date:

Position Occupant

Name:
Signature/HE:
Date:

