Role Description
Senior Epidemiologist

Cluster	NSW Health
Agency	Cancer Institute NSW
Division	Cancer Services and Information
Location	Australian Technology Park
Classification/Grade/Band	Health Manager Level 3
Kind of Employment	Ongoing
ANZSCO Code	224113
Role Number	699092
PCAT Code	2129192
Date of Approval	August 2019
Agency Website	www.cancer.nsw.gov.au

Overview

The Cancer Institute NSW is Australia's first statewide cancer control agency, established to lessen the impact of cancer in NSW. The Institute supports and promotes best practice; working to ensure people across the state, no matter where they live, are provided the same high quality treatment and care that is vital to optimising the outcomes and quality of life for people diagnosed with cancer.

Driven by the purpose and objectives of the NSW Cancer Plan, the Institute continuously works to:

- reduce the incidence of cancer
- increase the survival rate for people with cancer
- improve the quality of life of people living with cancer
- provide a source of expertise on cancer control for the government, health service providers, medical researchers and the general community.

In order to achieve this, the Institute engages with the community, health professionals, researchers, governments and charity organisations to:

- provide information, resources and advice about preventing cancer
- promote the importance of early detection through cancer screening programs and community awareness
- provide grants that build research capacity and foster innovation in, and translation of, cancer research into improved cancer outcomes
- maintain quality information repositories about cancer in NSW to inform future policy and health planning
- establish partnerships with cancer healthcare professionals to develop and evaluate programs to improve the quality of cancer treatment and care in NSW.

Primary purpose of the role

Provide ongoing collaborative development of data quality measures to ensure a continuous supply of 'fit for purpose' clinical data needed to support research and program indicator development. Ensure research initiatives meet both internal and external stakeholder needs and provide expert epidemiological input into the research, monitoring and evaluation activities of the Institute to inform program development and support the achievement of Cancer Plan objectives.

Key accountabilities

- Develop reporting solutions and innovation in data visualisation, access and utilisation of clinical data in a timely manner.
- Engage and collaborate with health professionals within the Institute and external key stakeholder organisations to ensure research initiatives meet stakeholder needs.
- Contribute to the identification of key cancer research requirements, including major obstacles, issues and problems
- Communicate epidemiological findings through the preparation of technical and non-technical reports, peer-reviewed journal publications and presentations to support the delivery of high quality cancer related evidence and information to a diverse range of stakeholders.
- Contribute to the development and implementation of research initiatives that align with stakeholder needs to inform the development of high quality cancer control services.
- Develop reports and undertake analytical projects to advise stakeholders on epidemiological and cancer research related issues to support achievement of the Institutes key strategic objectives for cancer control.
- Undertake complex quantitative analyses to produce high quality epidemiological data and information to inform the development, monitoring and evaluation of cancer control initiatives and reduce the incidence and mortality of cancer.
- Maintain and develop knowledge of analytical and epidemiological methodologies, and implement new techniques to enhance the research and analysis capabilities of the Institute.

Key challenges

- Managing a number of activities concurrently, given the context of high work volumes and demands for accurate and expert responses to complex issues, requiring the integration of diverse sources of information.
- Delivering consistently high quality epidemiological reports and analyses given the need to respond to ad hoc requests for information at short notice.
- Interpreting and communicating results of complex analyses, given the requirement to tailor information to cater to both technical and non-technical audiences.

Key relationships

Who	Why
Internal	
Institute Executive	Advise on epidemiological and cancer research related issues on an ad hoc and project basis, to help inform Cancer Institute NSW's strategic direction, decision making, and communication with external stakeholders
Manager Cancer Analysis and Statistics	Receive guidance and advice, and provide updates and information on the progress of projects
Manager Data and Reporting	Advise on data specifications for automated reporting, and support the transferral of analyses to the Data and Reporting team for routine reporting when applicable
Program Lead Data Input and Collection	Receive advice and guidance on clinical data including available sources, specifications, quality statements and interpretation to support routine reporting, research and indicator development
External	
Interstate Cancer Control Agencies	Collaborate on the establishment of national cancer benchmarks
Clinicians	Seek advice on clinical interpretations and engage them in analysis to increase validity, acceptance and impact of results
Other External Stakeholders	Liaise to ensure research questions and results are clinically relevant; propose research initiatives that both extend existing program and involve new areas of cancer research

Role dimensions

Decision making

- Accountable for determining and managing own priorities and workload.
- Responsible for delivery epidemiological research and related activities within agreed timeframes, budgets and quality standards.
- Exercises discretion and judgement in providing advice and responding to enquiries and correspondence, escalating any contentious issues to supervisor.

Reporting line

The Senior Epidemiologist reports to Manager Cancer Analysis and Statistics

Direct reports

The Senior Epidemiologist has 0 direct reports

Budget/Expenditure

N/A

Essential requirements

- Experience in communicating epidemiological concepts and results effectively to peers and non-technical stakeholders.
- Demonstrated ability to work with multidisciplinary organisational teams to understand complex data sources, contribute to quality statements and retain clinical context and integrity of health data in analysis.
- Demonstrated experience in the application of statistical techniques including survival analysis, generalized linear models and multi-level models.
- Demonstrated experience in working with large linked State and Commonwealth administrative data sets and governance requirements of this work.
- Strong computing and analytical skills using databases and statistical programming using software packages and languages such as SAS, R, Shiny and SQL.
- Knowledge of health care systems and the principles underlying health service information systems applicable to cancer control.
- Appropriate tertiary qualifications in epidemiology, public health, statistics, biostatistics or health information.

Capabilities for the role

The NSW Public Sector Capability Framework applies to all NSW public sector employees. The Capability Framework is available at www.psc.nsw.gov.au/capabilityframework

This role also utilises an occupation specific capability set.

Capability summary

Below is the full list of capabilities and the level required for this role. The capabilities in bold are the focus capabilities for this role. Refer to the next section for further information about the focus capabilities.

NSW Public Sector Capability Framework		
Capability Group	**Capability Name**	**Level**
Personal Attributes	Display Resilience and Courage	Adept
	Act with Integrity	**Adept**
	Manage Self	**Adept**
	Value Diversity	Intermediate
Relationships	**Communicate Effectively**	**Adept**
	Commit to Customer Service	Intermediate
	Work Collaboratively	Intermediate
	Influence and Negotiate	Adept
Results	Deliver Results	Adept
	Plan and Prioritise	**Adept**
	Think and Solve Problems	**Adept**

NSW Public Sector Capability Framework

Capability Group	Capability Name	Level	
	Demonstrate Accountability	Adept	
Business Enablers	Finance	Intermediate	
	Technology	**Intermediate**	
	Procurement and Contract Management	Intermediate	
	Project Management	Intermediate	

Occupation / profession specific capabilities

Capability Set	Capability Name	Level
Occupation Specific	**Research**	**Adept**

Focus capabilities

The focus capabilities for the role are the capabilities in which occupants must demonstrate immediate competence. The behavioural indicators provide examples of the types of behaviours that would be expected at that level and should be reviewed in conjunction with the role's key accountabilities.

NSW Public Sector Capability Framework		
Group and Capability	**Level**	**Behavioural Indicators**
Personal Attributes Act with Integrity	Adept	• Represent the organisation in an honest, ethical and professional way and encourage others to do so • Demonstrate professionalism to support a culture of integrity within the team/unit • Set an example for others to follow and identify and explain ethical issues • Ensure that others understand the legislation and policy framework within which they operate • Act to prevent and report misconduct, illegal and inappropriate behaviour
Personal Attributes Manage Self	Adept	• Look for and take advantage of opportunities to learn new skills and develop strengths • Show commitment to achieving challenging goals • Examine and reflect on own performance • Seek and respond positively to constructive feedback and guidance • Demonstrate a high level of personal motivation
Relationships Communicate Effectively	Adept	• Tailor communication to the audience • Clearly explain complex concepts and arguments to individuals and groups

NSW Public Sector Capability Framework		
Group and Capability	**Level**	**Behavioural Indicators**
		• Monitor own and others' non-verbal cues and adapt where necessary • Create opportunities for others to be heard • Actively listen to others and clarify own understanding • Write fluently in a range of styles and formats
Results Plan and Prioritise	Adept	• Take into account future aims and goals of the team/unit and organisation when prioritising own and others' work • Initiate, prioritise, consult on and develop team/unit goals, strategies and plans • Anticipate and assess the impact of changes, such as government policy/economic conditions, on team/unit objectives and initiate appropriate responses • Ensure current work plans and activities support and are consistent with organisational change initiatives • Evaluate achievements and adjust future plans accordingly
Results Think and Solve Problems	Adept	• Research and analyse information, identify interrelationships and make recommendations based on relevant evidence • Anticipate, identify and address issues and potential problems and select the most effective solutions from a range of options • Participate in and contribute to team/unit initiatives to resolve common issues or barriers to effectiveness • Identify and share business process improvements to enhance effectiveness
Business Enablers Technology	Intermediate	• Apply computer applications that enable performance of more complex tasks • Apply practical skills in the use of relevant technology • Make effective use of records, information and knowledge management functions and systems • Understand and comply with information and communications security and acceptable use policies • Support the implementation of systems improvement initiatives and the introduction and roll-out of new technologies

Occupation / profession specific capabilities		
Capability Name	**Level**	**Level Descriptions**

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Occupation / profession specific capabilities		
Capability Name	**Level**	**Level Descriptions**
Research	Adept	• Apply knowledge of quantitative, qualitative and/or evaluation research methods, also considering the role of new and innovative methods • Advise, critique and oversee the use of qualitative and/or quantitative research methods, contributing to discussions of most applicable approach • Collaborate with end users to identify their information/research needs and evidence gaps, determining appropriate research approach • Undertake objective, critical analysis of research data and evidence to evaluate and translate this for optimal use for end user requirements • Identify and interpret trends and opportunities for innovation following review and synthesis of gaps, facts, issues, patterns, interrelationships and trends • Interpret ethical, regulatory and legislative requirements and compliance issues to ensure their application throughout the planning, undertaking and closure of research

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