

Role Description

Senior Statistician



Cluster	NSW Health
Agency	Cancer Institute NSW
Division	Cancer Screening and Prevention
Location	Australian Technology Park
Classification/Grade/Band	Health Manager Level 3
Kind of Employment	Permanent
ANZSCO Code	224711
Role Number	672546
PCAT Code	11366591
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.

The Division of Cancer Screening and Prevention works to reduce the incidence of cancer and improve the survival of people with cancer through:

- management and funding for the three population-based cancer screening programs (bowel, breast and cervical)
- the coordination of cancer screening and smoking cessation services for the people of NSW
- the implementation of social marketing campaigns which aim to modify the behavior of the community to increase participation in the cancer screening programs; and reduce the risk of developing cancer
- providing advice and contributing to policy development and implementation.

The Senior Statistician is part of the Screening and Prevention Reporting & Analytics team. This team works with the three cancer screening programs and prevention portfolios.

Primary purpose of the role

Work with key stakeholders in the organisation, as well as with service management staff, to undertake strategic data analytics and modelling for the purposes of service improvement, as well as ensuring research methodologies are robust and accurate in order to inform decision making and support the achievement of Cancer Plan objectives.

Key accountabilities

- Collaborate with Cancer Institute and Screening and Assessment Services staff to define and develop data analysis and research for service management, participation improvement and funding purposes
- Apply business analysis skills to undertake requirements analysis, scope projects and develop project proposals using a consistent corporate approach
- Undertake complex analysis, linkage and modelling using BreastScreen NSW, national and NSW Health data, including:
 - using R, SAS and other relevant data analysis software
 - building up familiarity and utilising a variety of internal and external large scale administrative datasets
 - analysis and mining of unit record ABS and other population survey data for population profiling and modelling to inform marketing and recruitment strategies
 - supporting evaluation of service improvement strategies carried out within Screening and prevention
- Documentation, presentation and communication of analysis, methodology and results, including interpretation of findings and application to business improvement.

Key challenges

- Implementing business systems and processes to meet diverse stakeholders needs
- Communicating complex issues and advice to a wide range of stakeholders, given diverse interests and varying levels of technical knowledge.

Key relationships

Who	Why
Internal	
Team Leader, Reporting & Analytics	Receive guidance from and provide updates on key strategic projects, issues and priorities on key BAU projects, issues and priorities
Institute Staff	Collaborate with to identify and address business requirements and data provision
External	
Data Managers	Exchange information and collaborate with to maintain data quality and integrity
Interstate Data Managers	Exchange information and liaise with regarding BreastScreen Australia programs and projects
Researchers	Collaborate with and provide data for research projects

Role dimensions

Decision making

- The Senior Statistician is expected to operate with some level of autonomy in respect to the application of their specific field of expertise, is fully accountable for the accuracy, integrity and quality of the content of specialist technical advice and services provided and makes day-to-day decisions relating to work priorities and workload management, for themselves and any staff/project staff supervised.
- The position is also responsible for the delivery of assigned projects on time and within budget and for the conduct of negotiations with agency and external stakeholders and partners on such projects.

Reporting line

The Senior Statistician reports to Team Leader, Reporting & Analytics

Direct reports

The Senior Statistician has 0 direct reports, however does supervise a Data Analyst on specific projects

Budget/Expenditure

N/A

Essential requirements

- Tertiary qualifications in a quantitative discipline, such as statistics/ biostatistics, mathematics, engineering, actuarial studies or other related discipline, and demonstrated relevant equivalent professional experience and training. Demonstrated experience in undertaking statistical data analysis and reporting on large datasets for the purpose of performance monitoring and improvement, using R, SQL and SAS coding and advanced Excel
- Experience in determining appropriate statistical tools and techniques for interrogating and analysing data for large scale projects
- Experience in project management of research projects including project plan development, methodology, ethics submissions and project governance
- Demonstrated ability to engage and work collaboratively with key business stakeholders on analytics projects, including understanding and refining requirements and effective presentation of results to non-technical stakeholders.






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

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	Intermediate
	Manage Self	Adept
	Value Diversity	Intermediate
 Relationships	Communicate Effectively	Adept
	Commit to Customer Service	Adept
	Work Collaboratively	Intermediate
 Results	Influence and Negotiate	Adept
	Deliver Results	Adept
	Plan and Prioritise	Adept
	Think and Solve Problems	Adept
 Business Enablers	Demonstrate Accountability	Intermediate
	Finance	Intermediate
	Technology	Adept
	Procurement and Contract Management	Intermediate
 Occupation Specific	Project Management	Intermediate
	Data Management	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 Display Resilience and Courage	Adept	<ul style="list-style-type: none"> • Be flexible, show initiative and respond quickly when situations change • Give frank and honest feedback/advice • Listen when ideas are challenged, seek to understand the nature of the criticism and respond constructively • Raise and work through challenging issues and seek alternatives • Keep control of own emotions and stay calm under

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
Relationships Communicate Effectively	Adept	<p>pressure and in challenging situations</p> <ul style="list-style-type: none"> • Tailor communication to the audience • Clearly explain complex concepts and arguments to individuals and groups • 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
Relationships Work Collaboratively	Intermediate	<ul style="list-style-type: none"> • Build a supportive and co-operative team environment • Share information and learning across teams • Acknowledge outcomes which were achieved by effective collaboration • Engage other teams/units to share information and solve issues and problems jointly • Support others in challenging situations
Relationships Influence and Negotiate	Adept	<ul style="list-style-type: none"> • Negotiate from an informed and credible position • Lead and facilitate productive discussions with staff and stakeholders • Encourage others to talk, share and debate ideas to achieve a consensus • Recognise and explain the need for compromise • Influence others with a fair and considered approach and sound arguments • Show sensitivity and understanding in resolving conflicts and differences • Manage challenging relations with internal and external stakeholders • Pre-empt and minimise conflict
Results Plan and Prioritise	Adept	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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

NSW Public Sector Capability Framework

Group and Capability	Level	Behavioural Indicators
		<p>range of options</p> <ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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
Data Management	Adept	<ul style="list-style-type: none"> • Identify and apply appropriate analytical evaluation methodologies, techniques and concepts • Review and evaluate data sources to assess the validity and reliability of the data, applying a range of analytical techniques to inform analysis outputs • Apply key attributes for structuring data, recognising commonly used formats and how best to use these in meeting end user needs • Advise on the application of quality standards, facilitating compliance and contributing to improvements