



## ROLE DESCRIPTION

<b>Role Title:</b>	Solution Architect - Cancer
<b>Classification Code:</b>	ASO8
<b>LHN/ HN/ SAAS/ DHW:</b>	Commission on Excellence and Innovation in Health
<b>Hospital/ Service/ Cluster:</b>	
<b>Division:</b>	Clinical Informatics Directorate
<b>Department/Section / Unit/ Ward:</b>	
<b>Role reports to:</b>	Clinical Informatics Director
<b>Role Created/ Reviewed Date:</b>	02/10/2019
<b>Criminal and Relevant History Screening:</b>	<input type="checkbox"/> Aged (NPC) <input type="checkbox"/> Working With Children's Check (WWCC) (DHS) <input type="checkbox"/> Vulnerable (NPC) <input checked="" type="checkbox"/> General Probity (NPC)
<b>Immunisation Risk Category Requirements:</b>	<input type="checkbox"/> Category A (direct contact with blood or body substances) <input type="checkbox"/> Category B (indirect contact with blood or body substances) <input checked="" type="checkbox"/> Category C (minimal patient contact)

## ROLE CONTEXT

### Primary Objective(s) of role:

The Solution Architect – Cancer leads the development and planning of a complex patient centric data lake house and software architecture and designs the framework for the agency applications and solutions to specifically meet the needs of the SA Cancer Network. The role interprets complex solution requirements and designs software architectures working collaboratively with clinicians, the CEIH Clinical Informatics Directorate (CID) and other stakeholders to ensure a consistent approach to the provision and the interoperability of the architecture framework. The Solution Architect also leads and manages the investigation and introduction of best practices and architectural standards and guidelines for development of lakehouse model and interfacing applications.

The Solution Architect - Cancer leads and works collaboratively with team members and customers to understand requirements and delivers technical consultancy to the development of solution recommendations. The role is also responsible for ensuring activities comply with data governance and data security requirements and the CID agreed development and configuration standards as well as the data architecture and model and application design. The Solution Architect – Cancer will ensure secure development practices and ensure that the appropriate security controls are incorporated into all system designs. As a solution architect, the role will mentor and support more junior team members, evangelise human centred design, user insights, innovation, security and privacy as core tenets.

The position operates in a complex technical environment and provides customer focussed services to consumers including clinicians, consumers, researchers, the Minister, operational managers and executives to facilitate data driven decisions which ensure appropriate, safe and quality services for patients within the public health system in South Australia and beyond.

The CID values innovation, excellence, collaboration, knowledge sharing, transparency, accountability and respect.

**Direct Reports:**

- > Whilst this role does not have any direct reports it is expected that as a senior member of the team they will provide leadership, guidance and set standards for other similar roles working with or contracted to the team.

**Key Relationships/ Interactions:**Internal

- > Works with and advises the SA Cancer Network as primary audience.
- > Reports to the Clinical Informatics Director.
- > Works with and advises the CID team comprising business analysts, technical developers, data analysts / scientists, data engineers and report writers.

External

- > Liaises with external service providers, vendors and partners.
- > Where required represents the CEIH on government and agency committees and working parties.
- > Liaises extensively with clinicians, clinical support staff, informaticians, business managers, the Department of Health and Wellbeing including the Data, Analytics and Insights team and Digital Health SA including the Office of the Chief Medical Information Officer.

**Challenges associated with Role:**

Major challenges currently associated with the role include:

- > Leading and driving innovative solutions in the creation of faster data access, integrated data reuse and vastly improved time-to-solution for clinical informatics initiatives.
- > Establishing relationships with, and managing the expectations of a diverse range of stakeholders in a dynamic and changing environment.
- > Maintaining a contemporary knowledge of data lake solutions and architecture, market analysis for clinical tools, data lakehouse design, data integration tools and techniques, data architecture and data modelling to support innovation in tailored, accessible data.
- > Working in a fast paced environment characterised by complexity, innovation and change.

**Delegations:**

- > None

## Key Result Area and Responsibilities

Key Result Areas	Major Responsibilities
Cancer related Data Architecture / Data Model	<ul style="list-style-type: none"> <li>&gt; Lead the development of architectures for complex solutions, including balancing functional, service quality, security and systems management requirements agreed with both external and internal customers for high quality customer outcomes.</li> <li>&gt; Lead and guide development and review of application and data integration architecture and framework which supports and facilitates the availability of key data and analytics for data consumers.</li> <li>&gt; Undertake comprehensive research and assessment of current trends in application and data architecture and models, tools and cloud technology and make recommendations for critical data warehouse growth and in relation to improving complex data integration and accessibility.</li> <li>&gt; Lead and oversee the development and implementation of application interfaces and lake house architecture and framework that are aligned with best practice and clinical informatics needs focussed on a consistent 'version of the truth', including evaluating data warehouse architecture goals, identifying skill requirements and providing high level reports and recommendations to influence decision making.</li> <li>&gt; Lead, design and undertake the development and evaluation of data and applications architecture and both physical and logical data models.</li> <li>&gt; Lead, undertake and evaluate risk identification and mitigation strategies and processes associated with the architecture.</li> </ul>
Cancer related Application development and integration	<ul style="list-style-type: none"> <li>&gt; Lead the strategic planning, development, management and evaluation of complex clinical applications and services that integrate and standardise data assets, create faster data access, secure application environment and a consistent 'version of the truth' and vastly improved time-to-solution for clinical applications.</li> <li>&gt; Lead, design and undertake the sourcing and integration of data into linked data assets enabling appropriate data access including to support use cases such as data at the point of care for delivery treatment plans, recommendations, personalised care, patient outcomes and share with authorised persons in new and innovative ways.</li> <li>&gt; Lead and deliver technical consultancy to the implementation and integration of high quality data to meet agreed user needs.</li> <li>&gt; Lead and ensure that the deployment of data integration and automation solutions to production and handover to the designated technical owner comply with SDLC and change management standards and includes the provision of technical advice and support for operations and problem resolution.</li> <li>&gt; Lead and ensure that the deployment of clinical applications and solutions comply with SDLC and change management standards and includes the provision of technical advice and support for operations and problem resolution.</li> <li>&gt; Evaluate all data integration processes, oversee and undertake troubleshooting and monitor the resolution of risks and issues.</li> </ul>
Development standards	<ul style="list-style-type: none"> <li>&gt; Lead and ensure that projects, activities and services comply strictly with SDLC standards with respect to the development and maintenance of application and data solutions assets.</li> <li>&gt; Set standards for and document the technical design and solution of</li> </ul>

	<p>any development work complying with agreed standards and conventions and champion best practices in the delivery of digital solutions to drive business outcomes</p> <ul style="list-style-type: none"> <li>&gt; Lead, undertake and ensure that master and meta data management is occurring and being captured in accordance with agreed standards.</li> <li>&gt; Lead and undertake the development and implementation of policy and practices for the technical design, development, testing and deployment of systems, quality assurance systems and repositories to ensure data is centrally managed as a “single version of the truth” and meets clinical informatics requirements.</li> <li>&gt; Manage and undertake the optimisation of applications and implement best practices to create faster data access, integrated data reuse and improved time-to-solution.</li> </ul>
Incident and Business Continuity	<ul style="list-style-type: none"> <li>&gt; Lead and undertake a range of complex application administration and maintenance activities and functions, including overseeing and ensuring documentation for support and administration standards are maintained.</li> <li>&gt; Prepare comprehensive handover plans and documentation and ensure that critical handover activities occur in a complete and timely manner.</li> <li>&gt; Provide expert technical advice to the identification and resolution of complex data integration, Data Warehousing and/or Business Intelligence problems, issues and risks across system components.</li> <li>&gt; Monitor and ensures that Service Level Agreements with respect to performance, reliability and business continuity are met.</li> <li>&gt; Develop, and provide technical advice to, business continuity plans in to ensure alignment with relevant legislative and regulatory frameworks, and develop review and implement agency-wide policy</li> </ul>
Project Management	<ul style="list-style-type: none"> <li>&gt; Working with and supported partially by other project managers, lead the planning, development, implementation and evaluation of complex and interdependent data analysis projects including the preparation of project plans, budgets, risk logs and communication plans and ensure projects are delivered in accordance with agreed project management approach and tools.</li> <li>&gt; Formulate, implement and evaluate solutions which focus on sustainability and embedding, as ‘business as usual’, an understanding about clinical indicators and related measures, the importance of good data quality, stakeholder engagement and communication, and education.</li> <li>&gt; Lead and manage multi-disciplinary project teams and provide expert technical advice and support to project management and staff to ensure project outcomes are achieved in alignment with the organisation’s current strategic and operational requirements.</li> <li>&gt; Monitor and provide high level reports on project progress, performance and financial position to key stakeholders and develop corrective actions where required.</li> <li>&gt; Provide expert technical advice and contribution to the identification, management and resolution of complex risks across the system..</li> </ul>
Capability, knowledge sharing and engagement	<ul style="list-style-type: none"> <li>&gt; Establish and manage relationships, partnerships and networks with executive management and key internal and external stakeholders to build capability and facilitate information flows.</li> <li>&gt; Lead and guide stakeholder groups to focus on action based outcomes aimed at improving health outcomes for consumers and encourage a spirit of collaboration and knowledge sharing.</li> <li>&gt; Develop, implement and monitor standards and mentor Clinical Informatics Directorate team members to build capacity and capability within the team.</li> </ul>

	<ul style="list-style-type: none"> <li>&gt; Deliver high level representation of the CEIH and the agency on relevant whole of Government committees, forums and working parties.</li> <li>&gt; Provide technical consultation and advisory services and contribute to the education and training of technical staff across the agency in regards to data integration techniques, best practice and coding standards.</li> <li>&gt; Manage and undertake the publishing of a range of technical and non-technical documentation to the agreed library/knowledgebase.</li> </ul>
Continuous Improvement	<ul style="list-style-type: none"> <li>&gt; Provide expert technical advice and contribution to knowledge base, share and promote its' use within the team and across CEIH customers.</li> <li>&gt; Lead the development, implementation and management of quality improvement standards and measurement strategies within the CEIH.</li> <li>&gt; Model and encourage a culture within the Clinical Informatics Directorate of continuous improvement, an expectation of excellence and data-driven in all aspects of work, including monitoring team performance.</li> <li>&gt; Monitor own performance to ensure that work is appropriately prioritised and completed on schedule.</li> <li>&gt; Ensure own training and skills are appropriate and raise required training and up-skilling requirements with the manager.</li> <li>&gt; Contribute to the development and achievement of the CEIH objectives.</li> </ul>
Corporate Compliance	<ul style="list-style-type: none"> <li>&gt; Comply with all of the organisations workplace policies and procedures.</li> <li>&gt; Comply with the Code of Conduct for Public Sector Employees.</li> <li>&gt; Manage the official records he/she creates and receives according to relevant legislation, policies and procedures.</li> <li>&gt; Identify and report all health and safety risks, accidents, incidents, injuries property damage and near misses in the workplace.</li> <li>&gt; Participate in all activities associated with the management of workplace health and safety</li> <li>&gt; Promote awareness and compliance with Equal Employment Opportunity principles.</li> <li>&gt; Ensure cultural sensitivity is maintained by attending and contributing to their learning in diversity of Cultural awareness and cross cultural training, with a frequency determined as appropriate by the organisation.</li> </ul>

## **Knowledge, Skills and Experience**

### **ESSENTIAL MINIMUM REQUIREMENTS**

#### **Educational/Vocational Qualifications:**

- > Nil.

#### **Personal Abilities/Aptitudes/Skills:**

- > An ability to manage to the spirit and principles of the premier's safety Commitment and the legislative requirements of the Occupational Health Safety and Welfare Act, utilising AS/NZS 4360 Risk Management, or to an equivalent set of standards.
- > Highly effective communication and interpersonal skills including a high level ability to advise on and present complex ideas clearly and concisely and tailor insights to audience diverse range of technical and non-technical stakeholders to advise, consult and negotiate successful outcomes in a professional, competent and ethical manner, and develop high level recommendations and documentation.
- > Demonstrated ability to identify and analyse complex problems, formulate and implement innovative solutions and meet strict deadlines in an environment of continual change and growth.
- > Demonstrated ability to work independently, as well as collaboratively in a team, under broad direction, exercise significant levels of independent judgement and delegated authority to determine goals and priorities within the framework of the corporate objectives of the agency and ensure that the required standards of accuracy and quality are met within tight timeframes.

#### **Experience:**

- > 5+ years experience in developing and designing solution architecture, Azure based cloud architecture security, application development, risk management, and modern warehouse data architecture. Demonstrated experience in the development and governance of business (preferably clinical), information systems and infrastructure architectures including security control design and estimating (incl, effort, duration and costs) in complex environments.
- >
- > Extensive experience leading the strategic planning, development and management of complex data sourcing and integration projects and services including creating, improving, and operationalising integrated and reusable data pipelines and documenting and developing solution technology to support the resolution of critical business problems and risks.
- > Demonstrated ability to work under broad policy guidelines in a multidisciplinary team on multiple priorities with tight timeframes and exercising original thinking, significant levels of independent judgement, clear communication methods, leadership and negotiation skills to resolve technically complex problems.
- > Extensive experience in leading, developing, influencing and maintaining collaborative and effective networks, alliances and operational relationships with internal and external clients and key stakeholders across a large, complex and dynamic organisation.

## Knowledge:

- > Comprehensive contemporary knowledge of data warehouse design, , development and optimisation Cloud Architecture, Application interfaces methodologies and best practices and a range of applications and and data integration tools, and knowledge of Microsoft BI stack, SharePoint, or similar information delivery tools and their BI applications.
- > Expert knowledge of data integration, ingestion, data architecture and warehousing, data modelling approaches to support high-performance analytics environments.
- > Extensive knowledge of project management, governance, assurance and evaluation processes and methodologies applied in the collection, integration, analysis, and presentation of data and business information and detailed knowledge of relevant government policies and their application to agency operations.

## DESIRABLE CHARACTERISTICS

### Educational/Vocational Qualifications:

- > Degree in computer science or similar.
- > Qualifications in data warehousing architecture design.

### Personal Abilities/Aptitudes/Skills:

### Experience:

- > Demonstrated experience working with health and/or research data, preferably cancer related including registries and clinical trials, to meet system wide clinical informatics and application requirements.

## Knowledge:

### **Professional / Technical ICT Capabilities (Skills Framework for the Information Age – SFIA):**

- Strategy and Architecture – IT Governance:** Reviews information systems for compliance with legislation and specifies any required changes. Responsible for ensuring compliance with organisational policies and procedures and overall information management strategy.
- Solution Architecture:** Contributes to the development of solution architectures in specific business, infrastructure or functional areas. Identifies and evaluates alternative architectures and the trade-offs in cost, performance and scalability. Produces specifications of cloud-based or on-premises components, tiers and interfaces, for translation into detailed designs using selected services and products. Supports a change programme or project through the preparation of technical plans and application of design principles that comply with enterprise and solution architecture standards (including security).
- Information Security:** Develops and communicates corporate information security policy, standards and guidelines. Contributes to the development of organisational strategies that address information control requirements. Identifies and monitors environmental and market trends and pro-actively assesses impact on business strategies, benefits and risks. Leads the provision of authoritative advice and guidance on the requirements for security controls in collaboration with experts in other functions such as legal, technical support. Ensures architectural principles are applied during design to reduce risk and drives adoption and adherence to policy, standards and guidelines.

### **Special Conditions:**

- > It is mandatory that no person, whether or not already working in SA Health, may be appointed to a position in SA Health unless they have provided the a satisfactory current Criminal and Relevant History Screening, as required by the *SA Health Criminal and Relevant History Screening Policy Directive*.
- > *For appointment in a Prescribed Position under the Child Safety (Prohibited Persons) Act (2016)*, a current Working with Children Check (WWCC) is required from the Department for Human Services Screening Unit. For other positions, a satisfactory National Police Certificate (NPC) assessment is required.



- > For 'Prescribed Positions' under the *Child Safety (Prohibited Persons) Act (2016)*, the individual's WWCCs must be renewed every 5 years from the date of issue; and for 'Approved Aged Care Provider Positions' every 3 years from date of issue as required by the *Accountability Principles 2014* issued pursuant to the *Aged Care Act 1997 (Cth)*.
- > Appointment is subject to immunisation risk category requirements. There may be ongoing immunisation requirements that must be met.
- > Depending on work requirements the incumbent may be transferred to other locations across SA Health to perform work appropriate to classification, skills and capabilities either on a permanent or temporary basis subject to relevant provisions of the *Public Sector Act 2009* for Public Sector employees or the *SA Health (Health Care Act) Human Resources Manual* for Health Care Act employees.
- > The incumbent may be required to participate in Counter Disaster activities including attendance, as required, at training programs and exercises to develop the necessary skills required to participate in responses in the event of a disaster and/or major incident.

### General Requirements:

Managers and staff are required to work in accordance with the Code of Ethics for South Australian Public Sector, Directives, Determinations and Guidelines, and legislative requirements including but not limited to:

- > *Work Health and Safety Act 2012 (SA)* and when relevant WHS Defined Officers must meet due diligence requirements.
- > *Return to Work Act 2014 (SA)*, facilitating the recovery, maintenance or early return to work of employees with work related injury / illness.
- > Meet immunisation requirements as outlined by the *Immunisation for Health Care Workers in South Australia Policy Directive*.
- > Equal Employment Opportunities (including prevention of bullying, harassment and intimidation).
- > *Children and Young People (Safety) Act 2017 (SA)* 'Notification of Abuse or Neglect'.
- > Disability Discrimination.
- > *Independent Commissioner Against Corruption Act 2012 (SA)*.
- > *Information Privacy Principles Instruction*.
- > Relevant Awards, Enterprise Agreements, *Public Sector Act 2009*, *Health Care Act 2008* and the *SA Health (Health Care Act) Human Resources Manual*.
- > Relevant Australian Standards.
- > Duty to maintain confidentiality.
- > Smoke Free Workplace.
- > To value and respect the needs and contributions of SA Health Aboriginal staff and clients, and commit to the development of Aboriginal cultural competence across all SA Health practice and service delivery.
- > Applying the principles of the *South Australian Government's Risk Management Policy* to work as appropriate.

The SA Health workforce contributes to the safety and quality of patient care by adhering to the South Australian Charter of Health Care Rights, understanding the intent of the National Safety and Quality Health Service Standards and participating in quality improvement activities as necessary.

### Performance Development:

The incumbent will be required to participate in the organisation's Performance Review and Development Program which will include a regular review of the incumbent's performance against the responsibilities and key result areas associated with their position and a requirement to demonstrate appropriate behaviours which reflect a commitment to SA Health values and strategic directions.

### Handling of Official Information:



By virtue of their duties, SA Health employees frequently access, otherwise deal with, and/or are aware of, information that needs to be treated as confidential.

SA Health employees will not access or attempt to access official information, including confidential patient information other than in connection with the performance by them of their duties and/or as authorised.

SA Health employees will not misuse information gained in their official capacity.

SA Health employees will maintain the integrity and security of official or confidential information for which they are responsible. Employees will also ensure that the privacy of individuals is maintained and will only release or disclose information in accordance with relevant legislation, industrial instruments, policy, or lawful and reasonable direction.

**White Ribbon:**

SA Health has a position of zero tolerance towards men's violence against women in the workplace and the broader community. In accordance with this, the incumbent must at all times act in a manner that is non-threatening, courteous, and respectful and will comply with any instructions, policies, procedures or guidelines issued by SA Health regarding acceptable workplace behaviour.

**Resilience:**

SA Health employees persevere to achieve goals, stay calm under pressure and are open to feedback.

## Organisational Context

### Legal Entities:

SA Health is the brand name for the health portfolio of services and agencies responsible to the Minister for Health and Wellbeing. The Department for Health and Wellbeing is an administrative unit under the Public Sector Act 2009.

The legal entities include but are not limited to the Commission on Excellence and Innovation in Health, Central Adelaide Local Health Network Inc., Northern Adelaide Local Health Network Inc., Southern Adelaide Local Health Network Inc., Women's and Children's Health Network Inc., Barossa Hills Fleurieu Local Health Network Inc., Eyre and far North Local Health Network Inc., Flinders and Upper North Local Health Network Inc., Limestone Coast Local Health Network Inc., Riverland Mallee Coorong Local Health Network Inc., Yorke and Northern Local Health Network Inc. and SA Ambulance Service Inc.

### The Commission on Excellence and Innovation in Health:

The Commission on Excellence and Innovation in Health provides leadership and advice on clinical best practice with a focus on maximising health outcomes for patients, improving care and safety, monitoring performance, championing evidence-based practice and clinical innovation, and supporting clinical collaboration.

The Commission will bring together expertise from clinicians, consumers, health partners and other relevant stakeholders to maximise health outcomes for patients.

## Values

### SA Health Values

The values of SA Health are used to indicate the type of conduct required by our employees and the conduct that our customers can expect from our health service:

- > We are committed to the values of integrity, respect and accountability.
- > We value care, excellence, innovation, creativity, leadership and equity in health care provision and health outcomes.
- > We demonstrate our values in our interactions with others in SA Health, the community, and those for whom we care.

### Code of Ethics

The *Code of Ethics for the South Australian Public Sector* provides an ethical framework for the public sector and applies to all public service employees:

- > Democratic Values - Helping the government, under the law to serve the people of South Australia.
- > Service, Respect and Courtesy - Serving the people of South Australia.
- > Honesty and Integrity- Acting at all times in such a way as to uphold the public trust.
- > Accountability- Holding ourselves accountable for everything we do.
- > Professional Conduct Standards- Exhibiting the highest standards of professional conduct.

*The Code recognises that some public sector employees are also bound by codes of conduct relevant to their profession.*

## Approvals

### Role Description Approval

I acknowledge that the role I currently occupy has the delegated authority to authorise this document.

**Name:**

**Role Title:**

**Signature:**

**Date:**

## Role Acceptance

### Incumbent Acceptance

I have read and understood the responsibilities associated with role, the organisational context and the values of SA Health as outlined within this document.

**Name:**

**Signature:**

**Date:**

### Version control and change history

Version	Date from	Date to	Amendment
V1	10/02/2017	09/04/2017	Original version.
V2	10/04/2017	04/07/2017	Safety & Quality statement in General Requirements.
V3	04/07/2017	10/07/2018	Minor formatting with order of information amended.
V4	11/07/2018	26/03/2019	Updated legal entities for Minister and Department title on Page 7. Updated Immunisation Guidelines to Policy Directive under general requirements.
V5	27/03/2019	04/06/2019	Added categories for immunisation requirements on front page.
V6	05/06/2019	25/06/2019	Updated changes to the Criminal Relevant History and Screening.
V7	26/09/2019	14/06/2022	Updated legal entities to include new regional LHN's.
V8	15/06/2022	20/08/2024	Additional context for role
V8	21/08/2024		Modification for Solution Architect - Cancer