

Data Governance Policy

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Document Title:	<i>Data Governance Policy</i>			
Summary:	<i>This policy provides the Cancer Institute NSW (the Institute) with an instrument to formally manage its data assets in a collaborative, consistent and co-ordinated manner.</i>			
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Applies To:	<i>All staff and contractors of all Divisions of the Institute.</i>			
References:	<p>Policy, Procedures and Guidelines:</p> <ul style="list-style-type: none"> • <i>Information Security Policy (E07/26801)</i> • <i>Information Classification, Labelling and Handling Procedure (E14/02843)</i> • <i>Records & Information Management Policy (E06/10927)</i> • <i>Data Custodian Guideline (E14/15305)</i> • <i>Data Custodian Appointment Procedure (E15/32397)</i> • <i>Data Breach Management Procedure (E15/42520)</i> • <i>Metadata Management Policy (E17/18216)</i> • <i>Master and Reference Data Management Policy (E17/18215)</i> <p>NSW Government:</p> <ul style="list-style-type: none"> • <u>NSW Government – NSW Data & Information Custodianship Policy</u> • <u>Electronic Information Security Policy – NSW Health</u> • <u>NSW Health – Privacy Manual for Health Information</u> • <u>NSW Health Data Governance Framework</u> • <u>NSW Health Data Governance Program – Staff Roles and Responsibilities</u> • <u>Data collections – Disclosure of Unit Record Data for Research or Management of Health Services</u> • <u>Cancer Institute (NSW) Act 2003</u> <p>Industry:</p> <p><i>Data Management Association’s Guide to the Data Management Body of Knowledge (DAMA-DMBOK)</i></p>			
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	0.1	<i>S James</i>	03/10/2010	<i>Initial draft.</i>
	1.0	<i>S James</i>	27/07/2010	<i>Revised final draft.</i>
	1.1	<i>N Grayson</i>	09/09/2015	<i>Reviewed & updated policy.</i>
	2.0	<i>N Grayson</i>	09/09/2015	<i>Final version.</i>

	2.1	<i>N Grayson</i>	22/02/2017	<i>Reviewed & updated policy.</i>
	3.0	<i>P Siddens</i>	24/05/2017	<i>Minor formatting & edits.</i>
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Approvals	Version	Who	Date	Record
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	3.0	<i>Professor David Currow</i>	23/06/2017	<i>Approved.</i>
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1 Introduction

1.1 Overview

The Cancer Institute NSW (the Institute) was established in July 2003 through the Cancer Institute (NSW) Act 2003 to lessen the impact of cancer in NSW. The Institute is funded by the NSW State Government and governed by the Cancer Institute NSW Board. The Institute's objectives are to:

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

The Institute's data assets are used to support these objectives.

1.2 Purpose

The purpose of this policy is to provide the Institute with an instrument to govern its data assets effectively through the exercise of authority and control (planning, guiding and monitoring) over the management of these assets in order to ensure:

- strategic alignment of the Institute's data assets to the NSW Cancer Plan;
- compliance with relevant legislation, policies and procedures and standards;
- confidence in the data used to inform decisions;
- effective assurance and control of data management processes;
- formalised roles and responsibilities;
- protection of the data through documented policies and procedures, and ongoing communication, education and monitoring.

1.3 Scope

This policy covers data governance for all of the Institute's data assets (regardless of the system in which the data are stored) and data management functions as defined by the Data Management Association's Guide to the Data Management Body of Knowledge (DAMA-DMBOK).

2 Data Management Functions

Data management functions are defined by the Data Management Association's Guide to the Data Management Body of Knowledge (DAMA-DMBOK). Data and data management functions shall be measured, monitored and refined to ensure their effectiveness and quantify their value to the Institute. Data management functions are governed by policies and procedures relating to:

- Data Governance Framework;
- Data Governance Policy;
- Data Quality;

- Data Privacy and Security;
- Data Architecture (metadata, master data, and reference data);
- Data Warehousing and Business Intelligence;
- Data and Content Management;
- Data Architecture;
- Data Development;
- Data Operations;
- Data Management Procedures;
- Research Governance.

2.1 Data Governance Framework

A Data Governance framework will be established, implemented, operated, monitored, reviewed, maintained and improved to ensure that appropriate authority and control is applied to data, and that data is managed in line with legislative and other compliance obligations.

2.2 Data Governance Policy

A Data Governance Policy (this document) shall be maintained by the Data Governance Manager, approved by the Chief Operating Officer (COO) and published and communicated to all relevant employees and relevant external parties.

2.3 Data Quality

Data shall be 'fit for purpose' and each data asset shall have defined data quality requirements. Data quality shall be assured, measured, monitored and improved based on Institutional environment, relevance, timeliness, accuracy, coherence, interpretability and accessibility. Information about data quality shall be made available to users to ensure they are aware of the quality of the data when making decisions or interpreting findings. Where possible, data quality shall be assured at the point of creation.

2.4 Data Privacy and Security

Each data asset shall be classified according to the Information Classification, Labelling and Handling Procedure (E14/02843). Data must be secured and protected from unauthorised access. Data must be collected, stored, used & disclosed and archived & disposed in accordance with privacy legislation and relevant privacy and security policies, procedures and protocols. A Privacy Impact Assessment (PIA) shall be conducted prior to the undertaking of any new activity or change to an existing activity that involves the collection, storage, use or disclosure, archival or disposal of personal or health information. A formal data breach procedure shall be applied for all suspected and actual data breaches. On commencement of employment at the Institute, and every two years thereafter, all staff, including contractors, must complete privacy and security training and sign an Information Privacy and Confidentiality Agreement.

2.5 Data Architecture (Metadata, Master Data & Reference Data)

All data assets shall be clearly identified and recorded in a central repository of data assets and elements. Management of data (data collection, storage, access, use, disclosure, archiving and disposal) shall remain compliant with the Institute's various obligations including those specified within relevant legislation, NSW government policies and directives, NSW Health Policy Directives, Institute policies, procedures and guidelines, as well as other obligations (e.g. contractual requirements).

Each data asset shall have metadata. Metadata shall be assured, measured, monitored and improved in accordance with published standards and industry guidelines. Changes to metadata shall be agreed and authorised with due consideration of impacts to other data management functions and business processes.

Master data and reference data shall be agreed at the enterprise level. Definitions shall comply with state and national standards where available. Changes to master data and reference data shall be agreed and authorised with due consideration of impacts to other data management functions and business processes.

The Institute's data model shall be expanded in an iterative approach to include all data assets. The data model shall align to Institute business processes and shall support linkage between data assets, within and across data domains.

All new data assets must be approved by the Data Sponsor. The Data Sponsor shall appoint a Data Custodian to each data asset.

2.6 Data Warehousing and Business Intelligence

The Data Governance Policy supports the Institute Data Warehouse (IDW) which is a data repository for analytical data and organisational reporting.

2.7 Document and Content Management

All records shall be managed in an appropriate manner in accordance with relevant legislation, standards and policies issued by the State Records Authority, and the Institute's Records and Information Management Policy (E06/10927).

2.8 Data Development

Data requirements shall be identified and defined during development of all systems. Systems shall conform to data architecture and standards.

2.9 Data Operations

Plans for data availability, recovery and retention shall be established, monitored and updated. Mechanisms to monitor and improve the performance of data assets shall be implemented. Data technology shall be managed according to ITIL principles and align with data requirements and conform to data architecture and standards.

2.10 Data Management Procedures

Data Management Procedures shall define the processes and procedures to be followed in order to meet the policy statements of one or more Data Management Function Policies.

Existing Procedures shall be reviewed and updated and new Procedures shall be documented and applied which meet the Data Management Function Policy statements.

2.11 Research Governance

All research projects shall be reviewed by the Data Governance Team and must comply with the relevant Data Governance policies and Research Governance framework.

3 Roles & Responsibilities

Clarity of the data governance roles and responsibilities ensures effective management and secure use or disclosure of data.

The [NSW Health Data Governance Framework](#) (GL2019_002) stipulates that each state wide data asset must have a designated Data Sponsor, Data Custodian and Data Steward. The Institute follows best practice by nominating a data sponsor, custodian and steward for each of its data assets. The roles and responsibilities of these positions and of Data Users are clearly defined in the NSW Health Data Framework.

3.1 Chief Operating Officer

The Chief Operating Officer will:

- Approve the Data Governance Policy.
- Approve the necessary resources required to establish, implement, operate, review, maintain and improve the Institute's Data Governance Program.

3.2 Executive

The Executive will:

- Provide the necessary resources to establish, implement, operate, review, maintain and improve the Institute's Data Governance Program.

3.3 Data Governance Manager

The Data Governance Manager will:

- Review and update the Data Governance Policy and Data Management Function Policies & Procedures.
- Manage the overall establishment, implementation, maintenance, and continual improvement of the Data Governance Program.
- Apply actions required from annual review of the Data Governance Program.

3.4 Directors & Chief Information Officer

All Directors and the Chief Information Officer will:

- Ensure that staff and contractors who have a role to play in data governance comply with the Data Governance Policy and Data Management Function Policies and are trained and remain competent to fulfil their duties.
- Ensure that business processes and procedures are aligned with the Data Governance Policy and Data Management Function Policies.

3.5 Data Sponsor

The Data Sponsor undertakes the functions of 'ownership' of the data. They have the authority to approve and fund the data asset.

The key accountabilities of the Data Sponsor are to:

- Establish the basis for the asset.
- Enable strategic management, governance and operation of the asset.
- Provide direction and guidance, and authorise appropriate resources for management of the asset.
- Implement a data governance framework for the asset.
- Authorise any public release of any information, except where this authority is delegated by the Combined NSW Health Delegations Manual.
- Ensure compliance with all relevant legislation, policies and standards.
- Appoint a Data Custodian and ensure the Data Custodian's duties are fulfilled.

The Sponsor of the data assets held by the Institute is the Chief Cancer Officer.

3.6 Data Custodian

Data Custodians are responsible for the day to day management and oversight of the asset, approval of access to data and the overall quality and security of the asset.

The key accountabilities of the Data Custodian are to:

- Ensure that:
 - there is a published policy directive and/or information bulletins outlining the purpose of the asset;
 - the asset has published metadata, including a data dictionary, business rules and guide for use;
 - any use of the data aligns with the purpose for which it was collected;
 - there are up-to-date technical documents for the supply and storage of the data;
 - the asset remains relevant to system and business needs.
- Control access to data in compliance with all relevant legislation, policies and standards, and any conditions specified by the Data Sponsor.
- Regularly review users with access to data and the ongoing need and appropriateness of access.
- Establish a data quality framework that ensures the integrity, accuracy, completeness, timeliness, relevance, consistency and reliability of data.
- Work with eHealth to align data and IT governance for the asset.
- Ensure processes are in place to provide feedback to data suppliers about data quality including issues requiring rectification.

- Establish and maintain an acceptable level of data protection to ensure privacy, security and confidentiality of information.
- Ensure there is a documented process for responding to breaches of data security.
- Ensure there is a documented process for responding to breaches of data asset's policies and procedures.
- Provide advice and direction on the technologies used in data management business functions.
- Ensure ongoing development, maintenance and review of data assets.
- Advise on the use of the information contained within the asset.
- Appoint a Data Steward.
- Escalate material risks and issues to the Data Sponsor.

Further information can be found in the Data Custodian Guideline (E14/15305).

3.7 Data Steward

Data Stewards have significant knowledge and expertise in the content and quality of the data they manage on a day-to-day basis. Their responsibilities are related to the data management functions, including:

- Manage the data asset in compliance with relevant legislation, policies and standards, and any conditions specified by the Data Sponsor.
- Develop and issue a policy directive and /or information bulletins for the asset.
- Ensure there are up-to-date technical documents for the supply and storage of data.
- Work with stakeholders to develop and maintain metadata including a data dictionary, business rules and guide for use.
- Co-ordinate stakeholder engagement and input into the business requirements for the data asset as required.
- Provide feedback to data suppliers in relation to data quality issues.
- Convene a stakeholder working group to help manage the asset.
- Maintain a work plan for the asset, aligned with NSW Health's strategic direction.
- Escalate material risks and issues to Data Custodian.

3.8 Data User

It is the responsibility of all authorised users of a data asset to:

- Ensure that data is recorded or collected according to data standards.
- Report data errors and quality issues in a timely manner.
- Ensure data security and privacy are maintained whenever data is accessed.
- Ensure login details are kept confidential and are only used by the designated user.
- Report any breach or suspected breach of data security or privacy.

- Sign an acknowledgement of their obligations to protect data privacy and security.
- Ensure compliance with all relevant legislation, policies and standards, including NSW Health Code of Conduct.
- Obtain approval from Data Sponsor or delegated authority for public release of data.
- Abide by all terms and conditions associated with approval for access to data.

For more information, refer to the Information Security Policy (E07/26801).

The Data Custodian, Data Steward and Data User of each asset is documented in the Metadata Repository.

3.9 All Staff

All Staff (including contingent workers and contractors) have a responsibility to:

- Comply with the Data Governance Policy and Data Management Function policies and procedures.
- Participate in training related to data governance.

4 Managing Document Records

Records are managed in accordance with the Institute's Records & Information Management Policy (E06/10927).

This document will be reviewed annually or sooner if changes are required.

5 Glossary

A glossary of terms and definitions is outlined in the table (below).

Term	Definition
DAMA-DMBOK	Data Management Association's Guide to the Data Management Body of Knowledge.
Data Architecture Management ¹	Defining the blueprint for managing data assets.
Data Asset ²	An identifiable collection of data stored in any manner and recognised as having value for the purpose of enabling an agency to perform its business functions. Included in the Institute's Metadata Repository.
Data Custodian	The position appointed by the Data Sponsor that has overall responsibility for a data asset. The data custodian for a particular data asset is listed in the Data Asset Inventory entry for that data asset.

Term	Definition
Data Development ¹	Analysis, design, implementation, testing, deployment, maintenance.
Data Governance ¹	The exercise of authority and control (planning, guiding and monitoring) over the management of an organisation's data assets.
Data Management Function ¹	<p>One of the business processes within data management:</p> <ul style="list-style-type: none"> • Data Governance. • Data Architecture. • Data Development. • Data Operations Management. • Data Privacy and Security Management. • Data Quality Management. • Master and Reference Data Management. • Data Warehousing and Business Intelligence Management. • Document and Content Management. • Meta-data Management.
Data Steward	<p>The person who works with data custodians to define and control data. They have significant experience and knowledge of data they manage on a day-to-day basis and data management functions.</p> <p>A Data Steward may have responsibilities relating to one or more Data Management Functions, depending on the complexity of the data asset(s) and their capacity and capability with the respect to the Data Management Function.</p> <p>The Data Stewards for a data asset are listed in the Data Asset Inventory entry for that data asset.</p>
Data Operations Management ¹	Providing support from data acquisition to purging.
Data Privacy and Security Management ¹	Ensuring privacy, confidentiality and appropriate access.
Data Quality Management ¹	Defining, monitoring and improving data quality.
Data Sponsor	The position that "owns" the data asset. They have the authority to approve and fund the data asset. The Chief Cancer Officer is the Data Sponsor of all Institute data assets.
Data user	A person who is an authorised user of a data asset.

Term	Definition
Data Warehousing and Business Intelligence ¹	The collection, integration and presentation of data for the purpose of business analysis and decision-making.
Document and Content Management ¹	Managing data found outside of databases.
IDW	Institute Data Warehouse.
Institute	Cancer Institute NSW.
Master and Reference Data Management ¹	The process of defining how master data and reference data shall be created, integrated, maintained and used throughout the organisation.
Meta-data Management ¹	<p>The set of processes that ensure proper creation, storage, integration and control to support associated usage of meta-data.</p> <p>Meta-data is information about the physical data, technical and business processes, data rules and constraints, and logical and physical structures of the data.</p>
Metadata Repository	A register of the Institute's Data Assets.

1. The Data Management Association Guide to The Data Management Body of Knowledge (DAMA-DMBOK Guide). First Edition (<https://technicpub.com/dmbokanddg/>). See: H:\Administration Support\DAMA-DMBoK
2. Adapted from: Qld Government Chief Information Office - *What is information architecture* – White paper 1.0.0. (<https://www.qgcio.qld.gov.au/products/qgea-documents/548-information/2338-information-architecture-white-paper?lnk=QS0xLTIZMzqtMQ>).