

Enterprise Architecture

Department of Health Policy

QH-POL-402:2014

1. Statement

Queensland Health is increasingly using digital capabilities to improve patient safety and service quality, and efficiency through the health system. Enterprise Architecture provides the supporting framework which helps achieve these desired business outcomes through technical best practices and approaches.

2. Purpose

This policy reflects the changing nature of technology and its role in healthcare delivery and administration. Such a policy is essential in order to maintain the integrity of the Queensland Health digital health ecosystem in a time of increased local demand and rapid innovation to support patient centric integrated digitally enabled services. The intent of this policy is to ensure that:

- Information, Communications and Technology (ICT) enabled solutions and services are designed, implemented and managed according to the requirements of the Queensland Health Enterprise Architecture to ensure efficient and effective use, and management, of information and ICT solutions and services.
- The Department of Health provides quality ICT solutions and services which have been developed in a cost effective and cost-efficient manner.
- ICT solutions and services are positioned for growing demands and future needs of Queensland Health.
- Interoperability between ICT solutions and services enables secure exchange of trustworthy information across the continuum of care.

3. Scope

This policy applies to all employees, contractors and consultants within the Department of Health divisions.

4. Principles

Whilst not explicit mandates to follow the Enterprise Architecture principles provide a consistent set of fundamental beliefs, values, aspirations or behaviours that guide departments when making digital and ICT investment and policy decisions. All principles are equal and should be used to guide decision making, likewise new initiatives that do not adhere to these principles may be seen negatively by other decision makers. The Queensland Health Enterprise Architecture principles are as follows:

:

- **Customer Focus:** Every service must be designed around the user. All digital capabilities must meet the needs of the public, clinicians and other staff whilst maintaining compliance with legislative and policy requirements. Solutions should be co-designed using appropriate stakeholder engagement and participatory governance.
- **Queensland Health's federated health system is moving to a networked model:** All digital investments must support the requirements of the health system as a whole. Where appropriate services that scale to support enterprise needs are favoured over fragmented approaches. Where enterprise solutions and services exist, the impact of implementing new, changed solutions, or decommissioning existing solutions must be assessed prior to implementation.
- **Information as a health system asset:** This principle recognises that information has value and contributes to the delivery of healthcare services and outcomes. There is a need to share information appropriately, increase access, manage its quality, and subject it to appropriate governance, legislative compliance, and lifecycle management processes. To assist this, digital investments must reduce duplication of data and make data securely available (preferably at the source)
- **Digital as a Service:** Digital services must adopt an "as a service" approach for digital investments. Specifically, solutions and services must utilise (where appropriate) cloud-based technologies as enablers unless there is a reason not to do so, such as:
 - service characteristics (availability, recover time objective, etc) that cannot be met
 - cyber or information governance that cannot be met by a service.
- **Sustainability:** All digital solutions and services are to be sustainable. Sustainability must consider Social, Human, Economic and Environmental factors. A sustainable investment must also be provided in a manner that can respond to changes in health delivery needs.
- **Reuse Services and Platforms:** Digital services should demonstrate that they have sought to reuse existing solutions before delivering new ones. Digital services should also leverage existing platforms to deliver their outcomes where appropriate. Where it is not possible to reuse or leverage an existing solution, buy or build opportunities can be considered when more cost effective, fit for purpose, scalable and flexible into the future than leveraging existing.
- **Privacy, confidentiality, and security:** The increased ability to share data in a more connected, digital world will be balanced by (authorised and appropriate) measures to control data access, use and disclosure. Services must adopt a secure by design and information security management system approach, appropriate cyber security controls and manage an appropriate risk posture to protect the personal (and confidential) information from misuse, loss and unauthorised access, modification or disclosure. Cyber security controls must be regularly assessed and maintained through the lifecycle of the service.
- **Do no harm:** Digital services should promote quality and efficiency, but the failure to guarantee their reliability can lead to harming individuals. Higher information processing or communication capabilities can do more harm than more primitive systems with less capabilities, even if the former are potentially able to confer greater benefits (or the same benefit to more people) than the latter. This principle of non-maleficence must apply to all Digital investments across Queensland Health.

- **Support contemporary digital architecture:** All investments in digital services should support a mobile-first approach and adopt internet standards and protocols. This ensures digital services are easily accessible from mobile phones, tablets, laptops and assistive technologies like screen readers.
- **Interoperability as a default:** By design digital investments should support interoperability through adoption of open data and technology standards. Business service and process design should be performed to identify opportunities for interoperability. Where appropriate digital solutions and services must support information being securely accessible via standards-based APIs that allow the data to be created, interrogated and updated.
- **Provide an efficient digital experience:** Digital investments must enhance the user experience in a way that reduces the complexity and difficulty to perform digital tasks. Reduce manual input in favour of reusing trusted digital sources and provide single or common entry points to consume digital services for a consistent and efficient digital experience.

5. Requirements

5.1. Enterprise Architecture

- 5.1.1. Department of Health Divisions must ensure that use of and investment in ICT and information management complies with the Queensland Health Enterprise Architecture (QHEA) and the Queensland Government Enterprise Architecture (QGEA) and the department's legislated requirements and responsibilities.

5.2. Enterprise Architecture and compliance and dispensations

- 5.2.1. Divisions will provide, on request, accurate and comprehensive information to eHealth Queensland sufficient for Queensland Health to meet the mandated reporting requirements defined in the QGEA) ICT resources strategic planning policy (IS2. This includes at-risk system reporting and the annual current state ICT Profile report). Contributions to the ICT Profile must at a minimum include all critical ICT systems, at-risk ICT systems and ICT systems meeting the asset recognition threshold (as per the Financial Management Practice Manual).
- 5.2.2. Divisions must provide, on request, information to eHealth Queensland regarding the use of unsupported technologies determined to pose a risk to the Queensland Health system.
- 5.2.3. Divisions must initially complete an Architecture Preliminary Assessment (APA) for ICT initiatives requiring design elements (procurement of standard hardware solutions is exempt) for consideration by the Architecture and Standards Committee (ASC) at Gate 0 (investment concept) and Gate 3 (award of contract) of the Investment Management Framework where one of the following criteria is met:
 - the total investment value is >\$500,000 or
 - impacts more than one Hospital and Health Service or
 - is high risk or high complexity.
- 5.2.4. Divisions must provide a Solution Architecture for all ICT initiatives requiring design elements (procurement of standard hardware solutions

is exempt) for consideration by the ASC prior to implementation where one of the following criteria is met:

- the total investment value is >\$500,000 or
- impacts more than one Hospital and Health Service or
- is high risk or high complexity.

5.2.5. Divisions are required to comply with directions made by the ASC or appeal to the System ICT Advisory Committee.

5.2.6. Divisions must comply with the QHEA, with a particular focus on Schedule 1 of this policy, unless a formal dispensation is approved.

5.2.7. To seek an Enterprise Architecture dispensation to the QHEA, Divisions must submit a request and rationale to the ASC. Refer to the *Queensland Health ICT Policy Dispensation Standard* for additional information.

5.2.8. For dispensations in relation to information management, Divisions must submit a request and rationale to the Information Management Strategic Governance Committee. Refer to the *Queensland Health ICT Policy Dispensation Standard*.

5.2.9. All mandated Queensland Health Enterprise Architecture standards must undergo consultation with all Divisions as per the Queensland Health Enterprise Architecture Framework (the Framework), which outlines how the Queensland Health Enterprise Architecture is administered, managed and governed.

6. Legislation

- *Electronic Transactions (Qld) Act 2001*
- *Financial Accountability Act 2009*
- *Financial and Performance Management Standard 2019*
- *Hospital and Health Boards Act 2011*
- *Hospital and Health Boards Regulation 2012*
- *Human Rights Act 2019*
- *Information Privacy Act 2009*
- *My Health Record Act 2012*
- *My Health Records Rule 2016*
- *Healthcare Identifiers Act 2010*
- *Healthcare Identifiers Regulations 2020*
- *Public Health Act 2005*
- *Public Records Act 2002*
- *Public Services Act 2008*
- *Right to Information Act 2009*

7. Supporting documents

- *Department of Health Data management policy*
- *Department of Health Enterprise Architecture Dispensation Standard*
- *Department of Health My Health Record system participation standard*
- *Digital Health Strategic Vision for Queensland 2026*
- *eHealth Investment Strategy 2015*
- *Information Management Framework*
- *My Health, Queensland's future: Advancing health 2026*
- *Queensland Government Enterprise Architecture Framework*
- *Queensland Health Cyber Security Strategy*
- *Queensland Health Data and application custodianship policy*
- *Queensland Health Data and application custodianship standard*
- *Queensland Health Data Quality Framework*
- *Queensland Health Enterprise Architecture Framework*
- *Queensland Health Information Security Policy*
- *Queensland Health Investment Management Framework*
- *Queensland Health Use of ICT services and devices policy suite*
- *Queensland Health User access management guideline*

8. Definitions

Term	Definition
Application	A software system deployed by the agency which has part of an agency's business process embedded within it.
At-Risk ICT System	An at-risk ICT system refers to an ICT system assessed from a whole-of-department perspective as posing a "High" or "Very High" risk to the business. This does not include the inherent business risk of a critical ICT System or any risk that has been accepted with no further treatments to occur.
Critical ICT System	An ICT System that has an availability Business Impact Level (BIL) of High. A "High" BIL is defined as an inherent consequence of "Major" or "Extreme" according to the Department of Health risk analysis matrix should the system be unavailable.
Digital Service	A digital service is any defined business activity that provides something of use or value to customers (internal or external) electronically using data or transactions. A digital service may also be the physical services that enable and support these electronic transactions

Term	Definition
Dispensation	For the purpose of this policy the term 'dispensation' means the endorsed exception from compliance with the mandatory requirements and Schedule 1 of this policy.
Enterprise ICT Services	An Enterprise ICT service (including applications, systems, platforms and technology) is consumed by one or more customers across Queensland Health and has been designed and provided in a manner intended to scale for use at a state-wide level, if required. It is intended these services are not duplicated across the state.
Enterprise Architecture	The practice of applying a comprehensive and rigorous method for describing a current and future structure and behaviour for an organisation's processes, information, applications, technology and human resources, so that they align with the organisation's strategic direction.
External service provider	An entity (i.e. an individual or an organisation outside of the Department of Health and Hospital and Health Services) providing a health service under an agreement between the Chief Executive (Department) or a Service (Hospital and Health Service) and the entity.
ICT-enabled initiatives	ICT-enabled initiatives are focused on delivering improvements to the way of doing business, using ICT as an element. Any initiative requiring information technology and/or communications technology to realise outputs, outcomes and/or benefits is considered ICT-enabled.
Mandated (applications, services or requirements)	<p>Mandated: the application/service must be used. Where there are multiple applications/services listed as mandated options one of the applications/services must be used. The mandated option must be used when:</p> <ul style="list-style-type: none"> - Implementing a new product/service - Replacing an existing product/service - Major enhancements are required for an existing product/service <p>A dispensation is required to not use a mandated application/service or to implement an application/service that does not meet the stated requirements.</p>
Services	Services in Schedule 1 may refer to specific application software solutions or to Enterprise ICT services.
Technologies	Technologies support the application portfolio of the business, including software technologies, hardware, and network support.
Unsupported Technology	A technology that has left mainstream support and represents a risk from a whole-of-system perspective. It requires action to be taken such as decommissioning, upgrading or replacing the unsupported technologies with supported versions, products or services.

Schedule 1: Business, Information, Application and Technology Architecture

1. The section below describes business functions and current requirements for:
 - sharing information between organisations and care settings
 - implementing a new application, technology or service
 - replacing an existing application, technology or service
 - managing an existing application, technology or service
2. Where there are multiple applications, technologies or services mandated for a function; one of the listed applications, technologies or services must be used.
3. Any deviations from what is listed will require either a rectification plan or a formal dispensation to be submitted to the Design Authority for consideration and where necessary to the ASC and/or the Information Management Strategic Governance Committee.
4. Security architecture is addressed in specific QGEA policies and standards and the Queensland Health Information security policy.

Business Architecture

Queensland Government Enterprise Architecture artefacts:

- Queensland Government Enterprise Architecture framework
- Use of ICT services, facilities and devices policy – IS38
- Software asset management policy
- Records governance policy

Legislation:

- My Health Record Act. 2012
- My Health Records Rule 2016
- Healthcare Identifiers Act 2010
- Healthcare Identifiers Regulations 2020

Usage	Product/Service Name
Information Management	Mandated: Where specialist advice is required on clinical records management, data standards, clinical terminology, Queensland Health's master patient index (QMPI) data quality, policy development and data access requests, eHealth Queensland Health Informatics Services and Advisory Service must be consulted.
ICT Service Management	Mandated: All ICT solutions and technologies must have a support model appropriate to the business requirements of that technology.

Usage	Product/Service Name
	Specifically, where a new solution meets the criteria for ASC oversight it must address these requirements. Mandated: All service impacting events with Queensland Health are to be recorded within the eHealth Queensland ITSM Platform (Service Now) Mandated: All changes to Information & Communication Technology (ICT) hardware and software assets are managed in accordance with eHealth Queensland Change Management Standard.
Sustainability	Mandated: All ICT initiatives must have a sustainable support, financial model and resourcing for the expected whole life of the technology. Specifically, where a new solution meets the criteria for ASC oversight it must address these requirements

My Health Record System

Usage	Requirement
My Health Record System	Mandated: The My Health Record system must be used in accordance with the relevant legislative requirements in <i>the My Health Records Act 2012</i> and the My Health Records Rule 2016. The Department of Health must act as the seed organisation on behalf of Queensland Health for pre-registration, registration and maintenance activities involving the My Health Record System as required.

Information Architecture

In Queensland, the *Public Records Act 2002* (Qld) defines that the State owns the public records (including Data) of Queensland Health. Public records include records made for use by, or a purpose of, a public authority or records received or kept by a public authority. The Department of Health and Hospital and Health Services are public authorities.

While ownership of public records vests in the State, the Department and Hospital and Health Services are separately responsible for the management, safe keeping preservation, and appropriate disposal of all records in their possession.

Terminology

There are a number of terminologies including approved data sets and code sets used across Queensland Health to support business requirements. The aim is to use a standardised terminology wherever applicable.

- As the preferred national terminology for Australia, the use of SNOMED CT-AU including Australian Medicines Terminology (AMT) should be applied to meet requirements. SNOMED CT-AU is developed and published by the National Clinical Terminology Service (NCTS) of the Australian Digital Health Agency (ADHA).
- Use of national terminology products from the ADHA requires Queensland Health to hold the following licenses:
 - SNOMED CT Affiliate License Agreement

- Australian National Terminology License Agreement
- The above agreements are entered into by the Deputy Director-General, eHealth Queensland on behalf of Queensland Health (including the Department of Health and Hospital and Health Services). Refer to the *Department of Health National Clinical Terminology Service (NCTS) Participation Standard* for additional information.
- To assist in the consistent management of Clinical Terminologies in line with the framework provided by the ADHA, the use of the Queensland Clinical Terminology Service (QCTS) is mandated for use across the Department of Health (See Terminology Applications).
- Queensland Health approved data sets and code sets are also used to meet business requirements. These data sets and code sets must be sourced from and validated against the authoritative sources such as the Corporate Reference Data System (CRDS) or the Queensland Health Data Dictionary (QH DD).
- Where a data collection is required to deviate from these (QCTS, CRDS, QH DD) due to valid business requirements (for example alternate national, college or industry standard) than an ASC dispensation should be sought.

Terminology

Usage	Terminology
Clinical Terminology	Mandated For new systems where clinical information is intended to be exchanged: Systematised Nomenclature of Medicine Clinical Terms – Australian Release (SNOMED CT-AU)
Medicines Terminology	Mandated: Systematised Nomenclature of Medicine Clinical Terms – Australian Release (SNOMED CT-AU) (the Australian Medicines Terminology (AMT) was incorporated into SNOMED CT-AU since November 2015)
Pathology Observations	Mandated: Logical Observation Identifiers Names and Codes (LOINC)
Dietetics	Mandated: International Dietetics and Nutrition Terminology (IDNT)
Corporate Reference	Mandated: For new systems required to exchange or report data to the Department of Health: The Corporate Reference Data System (CRDS) Queensland Health Data Dictionary (QHDD)
Clinical Coding and Admitted Patient Separations	Mandated: International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification, Australian Classification of Health Interventions, Australian Coding Standards classification (ICD-10-AM/ACHI/ACS) Australian Refined Diagnosis Related Groups (AR-DRGs) Australian National Sub-acute and non-acute patient (AN-SNAP)
Emergency Patients Episode Grouping	Mandated: Australian Emergency Care Classification (AECC)
Non-admitted Patient Events	Mandated: Independent Health and Aged Care Pricing Authority (IHACPA)

Usage	Terminology
	Tier 2 non-admitted care services classification (Queensland Health Version)

Clinical Data

Usage	Requirement
Acute Care Setting Management	Mandated: Provides equivalent data to Clinical Data Repository (as per existing eHealth Queensland supported systems) Conform to Enterprise Integration Platform (EIP) information exchange specification and patterns
Community & Primary Care Setting Management	Mandated: Provides equivalent data to Clinical Data Repository (as per existing eHealth Queensland supported systems) Conform to Enterprise Information exchange standards and patterns
Medical Imaging	Mandated: A copy of Medical Imaging Reports (both Internal and External Providers) when requested by a Queensland Health representative must be accessible from The Viewer Medical Imaging solutions must conform to EIP information exchange specification and patterns where appropriate
Medication	Mandated: 1. Complies with the Medication Data Standards http://qheps.health.qld.gov.au/clinical_info_mgt/html/medication_dss.htm 2. Provides equivalent data to Clinical Data Repository (as per existing eHealth Queensland supported systems) 3. Conform to EIP information exchange specification and patterns
Clinical Reference Data	Mandated: Queensland Health Clinical Data-Set Definitions
Private and External Pathology	Mandated: A copy of External Pathology Reports requested by a Queensland Health representative must be accessible from The Viewer.
Dental	Mandated: Provides equivalent data to Clinical Data Repository (as per existing eHealth Queensland supported systems) Conform to EIP information exchange specification and patterns
Register of all cases of cancer diagnosed in Queensland and cancer mortality	Mandated: Queensland Cancer Registry (QCR)
Organ Tissue Register	Mandated: OrganMatch

Person Identification

Usage	Requirement
Client Directory Number (Enterprise Unique Identifier)	Mandated: The Client Directory Number (Queensland Master Patient Index Enterprise Unique Identifier) must not be used as a primary identifier within any information system.
Patient Demographics	Mandated: Queensland Master Patient Index (QMPI)
Individual Healthcare Identifier (IHI)	Mandated: Queensland Master Patient Index (QMPI)
Registrar General Birth Registrations	Mandated: Birth Details System
Registrar General Death Notifications	Mandated: Death System

Other

Usage	Requirement
Published research data	Mandated: Database of Research Activity (DORA 2.0)

Application Architecture

Enterprise Resource Planning

Usage	Requirement
Fiscal and Monetary Services	Mandated: S/4HANA
Asset Management	Mandated: S/4HANA (Excludes technologies to support operational management of assets)
Workforce Safety	Mandated: Hazardous Chemicals: ChemAlert
Payroll	Mandated: Personnel Administration: myHR (SAP HR) Time Reporting: myHR (Infor WFM) Rostering: myHR (Infor WFM)

Health Service Delivery

Usage	Requirement
Pathology	Mandated: Inventory Management: - BloodNet Requests and authorisation for access to funded immunoglobulin products: - BloodStar Organ and tissue donation for transplantation: - DonateLife Electronic Donor Record
Aged Care Services	Mandated: My Aged Care Assessor Portal
Community and Public Health Services	Mandated: Application is Practice Incentives Program (PIP) compliant (https://epipregister.digitalhealth.gov.au/product-register/registers)
Discharge	Mandated: Enterprise Discharge Summary (EDS)
Electronic Health Record - Longitudinal Record Viewing	Mandated: The Viewer
Electronic Health Record - Digital Hospitals	Mandated: Integrated Electronic Medical Record (ieMR)
Promotion, Prevention and Protection	Mandated: Healthcare Associated Infection: (Multiprac) Staff immunisations: Staff Protect (SPA) Notifiable Conditions: Notifiable Conditions System (NOCS)
Medical Imaging - Breast Screening	Mandated: Registry: Breast Screen Queensland Registry (BSQR); and - PACS: Sectra PACS
Medication	Mandated: Drugs of dependency: Monitoring of Drugs of Dependency System (MODDS)
Real-time reporting of monitored medicines	Mandated: QScript
Alcohol and Other Drugs	Mandated: Mental Health: Consumer Integrated Mental Health and addiction (CIMHA)
Mental Health	Mandated: Mental Health: Consumer Integrated Mental Health and addiction (CIMHA)

Integration Services

The following eHealth Integration Services / application software services are to be used for integrations to enterprise data

Usage	Service Name
Enterprise Clinical Data	Mandated: Clinical Data Repository (CDR) Services
External Provider Identity Management	Mandated: STS Address Book, GP Connect
Internal Provider Identity Management	Mandated: Provider Matching Service (PMS)
Public Pathology Reports	Mandated: AUSLAB via the Enterprise Integration Platform
Patient Consent for Medical information access	Mandated: Consent Service
Patient Encounters	Mandated: Patient Encounter Service (ePADT)
Patient/Client Identity Management	Mandated: Queensland Health Patient Search Service
Longitudinal Electronic Medical Records	Mandated: Clinical Data Repository (CDR) Service
Unstructured Clinical Documents	Mandated: Document Service (DS)
Healthcare Provider Identifier – Individual (HPI-I)	Mandated: Queensland Health Healthcare Provider Identifier Management Services (QHHPIMS)

Generic Service Delivery

Usage	Application Service Name
Legislation and regulation services	Mandated: Monitoring, Applications, Permits and Licensing Events (MAPLE)
Clinical Coding	Mandated: 3M Codefinder

The following software products are provided by the QCTS and mandated for the administration of Terminologies within the Department of Health

Usage	Product Name
Terminology Browser	Mandated product: QCTS CSIRO Shrimp
Terminology Server	Mandated product: QCTS CSIRO Ontoserver
Syndication Server	Mandated product: QCTS CSIRO Ontoserver and CSIRO Atomio

Usage	Product Name
FHIR Terminology Authoring	Mandated product: QCTS CSIRO Snapper Platform (including Snapper:Author and Snapper:Map)

Technology Architecture

Queensland Government Enterprise Architecture:

- ICT cabling infrastructure policy
- Collaboration platform (Microsoft Teams) policy

Mandated

- Queensland Health ICT Cabling Standard
- Queensland Health Use of ICT services and devices policy
- Queensland Health Use of ICT services and devices standard
- Queensland Health Collaboration platforms standard

Usage	Application/Service Name
Application Integration Platforms, Messaging Middleware	Mandated: Enterprise Integration Platform (EIP) All application integrations (with the exception of bio-medical devices) to QH Enterprise systems must be via the EIP. No ICT solution must integrate or communicate directly with these enterprise systems. This excludes when data is routinely extracted from these applications for downstream analytics and processing Mandated: Secure Information Transfer Service (STS) For all external integrations with Queensland Health Enterprise system data.
My Health Record	Mandated: Upload of QH clinical information to My Health Record will be managed via the eHealth Queensland provided My Health Record Integration Solution (MHRIS)
License Management (Microsoft and Adobe License)	Mandated: Workstation Software Service All licensing of workstation Microsoft and Adobe software is to be managed by eHealth Queensland. Purchasing of these licenses by other business units may place Queensland Health in breach of these enterprise agreements. The exception is where these licenses are purchased as an ancillary component of a product. For example, Microsoft software is present on a bio-medical device and the manufacturer passes on the licensing.

Collaboration Software

Usage	Application/Service Name
Email and Calendaring	Mandated: eHealth Queensland Digital Collaboration Platform (Office 365) eHealth Queensland Legacy Email Service (On-Premise)
Real time and Team Collaboration	Mandated: eHealth Queensland Digital Collaboration Platform (Office 365) eHealth Queensland TeleHealth Videoconferencing Service The following products may also be used when an Information Security Risk Assessment has been conducted for the usage scenario: - Apple Facetime - Google Duo

Desktop

Usage	Application/Service Name
Desktop PCs, Desktop Terminals, Virtual Machine Desktops	Mandated: MOE associated with the eHealth Queensland Workstation Management Service The exception is where the operating system is an ancillary component of a product or service. For example, Microsoft software is present on a bio-medical device
Digital Application Systems Management, Hosting and Support	Mandated: All ICT support events with Queensland Health are to be recorded within the eHealth Queensland ITSM Platform (Service Now)

Security Management

Usage	Application/Service Name
Identity and Access Management	Mandated: ICT User Network Access Management Service, External Network Access Service. eHealth Queensland Privileged Access Management Service (for Privileged Access Management and Application whitelisting/control)
Intrusion and Prevention Detection	Mandated: ICT User Network Access Management Service External Access Service
Public Key Infrastructure Software	Mandated: Queensland Health PKI Service (Internal QH network connected managed devices only)
Authentication Devices and Software	Mandated: ICT User Network Access Management Service and External Access Service. eHealth Queensland Privileged Access Management Service (for password vaults).

Usage	Application/Service Name
Security Event and Information Management	Mandated: eHealth Queensland Cyber Security Incident and Threat Response Service.
Content Filtering	Mandated: Corporate Safe Internet (for internet) - eHealth Queensland Digital Collaboration Platform (Office 365) (for external collaboration)
Vulnerability Management	Mandated: eHealth Queensland Vulnerability Management Service
Anti-virus and anti-malware	Mandated: eHealth Queensland supplied anti-virus and anti-malware solutions

Bandwidth and Connectivity

Usage	Application/Service Name
Bandwidth Provision	Mandated: Wide Area Network Management Service, Local Area Network Management Service, Wi-Fi Service and Internet Service
Remote Access Devices Software	Mandated: External Network Access Service
VPN Devices and Services	Mandated: External Access Service

Networks

Usage	Application/Service Name
Caching and Proxy Devices and Software	Mandated: ICT Network Infrastructure Service and Internet Service Excludes devices managed on networks isolated from the QH network (BEMS, Fire, Security). Any connectivity from these networks to the QH Core Network will be managed by eHealth Queensland
Voice Network Devices and Software	Mandated: Telephony Infrastructure Support Service
LAN Devices	Mandated: Local Area Network Management Service Excludes devices managed on networks isolated from the QH network (BEMS, Fire, Security). Any connectivity from these networks to the QH Core Network will be managed by eHealth Queensland
Metropolitan Area Network (MAN) to Wide Area Network (WAN) Devices	Mandated: Wide Area Network Management Service

Usage	Application/Service Name
Wireless Network Access	Mandated: Wi-Fi Services Excludes devices managed on networks isolated from the Queensland Health network (BEMS, Fire, Security). Any connectivity from these networks to the QH Core Network will be managed by eHealth Queensland
Network Name and Address Devices and Software	Mandated: Wide Area Network Management Service, Local Area Network Management Service, Wi-Fi Service Excludes devices managed on networks isolated from the Queensland Health network (BEMS, Fire, Security). Any connectivity from these networks to the Queensland Health Core Network will be managed by eHealth Queensland
Network Performance and Optimisation Devices and Software	Mandated: ICT Network Infrastructure Service and Internet Service Excludes devices managed on networks isolated from the Queensland Health network (BEMS, Fire, Security). Any connectivity from these networks to the Queensland Health Core Network will be managed by eHealth Queensland
Radio Communications Devices	Mandated: Paging and Messaging Service Excludes locally managed Radio Communication services
Network Security Devices and Software (includes firewalls)	Mandated: Wide Area Network Management Service, Local Area Network Management Service, Wi-Fi Service, Internet Service and the eHealth Queensland Network Operations Network Time Service

Special Purpose Devices

Usage	Application/Service Name
IP Telephony Devices and Software	Mandated: Telephony Infrastructure Support Service
Desktop Telephones	Mandated: Telephony Infrastructure Support Service
Other Special Purpose Devices	Mandated: (for network connectivity only) Specialty Equipment Connection Service

Version Control

Version	Date	Comments
1.0	5/06/2014	Effective date. New policy developed from Queensland Health Enterprise Architecture Framework.
1.1	10/06/2015	Transferred information to new template.
2.0	12/04/2018	Enterprise Architecture Framework Standard incorporated into the Enterprise Architecture Policy. Statement and Purpose has been reviewed and updated to reflect current business models. Principles reviewed to align with the current Enterprise Architecture Health Service Directive. Formal review undertaken. Approved ASC March 2018 Approved CE eHealth Queensland
3.0	28/01/2022	The following changes were made to the Policy as a result of feedback from formal consultation: <ul style="list-style-type: none"> • Major update to Principles to align to the Department of Health Enterprise Architecture Policy and Queensland Health Enterprise Architecture Framework • Update to Context section for clarity • Inclusion of compliance with relevant legislation • Update to definitions table for consistency • Update to schedule 1 for correctness and consistency: <ul style="list-style-type: none"> • Emergency Patients Episode Grouping • Non-admitted Patient Events • Medical Imaging • Private and External Pathology • Longitudinal Electronic Medical Records • Digital Application Systems Management, Hosting and Support. • Additional paragraph to Terminology section <p>Approved by the ASC November 2021. Approved to publish by Deputy Director-General, eHealth Queensland</p>
3.1	08/01/2023	Under Requirements 5.2.7 and 5.2.8 – Department of Health Enterprise Architecture Dispensation Standard has been rescinded and replaced with the Queensland Health ICT Policy Dispensation Standard. Department of Health Enterprise Information Architecture Standard incorporated into the Enterprise Architecture Policy under Information Architecture in Schedule 1. Clinical Data, Personal Identification and Other sections have been updated.

Version	Date	Comments
		<p>Terminology for Non-admitted Patients Events has been updated: Independent Hospital Pricing Authority (IHPA) to Independent Health and Aged Care Pricing Authority (IHACPA). The name change was due to the <i>Age Care and Other Legislation Amendment (Royal Commission Response) Act 2022</i>.</p> <p>Approved by the ASC December 2022.</p> <p>Approved to publish by Deputy Director-General, eHealth Queensland</p>