

Finance & Corporate Directorate

Digital Health Services Transformation

Consultation Document

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1 Background

The Health Information, Communication & Technology (Health ICT) is a complex ecosystem with a sprawling portfolio that spans across both corporate and health information, applications as well as telehealth, infrastructure, project, and support services. The Health ICT department provide strategic, operational and clinical technology services to both Western NSW Local Health District (LHD) and the Far West LHD along with services in partnership with eHealth NSW and a range of ICT vendor partners. The current Health ICT operating model and structure has been in place since 2015.

While the Health ICT team has continued to respond to longstanding and emerging challenges in the operating environment, and within the health system more broadly, a range of challenges were visibly emerging back in 2021 requiring reconsideration of the ICT operating model.

These challenges led to an engagement with external consultancy KPMG in December of 2021 to review the current operating model and ICT services in the LHD, in light of emerging trends in health, strategic directions of both the LHD and eHealth as well as the broader health technology trends to identify options and priorities to adapt the IT operating model to meet future need.

Key characteristics and trends identified in the services landscape in 2021 include:

- Shifting technology landscapes such as the move to cloud solutions, the use of Artificial Intelligence (AI) and automation and Applications Programming Interface (API) integration models.
- Changes in the approach to ICT operations to support close business engagement, extract the most value from information, provide seamless frontline services amongst other capabilities.
- Health-specific technology trends, for example increased use of consumer engagement apps and virtual care (including in-home) technologies, the convergence of biomedical devices and clinical systems.
- NSW Health State-wide trends including consumers at the centre of care initiatives and the development of the single digital patient record (SDPR).
- Challenges unique to WNSW and Far West LHDs including the large number of sites over a vast geographic area and key challenges recruiting and retaining skilled technology staff.

The resulting outcomes and recommendations of the review were however put on hiatus while the LHD underwent its own realignment following the appointment of a new Chief Executive.

The ecosystems of both government and health have, and will, continue to change even more dramatically on the back of the various outcomes/recommendations from parliamentary inquiries, plans, special and/or royal commissions, rural and health plans etc. While not all will result in downstream impacts in the technology space, many will draw on technology as enablers to deliver the required recommendations and/or outcomes.

Additionally, economic impacts emerging from health budget material measures, expenditure reviews or operational impacts from the 'single state-wide operating and business model for planning, coordination and delivery of ICT services across the New South Wales health system'.

Most recently, Western NSW LHD, in its submission to the Special Commission of Inquiry, cited a number of 'mega trends and structural barriers'. Most notably, demographic change and migration, market failure of primary care, increasing demand on emergency departments, acute care, residential aged care as well as inadequate specialist outpatient services. These coupled with challenges around workforce decline and reliance on locum and agency markets are expected to add significant pressure to the delivery of rural health services and the needs for technology to enable new ways of delivering care.

In 2023 an evaluation of our current working environment commenced under the program 'Health ICT Transformation'. The transformation commenced with a managers 2-day workshop which evolved into consultation with each individual team on their current functions and their individual views of what areas of

operating needed refinement or change. It also included a dive around consumer feedback (positive and negative) through formal and informal mechanisms. Outputs from the transformation are ongoing in nature, however a proposed Digital Health governance has been tabled with executive along with a proposed structure to enable the objectives and outcomes of the below to occur. The operating model and resulting realignment of services seeks to alleviate the identified challenges of the 2021 review, anticipate the impact or influence of internal and external political directions and gear up and position Digital Health Services to accommodate or respond.

2 Objectives

2.1 Reason for change

The 2021 (KPMG) and 2023 (Health ICT Transformation) review processes identified a number of limitations in the current service model. Key challenges were identified in the following areas:

- **Business and clinical enablement:** Limits in the capacity and skills required to engage across all sites and all customers of ICT to provide responsive customer-centric services.
- **Strategy and innovation:** Challenges in predicting, and planning for, future demands on services.
- **Service coordination:** Inconsistencies in the end-to-end management of requests and incidents, reactive services that do not dedicate time to resolving endemic problems and limits to transparent service reporting.
- **ICT business management and support:** Limitations in managing ICT assets to support predictable replacement and maintenance cycles, a need to uplift skills and training in key areas and to provide more pro-active vendor management.

Changes to the operating model are proposed to address these limitations and to meet the evolving technology and health service needs into the future to support:

- Effective strategic planning and stronger clinical engagement to be responsive to new models of care and continuous systems improvement needs.
- Predictable and efficient management of ICT assets to provide reliable, up to date, high-performing, technology infrastructure across all sites.
- End-to-end management of requests and incidents to provide a seamless experience for ICT end users.
- Capacity and skills uplift to support 'problem management' to mitigate commonly occurring or widespread issues.
- Enhanced individual and team performance management to meet ICT customer and LHD Executive expectations.
- Building capability to enable the various teams to function as a high performing team operating as 'one team' regardless of location.
- Process optimisation to support greater effectiveness or efficiencies to free up and redirect capacity towards the provision of sustainable services.
- Remediate areas of silos in the team to reduce organisational risk.
- Remediate areas of overlaps across teams to reduce duplication.
- Create redundancy within the services we provide to ensure the organisations are kept "online".
- Provide clear career paths for staff as well as succession opportunities.

2.2 Type of change

The operating model changes required to meet the goals of reform listed above include:

- **Realignment of ICT functional working groups** – the new model defines three core functional groupings:
 1. Digital Health governance, strategic planning, business management and project management;
 2. Clinical engagement, Health Information, and privacy; and
 3. Operational support services.

Within these groups there are common services, used across all Digital Health service requirements, and 'business aligned' services that focus, more specifically, on frontline health service needs.

- **Change of job roles** - the above changes, together with other opportunities for improvement noted previously, will lead to a change in the role requirements of some of the existing staff profile and a change in reporting line. There may also be a need to introduce new skills and capabilities.
- **System change** – updated or additional tools for roles with changed/broader technology scope.
- **Process change** – changes in ICT service delivery including increased collaboration and partnership with clinical, corporate and support staff and improved management of day-to-day support services, service reporting and performance management.

2.3 Scope of change

The primary area of change is the Health Information, Communication & Technology (Health ICT) Service Department which provide technology services for Western NSW and Far West LHDs. The transformation is across the entire Health ICT Department and includes changes to systems, process, roles and reporting lines.

The changes may have a future impact on services outside of the Health ICT as Health ICT team look to pursue cyber security maturity and compliance with NSW Cyber Security Policy and the recently updated SOCI Act and safeguard health information contained in or accessed by technology systems by addressing the risks associated with 'shadow IT', 'Internet of Things (IoT)' and third-party providers.

Shadow IT, IoT and technology services operating outside local ICT control pose several security challenges and risks including lack of standardisation, compliance violations, malware infections, data breaches and data loss as devices and/or applications are often not subject to the same level of security controls as those with the remit of ICT gatekeepers. In Western NSW these services include medical imaging, cancer services, biomedical and building technology from corporate.

3 Key Stages and Processes

Stage 1 Consultation 20 05 2024 – 02 07 2024	Stage 2 Finalisation 03 07 2024 – 19 07 2024	Stage 3 Implementation Commencing 22 07 2024
Release of proposed realignment document for feedback.	Feedback considered, document revised and finalised.	Final structure adopted
<p>Proposed transformation document distributed to:</p> <ul style="list-style-type: none"> - FW and WNSW LHDs Health ICT staff - Health Services Union <p>Consultation information sessions with Health ICT staff</p> <p>Documentation released to staff and union.</p> <p>EAP Services offered to staff.</p> <p>Consultation feedback to be received by 2nd July 2024</p> <p>Questions can be sent to below email and will be collated and answered if possible on a weekly basis during the consultation period</p> <p>Feedback to be sent via email to: WNSWLHD-HealthICT-Transformation@health.nsw.gov.au</p>	<p>Feedback considered and document revised as necessary.</p> <p>Approval to continue sort from executive.</p> <p>Final transformation document released by 19th July 2024</p> <p>EAP services offered to staff</p>	<p>Finalisation of role changes and reporting line changes.</p> <p>Budget, cost centre and workforce profile aligned.</p> <p>Recruitment process to commence. Recruitment will be cascading in nature with the Director, Digital Health role to commence first. All roles below will be initially for Health ICT staff only.</p> <p>Resume and application writing services offered to staff.</p> <p>Vacant positions post internal Health ICT recruitment to be advertised through regular recruitment processes.</p> <p>Recruitment will adhere to the relevant recruitment, EEO, Workforce Mobility Placement and Managing Displaced Employees policies and procedures.</p>

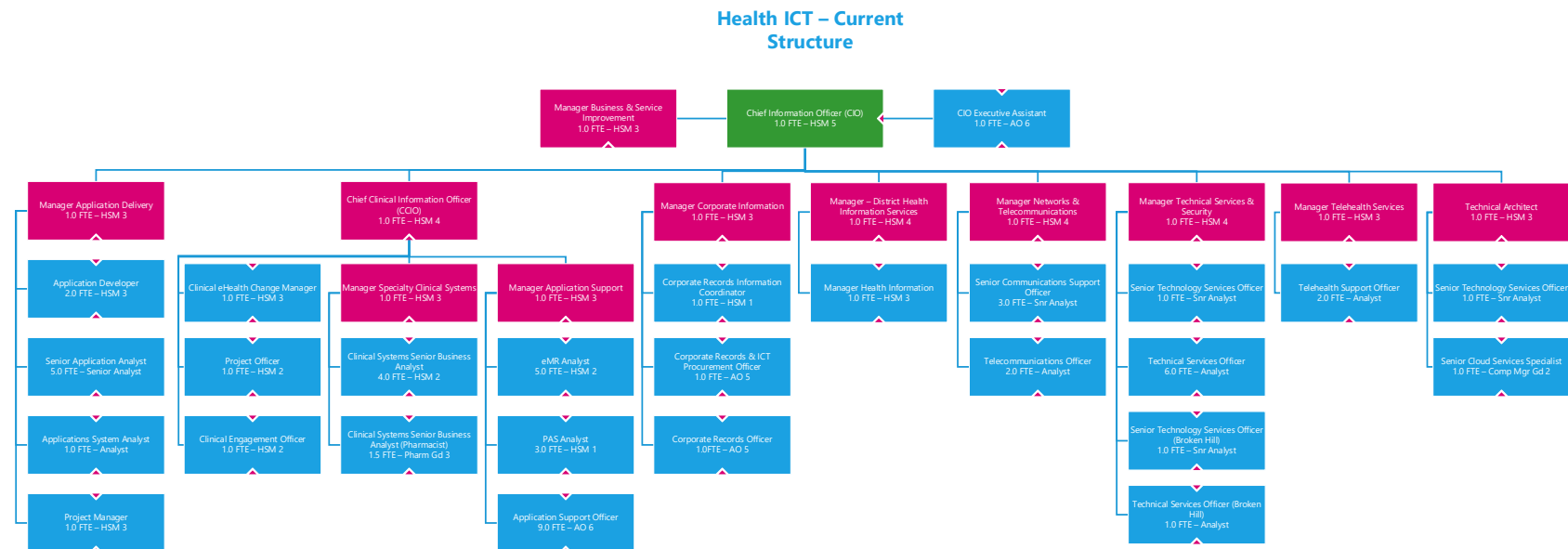
4 Current Structure and Functions – Overview

The current structure is largely founded on technical service areas and skill sets. Key groups include:

- Chief Clinical Information Officer, Project Management Office and Electronic Medical Record (EMR) Program – supports the roll-out of state-wide clinical applications, including the EMR, as well as local EMR and Patient Administration System (PAS) application support.
- Telehealth Services – management of telehealth and virtual care services and technologies.
- Health Information Management – quality and compliance management of medical records (digital and paper-based).
- Corporate record management - quality and compliance management of corporate records (digital and paper-based).
- Application Delivery – supports business analysis, technical development, testing and implementation of local applications.
- Network and Telecommunications – project and operational support for local voice and data networks.
- Technical Services – projects and operational support for end user compute, desktop and other endpoints, support for access and security management.

These groups are overseen by the Chief Information Officer (CIO) and supported by the Executive Assistant and the Manager of Business and Service Improvement.

The following organisational chart outlines the current structure of HICT.



It is important to note this only depicts the permanent structure for Health ICT and does not include any temporary or contract positions. Below provides a high-level summary of service remit of each team.

4.1 Chief Information Officer (CIO) Office

The CIO Office leads the implementation of ICT strategy ensuring alignment of LHD and external digital priorities with LHD information and digital needs. The team also consists of administration support to the Chief Information Officer.

4.2 Application Delivery

This team currently provides technical application implementation, maintenance and support, database management, system integration, and application development services.

4.3 Business and Service Improvement

This team currently provides service, change and business management including critical incident management, Communication and Stakeholder Management, finance, contracts, assets, service improvement and vendor review/management.

4.4 Clinical Systems and Health ICT Project Management Office

This team currently provide clinical technology strategy and engagement, demand management, project assurance and project reporting, clinical system configuration, support, and patient registration.

4.5 Cloud and Architectural Services

This team currently provisions, monitors and supports on-premise and cloud infrastructure, systems and security for both FW and WNSW LHDs.

4.6 Corporate Information

This team currently provides corporate information and record management (electronic & paper) retention, storage, culling and archive for WNSW LHD. The team supports the single eDRMS platform across FW and WNSW.

4.7 Health Information

This team currently provides district leadership for health information, record management, medico legal and privacy related services for WNSW LHD.

4.8 Networks and Telecommunications

This team currently provides network, wi-fi and telephony infrastructure, design, configuration, support as well as mobile device management, messaging integration with building technology.

4.9 Technical Services and Security

This team currently provides procurement, implementation and support of end user infrastructure, including desktop, laptops, printers. Cyber security services for both FW and WNSW is also within the remit of this team.

4.10 Telehealth

- This team currently provides telehealth infrastructure and support services for both FW and WNSW LHDs. Management all operational and technical aspects for the LHD video conferencing network – clinical and administrative.

5 Proposed Structure – Overview

The proposed structure is based on a rearrangement of functions to support a more effective operating model.

The new functional model defines three key groupings:

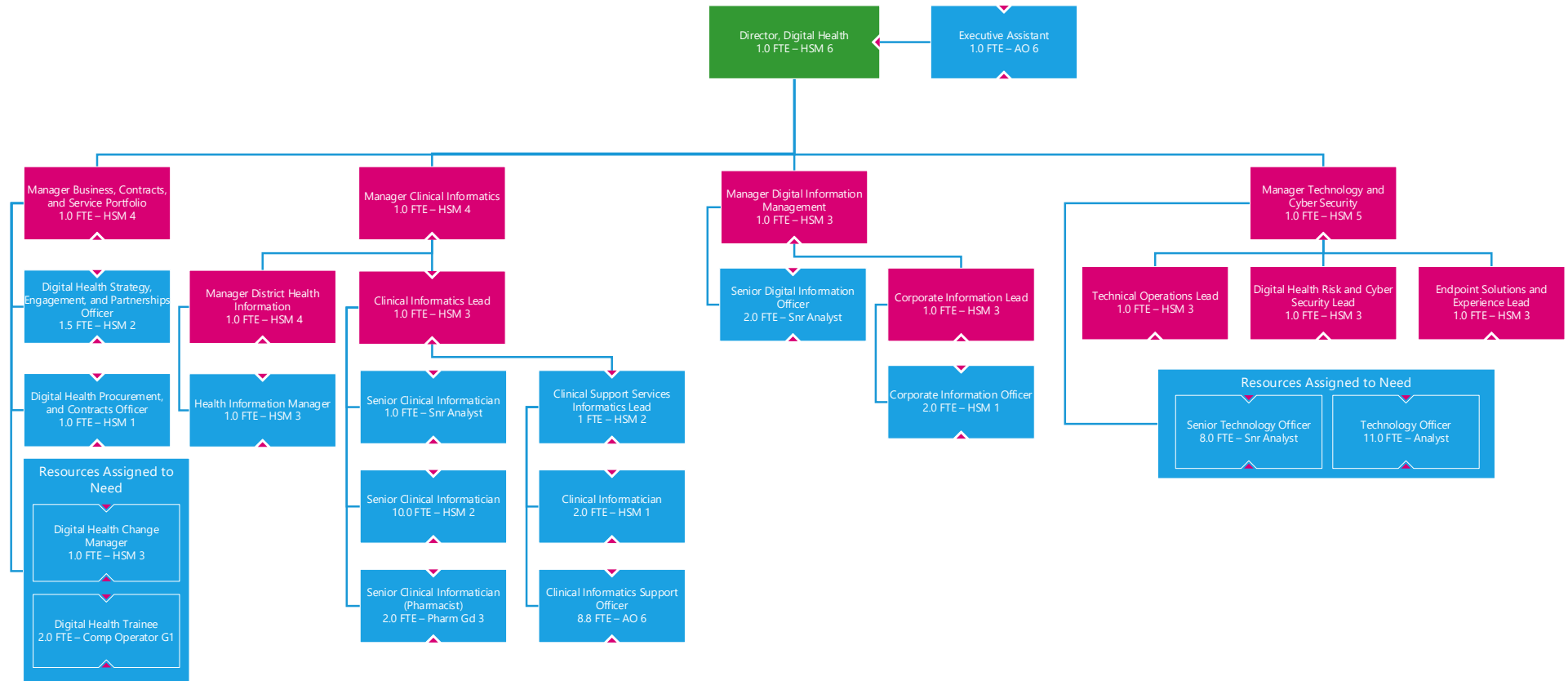
- Strategic planning, clinical engagement, and project management.
- Operational support services.
- ICT governance and business management.

The groups are defined to include common services, used across all service requirements, and ‘business aligned’ services that focus, more specifically, on frontline health service needs. This blended approach is intended to simultaneously leverage common technical service requirements, where appropriate, and position key capabilities close to frontline clinicians and support staff as strongly as possible.

Reorganising the functional model will support efforts to overcome current challenges and better position WNSW Digital Health Services for the future of services in the LHD.

The following organisational charts outline the proposed structure covering all positions.

Digital Health Services Proposed Structure



5.1 Digital Health Services Office

The Director, Digital Health will provide the overarching strategy and guidance for Digital Health Services. The function is an essential bridge between technology, information, and strategy, providing professional strategic advice and direction, leading change management in technology implementations, facilitating seamless transitions, and fostering innovation in healthcare delivery. The function is also an essential bridge between the clinical workforce and the ICT service delivery, translating clinical requirements into actionable ICT strategy and programs.

5.2 Business, Contracts & Portfolio Services

This team will provide all finance, contracts, lifecycle, and procurement functions for the whole Digital Health Services department as well as manage the Digital Health Service Portfolio Management function which includes the pipeline of work (including briefing and business case workup), service catalogue, and assignment of project resources. The team will also work closely with the Digital Health Services Office to develop strategies and uphold governance.

5.3 Clinical Informatics and Health Information Services

This team will cover WNSWLHD district wide Health Information leadership and privacy services as well as clinical change, engagement, workflows and education at the elbow within the various health services for FW and WNSWLHD. In addition, after hours administration transactions for smaller facilities will be a function of the clinical informatics arm.

5.4 Digital Information Management Services

This team will provide Information Management and support for FW and WNSWLHDs as well as Corporate Records management for WNSWLHD.

5.5 Technology and Security Services

This team will provide services spanning Architecture, Server Infrastructure, Database Services, Network Infrastructure, Cloud technologies, Telephony, End user solutions and experience, Cyber Security and Digital Health Risk Management.