Special Commission of Inquiry into Healthcare Funding

Statement of Dr Zoran Bolevich

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1.   This statement made by me accurately sets out the evidence that I would be prepared, if necessary, to give to the Special Commission of Inquiry into Healthcare Funding (**the Inquiry**) as a witness. The statement is true to the best of my knowledge and belief.

A.   BACKGROUND

2.   My name is Dr Zoran Bolevich. I am the Chief Executive of eHealth NSW (**eHealth**) and Chief Information Officer of NSW Health. My CV is at Exhibit 5 NSW Health Tranche 2 Consolidated Exhibit List

B.   SCOPE OF PROCUREMENT AND SERVICE DELIVERY

3.   This statement addresses the questions raised in the Inquiry's letter dated 20 December 2023 and also broadly addresses Term of Reference E. The statement does not specifically exclude 'capital-related' or 'workforce-related' procurement activities. This is because: (a) many Information and Communication Technology (**ICT**) projects are capitally funded, and procurement is an integral part of these projects as well as being an enabler of ICT service delivery, and (b) professional services and other forms of workforce inputs are often inextricably linked with technology products that are being implemented and, therefore, human resource inputs cannot be logically separated from other procurement outcomes.

4.   In discussing delivery of services, this statement focusses on the shared services provided by eHealth. In addressing procurement, this statement relies on the definition of procurement in section 162 of the *Public Works and Procurement Act 1912*, being:

   "procurement of goods and services means the process of acquiring goods and services by—

   a. identifying the need to purchase goods and services, and

   b. selecting suppliers for goods and services, and

   c. contracting and placing orders for goods and services,

   and includes the disposal of goods that are unserviceable or no longer required".

5.   Delivery of services by the shared services and statewide health services agencies is distinct from procurement. When Local Health Districts (**LHD**) and Specialty Health Networks (**SHN**) receive services from eHealth, there is no procurement relationship between eHealth and the LHD or SHN, with eHealth acting as the Shared Service agency.

6.   This statement is made from the perspective of the whole-of-system view of ICT, and in addressing advantages, disadvantages, and opportunities in the NSW Health procurement system for ICT, does so from a statewide rather than local perspective.

C.   ROLE AND FUNCTION OF eHEALTH

7.   eHealth is a NSW Health Shared Service agency, established in 2014 as part of the Health Administration Corporation. Its role is to provide statewide leadership on the planning, implementation and support of ICT and digital capabilities across the NSW Health system. It provides ICT solutions that support the health needs of NSW communities now and into the future, consistent with the objectives of the Future Health strategy and the need for NSW Health to be digitally enabled.

8.   eHealth is responsible for developing Whole of Health digital strategy, policy, standards, and investment plans; coordinating and implementing statewide ICT programs and projects; as well as providing a comprehensive set of ICT support services to NSW Health entities. eHealth undertakes these functions under the policy guidance and oversight of the NSW Ministry of Health and in partnership with LHDs, SHNs, Pillar organisations, statewide services and other NSW Health entities.

9.   eHealth procures, co-creates, builds and manages digital systems and initiatives to support NSW Health in the areas of:

   a.   Clinical care

   b.   Workforce and business management (including finance, procurement and asset management)

   c.   Population health

   d.   Patient experience

   e.   Data management, reporting and analytics

   f.   Research and innovation

10.   In order to provide these clinical and business-related digital capabilities, eHealth designs, operates and maintains ICT and digital infrastructure including hosting services (both in the NSW Government Data Centres and the Cloud), wide area networking services, active directory, communication platforms (including email, instant messaging and videoconferencing), and cyber security services (e.g. Health Security Operations Centre).

11.   To support users of ICT and digital systems across the health system, including frontline healthcare workers, eHealth operates a 24/7 Statewide Service Desk, which includes a fully staffed call centre as well as an online portal where users can raise service tickets and make service requests (SARA – Search And Request Anything portal).

12. The procurement function within eHealth is an integral part of the agency's service provision and is used to:

   a. Procure statewide platforms, solutions and services in alignment with NSW Health's strategies and capital investment plans (e.g. procuring a statewide digital radiology solution, procuring a statewide staff rostering system etc.);

   b. Procure enabling technologies and platforms for eHealth's own use when providing support services to NSW Health entities (e.g. procuring software which monitors availability and performance of servers, procuring software which supports operation of the Statewide Service Desk etc.);

   c. Procure ICT good and services on behalf of NSW Health entities (including LHDs and SHNs) for procurements over $150,000.

13. As a Shared Service agency, eHealth holds accreditation under the NSW Accreditation Program for Goods and Services for significant (high value and high risk) procurements. LHDs and SHNs do not have this accreditation.

14. eHealth provides category plans, procurement activity and savings reports to the NSW Health Chief Procurement Officer (**CPO**). eHealth is also required to report to the CPO any instances of non-compliance with the Procurement Policy that the agency might become aware of.

D. FUNDING

15. NSW Health Shared Services operate primarily on a cost recovery model through internal charges to NSW Health entities, including LHDs and SHNs. NSW Health Shared Services' budgets are block funded and set by the Ministry of Health, within the available funding envelope for eHealth. Charges take into account:

   a. charges based on service catalogue and published pricing, and

   b. charging linked to consumption with customers receiving regular consumption data.

16. Recurrent funding is received via the Ministry of Health for programs and services that do not have a capital funding allocation. eHealth covers the cost of 'business as usual' service provision to NSW Health entities via 'user charges'. Examples of the components that are included in user charges are software licences and hosting for corporate and clinical applications (such as HealthRoster and Electronic Medical Records), access to the Statewide Service Desk and onsite support (where applicable), specialised application support and enhancements, networking, cyber security and other technical support services.

17. In addition to the primary recurrent funding from the Ministry of Health via cost recovery "user charges", eHealth also receives:

   a. Capital funding for statewide programs,

   b. Recurrent funding from the Ministry of Health to support eHealth's core functions.

18. Capital funding for statewide programs and projects is received from NSW Treasury via the Ministry of Health. Funding for these initiatives can also come from the NSW Government Digital Restart Fund, administered by the Department of Customer Service.

19. Recurrent funding allocated by the Ministry to support core functions of eHealth include support for its governance, executive management, finance, procurement, and people and culture functions.

20. In addition to funding allocated to eHealth, other NSW Health entities, including LHDs and SHNs, fund a range of local ICT and digital systems and support services.

21. Accelerated digitisation across the health system over the last decade has required corresponding funding to be allocated to eHealth and LHDs/SHNs to ensure that systems and infrastructure can be implemented and supported as required. While funding for digital health has grown in recent years, the total operating expenditure on ICT and digital is estimated to be less than 4% of the total operating expenditure of NSW Health as a whole. Capital expenditure on ICT and digital projects varies between financial years and, in recent years has been in the range of 5% to 7% of the total capital expenditure of NSW Health.

E. eHEALTH'S ROLE IN PROCUREMENT REFORM

22. eHealth supports the NSW Health Procurement Reform in two distinct ways: (1) by developing and implementing digital enablers for the Procurement Reform, and (2) by performing its responsibility as the ICT Category Manager for NSW Health.

23. In relation to the digital enablers of the Procurement Reform, eHealth has delivered the following:

   a. Procurement Systems and Data Strategy
      i. The purpose of the project was to develop an ICT strategy and development roadmap for digital systems and capabilities required to enable NSW Health Procurement Reform over a five-year period.
      ii. The project resulted in the development of the ICT Strategy for the Procurement Reform, which informed planning, scoping and delivery of digital systems and capabilities.

   b. SmartChain
      i. The purpose of the project was to implement a single, integrated end-to-end procurement and supply chain system that simplifies processes, making ordering and supplies management easier and more efficient for users.
      ii. The project resulted in supply chain modernisation by improving how data is collected, used and managed by NSW Health facilities, ensuring decision making is based on reliable and trusted information. The project was delivered in partnership with HealthShare and the Ministry of Health, with various aspects of the project still ongoing.

c. DeliverEASE
    i. The purpose of the project was to improve the ordering, supply, delivery and storage of medical consumables (e.g. items such as dressings, gloves, masks, tubing, cannulas, syringes and needles) for clinical areas of public hospitals.
    ii. The project resulted in the development of an initial solution that has been successfully implemented at several pilot sites, now moving towards a statewide rollout led by HealthShare NSW in partnership with LHDs and eHealth.

d. NSW Health Medicines Formulary Publishing Platform
    i. The purpose of the project was to establish a statewide digital medicines formulary platform for use by all LHDs and SHNs.
    ii. The project resulted in the successful implementation of NSW Health Medicines Formulary Platform (including Master Drug Catalogue and Statewide Hospital Pharmacy Product List) where approved pharmaceutical products are published in a centralised electronic format. This platform is easily accessible and available for clinicians to guide decision-making for the appropriate, safe, effective and cost-effective use of medicines. The formulary listings undergo a systematic, evidence-based evaluation process governed by the Clinical Excellence Commission. This capability underpins effective management of Pharmaceutical procurement.

24. In relation to its responsibility as the ICT Category Manager, eHealth has delivered savings and other benefits presented in paragraphs 68-79 of this statement.

25. For its responsibility as the ICT Category Manager, eHealth provides category plans, procurement activity and savings reports to the CPO.

F. eHEALTH'S ROLE IN REFORM OF SERVICE DELIVERY

26. In 2016, NSW Health released its 'eHealth Strategy for NSW Health 2016-2026' (Exhibit 66 NSW Health Tranche 2 Consolidated Exhibit List), the purpose of which was to guide the health system in delivering world-class, eHealth-enabled healthcare services across the State over the ten-year period. The Strategy establishes the direction for eHealth investment in alignment with broader health system strategies and priorities. It outlines an ambitious plan for the systematic digitisation of clinical and corporate functions, underpinned by modern, secure ICT infrastructure, and enabling innovations in integrated care, telehealth and data analytics. The strategy was to be delivered across three horizons of 'Building Consistent Foundations', 'Integration', and 'Personalisation'.

27. In the years that followed, the eHealth Strategy was systematically implemented through a series of strategic investments and programs/projects, which were managed by eHealth and delivered in partnership with NSW Health entities, with input and support from numerous industry partners and suppliers.

28. For the purposes of this statement, I will generally refer to projects managed by eHealth, and their purpose and results, rather than any particular underlying technology with their various brand names or individual suppliers whose technology was used as part of these projects.

29. The following significant statewide ICT and Digital projects and reforms have been completed since 2018:

   a. EMR Connect
      i. The purpose of the project was to enhance the delivery of safe and quality care for patients in NSW Health facilities through optimising the functionality of Electronic Medical Record (EMR) solution and implementing Electronic Medication Management (eMeds), which is a specialised functional module within EMR.
      ii. The project resulted in the successful roll out and adoption of the enhanced EMR in 187 hospitals and of eMeds, a digital prescribing and administration system within the EMR, in 200 hospitals across NSW Health. It was delivered through an extensive partnership with LHDs, SHNs, CEC, ACI and other NSW Health entities, and with considerable input and engagement of clinicians.

   b. Electronic Record for Intensive Care (eRIC) - Adult
      i. The purpose of the project was to implement a statewide, integrated and patient-centred clinical information solution to level 4, 5 and 6 adult Intensive Care Units (**ICU**s) (21 sites in LHDs across NSW Health).
      ii. The project resulted in successful delivery of the solution to 21 adult ICUs (total of 442 intensive care beds). Completed in collaboration with LHDs and the ACI, and with strong clinical sponsorship, the solution has replaced paper-based processes and provided ICU clinicians with accurate and timely information to improve decision making and patient care.

   c. Electronic Transition of Care (eTOC)
      i. The purpose of the project was to implement a solution to safely transfer patient medication management information, allergies and adverse drug reactions between the hospital ward EMR and ICU electronic system (eRIC). This allows clinicians to easily review and modify medication orders as necessary, to providing optimal patient care and improving safety.
      ii. The project resulted in the successful delivery of the solution, which allowed a reduction in medication error risk during the transfer of care process. This project was completed in conjunction with the ACI, CEC and LHDs.

   d. HealtheNet Pathology
      i. The purpose of the project was to integrate pathology test results into the HealtheNet solution from the four NSW Health Pathology Networks (Pathology West, SEALS, Sydney South West Pathology Service and Pathology North) to improve access to pathology test results and improve the quality and timeliness of patient care.
      ii. The project resulted in publicly ordered pathology results being available for clinicians to view across NSW through the HealtheNet Clinical Portal, enabling timely diagnostic decisions while also reducing the need for duplicative testing. Test results are also being submitted to the national My Health Record where they are available to patients and community-based providers. The project was delivered in partnership with NSW Health Pathology.

e. Clinical Health Information Exchange
    i. The purpose of the project was to provide clinicians with the ability to access patient information, including encounters, medications, pre-existing conditions, allergies, immunisations, lab results and clinical notes across organisational, geographical and technological boundaries regardless of local electronic health systems. This capability becomes critical where sharing of clinical information is impeded by inability of disparate electronic systems to 'talk to each other' (a problem commonly referred to as lack of interoperability).
    ii. Initially, the project resulted in successful real-time sharing of clinical information between NSW Health facilities and the Northern Beaches Hospital (in its role as a contracted service provider to NSW Health), which uses a different electronic medical record system to NSW Health facilities. It has since been deployed across most LHDs and SHNs, and will continue to play a key role once the new, Single Digital Patient Record is in place statewide, as it could enable sharing of information with other private and public sector electronic medical record systems in the future.

f. EMR Enhancements for Leading Better Value Care (LBVC)
    i. The purpose of the project was to develop digital solutions within EMRs used across NSW Health to support the delivery and documentation of standard models of care developed by the ACI as part of the value-based healthcare initiative.
    ii. The project resulted in the development of EMR modules for the Osteoporosis Refracture Prevention Program, Osteoarthritis Chronic Care Program, Renal Supportive Care, and Inpatient Management of Diabetes Mellitus.

g. Health Outcomes and Patient Experience (HOPE) Platform for Patient Reported Measures (PRM) – Phase 1
    i. The purpose of the project was to develop a platform which enables patients to provide structured feedback on outcomes and experiences of their care, and for this feedback to inform and guide the patients' care teams in a timely manner.
    ii. The project resulted in the creation of a purpose-built ICT platform, co-designed with patients and clinicians, and implemented across 648 locations (clinics) in NSW Health, currently used by more than 35,000 patients. PRM data captured in the system is used to inform shared decision making at the individual level, monitoring and quality improvement at the service level, and to evaluate outcomes and value at the system level. The project was delivered in partnership with the ACI and LHDs/SHNs.

h. Rural Medicines Formulary
    i. The purpose of the project was to develop a single Medicines Formulary (a standardised list of approved medicines) for use across six rural LHDs: NNSWLHD, MNCLHD, WNSWLHD, FWLHD, SNSWLHD and MLHD.
    ii. The project resulted in the creation of a single standardised rural formulary across the six rural LHDs, developed and implemented a publication tool for the rural formulary; and incorporated the rural formulary into eMeds solution. It was delivered in partnership with clinicians across the six LHDs and has

been used as a springboard for the subsequent development of NSW Health's statewide Medicines Formulary (delivered as part of the Procurement Reform).

i. NSW Health Vaccination Administration Management (VAM) system
   i. The purpose of the project was to rapidly build and implement a system to enable a mass vaccination program, which was a critical part of NSW Health's COVID-19 pandemic response.
   ii. The project resulted in the development of a mass vaccination system and its rapid deployment across a large number of vaccination sites across the state, supporting the delivery of more than two million doses of COVID-19 vaccine to the population. The system enabled online bookings by members of the public, supported the administration of vaccines by clinical staff, and facilitated the operational management of vaccination clinics. The project was delivered in partnership with the Ministry of Health and LHDs/SHNs.

j. COVID-19 Screening, Monitoring and Vaccinations – Australian Immunisation Register (AIR) Compliance
   i. The purpose of the project was to enable accurate recording of the screening, monitoring, tracking, ordering and administering of COVID-19 and other vaccinations occurring in public hospitals, and uploading the record of vaccination to the AIR system in compliance with new national legislation.
   ii. The project resulted in NSW Health becoming the first state to start registering all hospital-based vaccinations in the AIR. The project was delivered in partnership with the Ministry of Health (Health Protection NSW) and LHDs/SHNs.

k. Digital Solution for NSW Health's School Vaccination Program
   i. The purpose of the project was to digitise paper-based processes traditionally used by the School Vaccination Program and enable reporting of vaccination records to the Australian Immunisation Register (AIR).
   ii. The project resulted in the development and implementation of a strategic solution providing the capability to digitally capture parent consent, allow scheduling of clinics, manage the allocation of nurse immunisers, resources, vaccines and equipment to clinics, and provide the online capability for multiple vaccination delivery as per the routine school vaccination program requirements. The program was delivered in partnership with the Health Protection Branch of the Ministry of Health and Public Health Units of LHDs and SHNs.

l. Electronic Oral Health Record
   i. The purpose of the project was to enable the transition from paper-based patient records and processes to an EMR platform for public oral health services across NSW Health.
   ii. The project resulted in a successful rollout of the new digital solution across all LHDs and SHNs, enhancing patient safety and quality of care for public oral health patients and creating a capability for analysis and reporting of data. The project was delivered in partnership with the Ministry of Health's Centre for Oral Health and LHDs/SHNs.

m. Research Ethics and Governance Information System (REGIS)
    i.   The purpose of the project was to implement a solution to support the management of research project application reviews, approvals, and post-approval reporting, undertaken across NSW Health.
    ii. The project resulted in the successful implementation of an electronic solution which captures, manages and reports information relating to the review and approval stages of research projects, and post-approval activities. The project was delivered in partnership with the Office of Health and Medical Research in the Ministry of Health.

n. National Children's Digital Health Collaborative
    i.   The purpose of the project was to establish, a range of standards and digital tools to improve the health and wellbeing of children and young people, in partnership with the Australian Digital Health Agency and all states and territories. This innovative program was led by eHealth NSW and brought together Australia's leading experts in children's health to identify a number of strategic digital health projects for funding by the Australian Digital Health Agency.
    ii. The project resulted in the co-design, implementation and evaluation of: a nationally harmonised data set for 'Baby Books'; a proof of concept of a digital version of the Baby Book and the Pregnancy Health Record; and a set of interoperability resources for real-time sharing of information between GP, hospital and community health systems.

o. Technology Platform for NSW Health Telestroke Service
    i.   The purpose of the project was to deliver a comprehensive technology solution, enabling the establishment of an innovative statewide Telestroke service.
    ii. The project resulted in the delivery of networking infrastructure, videoconferencing equipment and software, as well procurement and implementation of a specialised medical imaging post-processing application and its integration with Enterprise Image Repository, to enable safe, effective operation of a new model of care which supports 23 rural and regional hospitals across NSW with real-time Stroke Specialist advice. The project was delivered in partnership with South Eastern Sydney LHD, the ACI, the Ministry of Health, and rural/regional LHDs.

p. Incident Management System (ims+)
    i.   The purpose of the project was to replace a legacy incident management system with a new statewide Incident Management System (known as ims+) for all NSW Health entities that would enable the notification and management of actual and potential incidents and near misses, as well as receipt of consumer feedback about patient care.
    ii. The project resulted in a rollout of the new solution across NSW Health, enabling increased notification, classification and quality of information, and opening up potential for enhanced analysis and monitoring of safety and quality across the system. The project was delivered in partnership with the CEC, Ministry of Health and LHDs/SHNs.

q. HealthRoster

    i. The purpose of the project was to implement a statewide staff rostering solution to enable improvements in rostering practices across NSW Health.

    ii. The project resulted in a successful rollout of the digital rostering solution to all LHDs and SHNs, covering all professional groups and with extensive interfaces to StaffLink HR and payroll systems, enhancing the efficiency and quality of various back-office functions, as well as creating new analytical and reporting capabilities. The project was delivered in partnership with the Ministry of Health, HealthShare NSW and LHDs/SHNs.

r. Human Capital Management (HCM) & Recruitment

    i. The purpose of the project was to extend workforce systems capability to include capability assessment, prioritisation and high level scoping of recruitment and onboarding, eCredentialing, employee life cycle, performance management, learning, talent and reporting.

    ii. The project resulted in the statewide rollout of Recruitment and Onboarding (ROB), and a pilot of Performance and Talent Management (PAT) across HealthShare NSW and eHealth NSW to inform the subsequent build and deployment of the PAT solution across the state. The project was delivered in partnership with the Ministry of Health, HealthShare NSW and LHDs/SHNs.

s. Performance and Talent (PAT)

    i. The purpose of the project was to implement performance, goals, talent management and succession planning modules of a cloud-based HCM solution to all NSW Health entities. The PAT platform will support enhanced talent management functionality, including the use of a statewide capability framework.

    ii. The project resulted in the implementation of PAT across all NSW Health entities and covering approximately 157,000 employees. It was delivered in partnership with the Ministry of Health.

t. Recruitment and Onboarding - Junior Medical Officer (JMO) Project

    i. The purpose of the project was to enable LHDs and SHNs to recruit Junior Medical Officers in accordance with NSW Health JMO recruitment policy during the Annual Medical Recruitment (AMR) campaign. ROB JMO replaced a legacy system, which used an obsolete technology solution.

    ii. The project resulted in the implementation across LHDs and SHNs, enabling integration to StaffLink for position management, pre-population of existing staff profile data, automation of mandatory background checks, automation of onboarding to StaffLink, and dashboard reporting with integration into Corporate Analytics. It was delivered in partnership with the Ministry of Health, HealthShare NSW and LHDs/SHNs.

u. Medical Intern Recruitment Application (MIRA) Project

    i. The purpose of the project was to replace a legacy Prevocational Training Application Program (PTAP) system, deliver additional functionality and enable the recruitment of interns for the 2023 clinical year and ongoing.

    ii. The project resulted in the successful replacement of the previous system, eliminating a significant business continuity risk, and enhancing

standardisation of processes, alignment with other recruitment campaigns, integration to StaffLink, automation of mandatory background checks, standardised dashboard reporting, and integration into Corporate Analytics. The project was delivered in partnership with the Health Education and Training Institute (HETI).

v.   Corporate Analytics

    i.   The purpose of the project was to enhance operational reporting by working directly with the various LHDs/SHNs, the Ministry of Health and HealthShare NSW's Service Centre to deploy multiple reporting and analysis solutions.

    ii.   The project resulted in the delivery of integrated corporate data sets and extended dashboard and data visualisation capability, reducing cognitive load for administrative and managerial staff, and highlighting exceptions where direct action should be taken. The analytics and insights will continue to drive improvements in service delivery, planning and financial efficiency through improved operational management based on timely data and evidence.

w.   NSW Health Pathology Billing

    i.   The purpose of the project was to develop and implement a statewide Pathology Billing System to the networks of NSW Health Pathology.

    ii.   The project resulted in the successful implementation of the billing capability at the West, South and East Pathology networks, enhancing the accuracy, completeness and timeliness of Pathology billing, including full compliance with complex Medicare billing rules. The project was delivered in partnership with NSW Health Pathology.

x.   VMoney Web

    i.   The purpose of the project was to develop and implement an application that would enable HealthShare NSW's Service Centre to process Visiting Medical Officer (VMO) payments on behalf of NSW Health Local Health Districts (LHDs) and other health agencies.

    ii.   The project resulted in the enablement of HealthShare NSW's Service Centre to process payments to around 7000 VMOs statewide in a timely manner, and with strengthened controls and reporting capabilities and resulted in the decommissioning of the legacy PowerHouse application.

y.   ServiceNow Workflow Management Program

    i.   The purpose of the program was to implement ServiceNow platform for all significant enterprise-wide service management needs, including eHealth and HealthShare NSW service centres, as well as to provide self-service capability to NSW Health staff, and create a platform for other clinical and non-clinical workflows to be digitised using the ServiceNow platform.

    ii.   The project resulted in the implementation of the in-scope ServiceNow applications, creation of Search and Request Anything (SARA) portal for NSW Health staff, reduction in manual administration, improved customer transparency, reduced processing times, greater process audit capability, and improved overall customer experience.

z. NSW Enterprise Data Lake
    i.   The purpose of the project was to create a statewide data platform to significantly reduce the barriers to accessing data from core clinical and corporate systems, enabling NSW Health entities to rapidly derive insights through near real-time analytics and reporting.
    ii. The project resulted in the establishment of a significant data management and analytics platform, which delivers benefits to NSW Health by improving data delivery efficiency and unlocks data from our frontline systems that were very difficult to access. This has enabled a number of innovative projects currently being undertaken by NSW Health entities, providing valuable insights for clinical, business, patient safety, efficiency, and productivity purposes.

aa. InformCAD - Tactical Upgrade of Computer Aided Dispatch (CAD) System
    i.   The purpose of the project was to upgrade NSW Ambulance's CAD system, including establishment of a new, stable and sustainable ICT infrastructure platform.
    ii. The project resulted in a successful rebuild of all technical environments, upgrade of the CAD system itself, and delivery of numerous improvements to geospatial recognition, enhanced mapping, up to date clinical prioritisation and dispatch pathways, general user experience, as well as stability, security and performance of this mission-critical system. The project was delivered in partnership with NSW Ambulance.

bb. Supporting Establishment of the Virtual Clinical Care Centre (VCCC) for NSW Ambulance
    i.   The purpose of the project was to provide technology enablement for a secondary triage service to ensure appropriate and timely provision of healthcare to triple zero (000) callers through a virtual model of care.
    ii. The project resulted in the state-of the-art Virtual Clinical Care Centre being established by NSW Ambulance ahead of the high volume demand period in 2021, and creating a platform for further growth of this service model. The project was designed and led by NSW Ambulance with technology support provided by eHealth NSW.

cc. Health Wide Area Network (HWAN)
    i.   The purpose of the project was to deliver a statewide computer network which caters for all data, voice and video services across NSW Health, connecting all NSW Health facilities (hospitals, community health centres, clinics, administrative facilities etc.) into a secure, high performing health network.
    ii. The project resulted in the successful implementation of a statewide computer network, which is a key enabler of all other digital capabilities and advances across NSW Health. The project was delivered in partnership with LHDs and SHNs.

dd. Statewide Data Centre Reform (SwDCR)
    i.   The purpose of the project was to establish new infrastructure through the transition of local data centres to the whole of Government Data Centres (GovDCs) and public Cloud hosting options.

      ii.   The project resulted in the migration of over 907 applications and 2,095 servers to the Cloud. The program also decommissioned a total of 299 applications and 1,762 servers. This has resulted in a significant reduction in cyber security, business continuity and performance risk from locally-hosted systems. It has also created a platform for further rationalisation of the current ICT environment which will lead to cost efficiencies.

ee.   Clinical Applications Reliability Improvement (CARI)
      i.   The purpose of the project was to increase the reliability and availability of essential clinical functionality for eHealth-hosted Cerner Electronic Medical Records (eMR) domains and other eHealth-hosted clinical applications.
      ii.   The project resulted in the enhanced reliability and availability of essential clinical systems across all NSW Health entities, reduced the impact of scheduled outages, unscheduled outages and disasters, and improved recovery time following outages.

ff.   Expansion of Statewide Infrastructure Services (SWIS)
      i.   The purpose of the project was to deliver centralised and supported identity management, directory services and email messaging services to all NSW Health entities. This included the implementation of scalable core systems and the phased migration of all NSW Health users.
      ii.   The project resulted in the implementation of centralised identity management for all users and applications ('Single Sign On') providing users with statewide access to systems, simplified and rapid user administration at enterprise level; centralised Directory Services; instant messaging; simplified user access and management of email and directory systems; and centralised desktop and server management system. The program has remediated over 2,840 applications and migrated 128,672 workstations.

gg.   Unified Conference, Collaboration and Wireless (UCCW)
      i.   The purpose of the project was to provide statewide videoconferencing and collaboration solutions and wireless services to support staff and patients across NSW Health.
      ii.   The project resulted in the implementation of secure Patient and Guest Wi-Fi service at 332 facilities across the state; successful roll out of Skype for Business and, subsequently, Microsoft Teams to more than 100,000 users, enabling video conferencing and collaboration across the health system; and development of MedSync clinical communications platform for clinicians to collaborate and instantly share clinical information in a secure manner.

hh.   Health Grade Enterprise Network (HGEN) Pilots
      i.   The purpose of the project was to establish a new, reliable, secure and financially sustainable model for procurement and management of computer networks in hospital campuses, and trial the new model in three diverse sites to extract learnings and assist with the development of a statewide approach.
      ii.   The project resulted in the development of statewide wired and wireless networking standards; successful procurement and establishment of pilot contracts; and implementation of the HGEN model at three sites: Westmead Health Precinct, Coffs Harbour Hospital, and NSW Health head office in St Leonards. Evaluation of the pilots, and practical learnings from all three sites

have informed next phase of the project – establishment of a statewide HGEN model.

30. Building on the achievements from earlier phases of its eHealth Strategy, NSW Health continues its journey to create a digitally enabled health system through a number of strategic projects and reforms which are currently underway. This includes technology initiatives to support statewide strategies and priorities such as those articulated in the Virtual Care Strategy for NSW Health, and aligned to the All-of-Government NSW Digital Strategy (including the 'Cloud First' policy).

31. The following significant statewide ICT and Digital projects and reforms are currently underway:

   a. Single Digital Patient Record (SDPR)
      i. Being undertaken by eHealth, in collaboration with all NSW Health entities.
      ii. The purpose of the project is to transform the digital systems and workflows that NSW public healthcare workers use every day to deliver care - through the rollout of a next generation, integrated patient administration system, electronic medical record, and laboratory information management system. It will replace nine systems currently used for electronic medical records, ten patient administration systems and five pathology laboratory information management systems in use across NSW Health.
      iii. Progressed in consultation with all LHDs and SHNs, Pillars, Ministry of Health and Statewide Services, and with strong clinical leadership and engagement across the entire health system.
      iv. Expected to be completed by end of 2029.

   b. Radiology Information System and Picture Archiving and Communication System (RIS-PACS) platform
      i. Being undertaken by eHealth, in collaboration with 12 LHDs and SHNs, and NSW Health Pathology.
      ii. The purpose of the project is to implement a state-based, supportable and advanced digital medical imaging platform which closely integrates with other core clinical systems, including the electronic medical record (EMR), patient administration system (PAS) and enterprise imaging repository (EIR). It replaces the critical end-of-life Radiology Information System and Picture Archiving and Communication System (RIS/PACS) currently used by medical imaging departments across NSW.
      iii. Progressed in consultation with medical imaging departments of all participating NSW Health entities.
      iv. Expected to be completed by mid-2024.

   c. Real Time Prescription Monitoring
      i. Being undertaken by eHealth, in collaboration with the Ministry of Health.
      ii. The purpose of the project is to reduce the opportunity for inappropriate use of monitored medicines and associated harm, and support increased regulatory efficiency and monitoring.
      iii. Progressed in consultation with Pharmaceutical Branch of the Ministry of Health, community-based prescribers (GPs and specialists), and pharmacies across NSW.
      iv. Expected to be completed by mid-2024.

d. SIGNAL – New Disease Surveillance Platform for NSW Health
    i. Being undertaken by eHealth, in collaboration with the Ministry of Health.
    ii. The purpose of the project is to build capability to undertake statewide disease surveillance activities and maintain outbreak response at the forefront of epidemic preparedness.
    iii. Progressed in consultation with Health Protection NSW and Public Health Units of all LHDs and SHNs.
    iv. Expected to be completed by end of 2026.

e. Essential Eight Uplift Program
    i. Being undertaken by eHealth, in collaboration with the Ministry of Health.
    ii. The purpose of the project is to increase the maturity of NSW Health cyber security defenses and capabilities through the adoption of 'Essential 8' standard recommended by the Australian Cyber Security Centre, with focus on most critical digital assets managed by eHealth NSW (so-called 'crown jewels').
    iii. Progressed in consultation with Cyber Security NSW, Ministry of Health, and all NSW Health entities.
    iv. Expected to be completed by December 2025.

f. Health Outcomes and Patient Experience (HOPE) Platform for Patient Reported Measures – Phase 2
    i. Being undertaken by eHealth, in collaboration with ACI and the Ministry of Health.
    ii. The purpose of the project is to further enhance the use of patient feedback (Patient Reported Outcome Measures and Patient Reported Experience Measures) as part of the care provision process by integrating HOPE with EMR and delivering a range of functional enhancements to the platform (e.g. multilingual survey questionnaires, enhanced reporting capabilities).
    iii. Progressed in consultation with patients and clinicians across NSW, including primary care clinicians.
    iv. Expected to be completed by October 2024.

g. Co-located GP Clinics
    i. Being undertaken by eHealth, in collaboration with Western New South Wales LHD and Far West LHD.
    ii. The purpose of the project is to enable secure sharing of key clinical information between acute care facilities and GPs within participating LHDs to enhance continuity of care and patient safety within rural healthcare settings.
    iii. Progressed in consultation with GPs, hospital clinicians, Royal Flying Doctor Service, and Aboriginal Health Organisations.
    iv. Expected to be completed by June 2024.

h. Engage Outpatients
    i. Being undertaken by eHealth, in collaboration with the Ministry of Health and LHDs/SHNs.
    ii. The purpose of the project is to develop a statewide capability for digital outpatient referral management to enable referrals from a GP to a clinician

        in an LHD to be managed digitally, leading to more efficient triage, management, tracking and reporting of referrals and associated outpatient appointments.

  iii. Progressed in consultation with referrers (GPs) and specialist outpatient services of LHDs and SHNs.

  iv. Expected to be completed by July 2024 (initial group of LHDs only, with further uptake expected post project closure).

i. Electronic Record for Intensive Care (eRIC) for Neonatal and Paediatric Intensive Care Units

  i. Being undertaken by eHealth, in collaboration with Hunter New England LHD, Murrumbidgee LHD, Nepean Blue Mountains LHD Northern Sydney LHD, Sydney Childrens Hospital Network, South East Sydney LHD, Sydney LHD, Southern NSW LHD, South West Sydney LHD, Western Sydney LHD, and the ACI.

  ii. The purpose of the project is to design and implement a specialised clinical information system for neonatal and paediatric intensive care units and co-located special care nurseries. The solution will be a single point to collate patient data, including capture from beside devices such as haemodynamic monitors, in concert with clinical notes, medications and fluids. This includes integration with external systems such as laboratory and radiology systems, to provide clinicians with clinical decision support, enhance patient safety and improve clinical outcomes.

  iii. Progressed in consultation with neonatal and pediatric intensive care units of participating LHDs and SHNs, and with input and guidance from ACI's Intensive Care Network.

  iv. Expected to be completed by mid-2024.

j. i.Pharmacy Statewide Consolidation and Cloud Migration

  i. Being undertaken by eHealth, in collaboration with all LHDs and SHNs.

  ii. The purpose of the project is to combine the existing 11 instances of the i.Pharmacy application (used to manage medication dispensing and other aspects of pharmaceutical services provided by public hospital pharmacies) into a single instance and host that instance in an eHealth-managed cloud environment. This is a key enabler of various improvement initiatives focused on the appropriate, safe, effective and cost-effective use of medicines.

  iii. Progressed in consultation with hospital pharmacy departments of all participating LHD and SHNs.

  iv. Expected to be completed by mid-2024.

k. Remote Patient Monitoring (Virtual Care)

  i. Being undertaken by eHealth, in collaboration with the Ministry of Health, ACI, LHDs and SHNs.

  ii. The purpose of the project is to enhance management of patients suffering from chronic diseases by means of remote collection and evaluation of patient health data using sensors and other monitoring technology at home and in community settings.

  iii. Progressed in consultation with patients and clinicians across NSW Health.

  iv. Expected to be completed by end of 2024 (first phase of a potential multi-year expanded program).

l.   Electronic Prescribing for Community Based and Virtual Care
   i.   Being undertaken by eHealth, in collaboration with the Ministry of Health and LHDs/SHNs.
   ii. The purpose of the project is to enable national electronic prescribing service to be leveraged by public hospitals and community health centres in NSW, replacing the current paper-based prescribing of medicines. A proof of concept is being undertaken with initial focus on prescribing of special authority medicines in metropolitan LHDs, and on prescribing for nursing home residents in two rural LHDs (Murrumbidgee and Western NSW).
   iii. Progressed in consultation with prescribing clinicians and pharmacists in participating LHDs.
   iv. Expected to be completed by September 2024.

m.   Emergency Care Assessment and Treatment (ECAT) Protocols Electronic Ordering
   i.   Being undertaken by eHealth, in collaboration with ACI, CEC, Ministry of Health, LHDs and SHNs.
   ii. The purpose of the project is to standardise nurse-initiated emergency care by enabling pre-defined order sets to be generated within the EMR to support safe and efficient use of standard care protocols (known as ECAT protocols).
   iii. Progressed in consultation with emergency care clinicians across all LHDs and SHNs, as well as the ACI's Emergency Care Network.
   iv. Expected to be completed by mid-2024.

n.   Venous Thrombosis Embolism (VTE) Prophylaxis in EMR
   i.   Being undertaken by eHealth, in collaboration with the CEC and the Ministry of Health.
   ii. The purpose of the project is to develop a VTE screening and assessment tool within the Electronic Medical Record system, as well as dashboards for compliance monitoring and quality reporting.
   iii. Progressed in consultation with clinicians across LHDs/SHNs.
   iv. Expected to be completed by mid-2025.

o.   eCQR Trauma Prototype Project
   i.   Being undertaken by eHealth, in collaboration with the ACI.
   ii. The purpose of the project is to develop a proof of concept of an Electronic Clinical Quality Register (eCQR) service that reduces the manual input of clinical data by extracting it from existing datasets in EMR and other clinical information systems, via the Enterprise Data Lake.
   iii. Progressed in consultation with Trauma clinicians who are part of the ACI's network.
   iv. Expected to be completed by March 2024.

p.   Brighter Beginnings - NSW Digital Baby Book
   i.   Being undertaken by eHealth, in collaboration with the Ministry of Health.
   ii. The purpose of the project is to improve the lives and experiences of parents and families in the first 2,000 days of their child's life by providing them with the opportunity to stay on track with child health and development information, health and development checks and childhood

        vaccinations.

    iii.   Progressed in consultation with child health and public health experts, clinicians and parents.

    iv.   Expected to be completed by end of 2026 (now incorporated into aspects of the Single Digital Patient Record Program).

q.   NSW Ambulance – Clinical Device and Notification Platform Upgrade

    i.   Being undertaken by eHealth, in collaboration with NSW Ambulance, ACI, and LHDs/SHNs.

    ii.   The purpose of the project is to replace the ageing, legacy fleet of monitor/defibrillators and associated LifeNet electrocardiogram (ECG) transmission solution with the next generation devices and a new software solution, which will support improved cardiac care to patient in line with the State Cardiac Reperfusion Strategy. The solution will provide future opportunities to extend to other models of care, including stroke, sepsis, and trauma.

    iii.   Progressed in consultation with clinicians (paramedics and hospital clinicians) across all LHDs, SHNs, and NSW Ambulance.

    iv.   Expected to be completed by end of 2024.

r.   Upgrade of NSW Ambulance's Electronic Medical Record

    i.   Being undertaken by eHealth, in collaboration with NSW Ambulance.

    ii.   The purpose of the project is to upgrade the NSWA EMR software and migrate the application to the cloud. As all components are at 'end of life', upgrading the software will mitigate these limitations and provide enhanced integration capabilities with hospital EMR systems.

    iii.   Progressed in consultation with NSW Ambulance.

    iv.   Expected to be completed by April 2024.

s.   NSW Health Medicines Formulary – Individual Patient Use (IPU)

    i.   Being undertaken by eHealth, in collaboration with the CEC, the Ministry of Health and LHDs/SHNs.

    ii.   The purpose of the project is to deliver a statewide solution to capture medications approved for use outside of a formulary listing or indication, but where a clinical need has been identified. Currently, the IPU processes across NSW Health remain largely manual and are highly variable. This feature will complete the process for approving and tracking medications initiated in NSW Health facilities and provide opportunities to reduce annual pharmaceutical spend through targeted contract negotiation, while reducing the labour burden on front line staff.

    iii.   Progressed in consultation with clinicians, patient safety and medication management experts.

    iv.   Expected to be completed by October 2024.

t.   Cash Transformation Program

    i.   Being undertaken by eHealth, in collaboration with the Ministry of Health and HealthShare NSW.

    ii.   The purpose of the project is to optimise cash management through automation and centralisation of processes and preferred efficient payment channels, resulting in expedited, accurate and streamlined cashflow.

      iii.   Progressed in consultation with Finance teams of all NSW Health entities.

      iv.   Expected to be completed by mid-2024.

u.   Enterprise Robotic Process Automation (eRPA) Program

      i.   Being undertaken by eHealth, in collaboration with HealthShare.

      ii.   The purpose of the project is to introduce a streamlined solution for process automation across NSW Health, in conformance with the governance model and change management frameworks. An Automation Capability Centre will be developed to deliver a scalable enterprise cloud automation platform, with a centralised control centre and a holistic eRPA delivery approach. The project will implement improvements to the existing process management systems through the deployment of digital process bots, improving accuracy of process delivery.

      iii.   Progressed in consultation with HealthShare.

      iv.   Expected to be completed by mid-2024.

v.   Stafflink ERP Cloud Migration

      i.   Being undertaken by eHealth, in collaboration with the Ministry of Health and HealthShare.

      ii.   The purpose of the projects is to migrate the current Stafflink Finance and Supply Chain modules to the Oracle ERP Cloud to deliver functional enhacements and improved user experience and create a modern finance capability.

      iii.   Progressed in consultation with HealthShare NSW, and the Ministry of Health.

      iv.   Expected to be completed by October 2026.

w.   Human Capital Management (HCM) Upgrade

      i.   Being undertaken by eHealth, in collaboration with the Ministry of Health and HealthShare.

      ii.   The purpose of the project is to migrate the current Stafflink HCM to the Oracle HCM Cloud and deliver functional enhancements and improved user experience.

      iii.   Progressed in consultation with HealthShare NSW and the Ministry of Health.

      iv.   Expected to be completed by October 2024.

x.   MoH Financial Planning Improvements (FPI) Program

      i.   Being undertaken by eHealth, in collaboration with the Ministry of Health and HealthShare.

      ii.   The purpose of the project is to migrate the financial planning and reporting modules to the Oracle EPC Cloud to improve budgeting, forecasting and planning to increase data quality, make business processes more intuitive, achieve seamless integration with StaffLink and third-party systems, address manual changes, and enhance analytics and reporting.

      iii.   Progressed in consultation with Finance teams of all NSW Health entities.

      iv.   Expected to be completed by April 2024.

y.   Enterprise Performance Management (EPM) Program

      i.   Being undertaken by eHealth, in collaboration with the Ministry of Health and HealthShare NSW.

ii. The purpose of the project is to provide capability for HealthShare to perform all account reconciliations, ensuring consistent and common practices across NSW Health, providing a world class service using leading software, and meeting audit requirements and local needs. This will free up capacity across NSW Health entities to focus on higher value tasks and provision of commercial support.

iii. Progressed in consultation with Finance teams of all NSW Health entities.

iv. Expected to be completed by November 2024.

z. eHealth Critical Infrastructure Refresh (eCIRP)

i. Being undertaken by eHealth, in collaboration with LHDs and SHNs.

ii. The purpose of the project is to refresh and/or replace historic ICT systems with cloud-based, virtualised infrastructure. This will establish a healthcare-centric, scalable and secure 'infrastructure as a service' that readily flexes to meet NSW Health needs and avoids irregular and uncertain capital expenditure on ICT infrastructure. Key deliverables include: Core Network Refresh, M365 Governance Tools, and EMR migrations to Cloud.

iii. Progressed in consultation with ICT teams across NSW Health.

iv. Expected to be completed by mid-2025.

aa. Digital Capability Optimisation (DCO)

i. Being undertaken by eHealth, in collaboration with LHDs, SHNs, Pillars and the Ministry of Health.

ii. The purpose of the project is to decrease ongoing ICT operating complexity and associated costs, and further reduce cybersecurity exposures and operational risks associated with outdated or obsolete technology.

iii. Progressed in consultation with ICT teams across NSW Health entities.

iv. Expected to be completed by July 2025.

bb. Health Grade Enterprise Network (HGEN)

i. Being undertaken by eHealth, in collaboration with LHDs, SHNs and the Ministry of Health.

ii. The purpose of the project is to establish a standards-based approach for consistent and regularly updated local area network capability. HGEN is an enabler of digital innovations such as SDPR, Virtual Care, Patient and Staff Experience systems.

iii. Progressed in consultation with ICT teams across NSW Health.

iv. HGEN is an ongoing asset management program.

32. For most of its significant projects, eHealth is required to undertake 'Gateway Reviews' in line with NSW Government's ICT and Digital Assurance Framework (Exhibit 123 NSW Health Consolidated Exhibit List) operated by the Department of Customer Service. For most projects, eHealth also undertakes Post Implementation Reviews to extract key process learnings.

G. LEGISLATION, FRAMEWORKS AND POLICY GOVERNING PROCUREMENT IN NSW HEALTH

33. The NSW Health procurement policies are developed by a range of branches within the Financial Services and Asset Management Division of the Ministry of Health. The primary procurement policy, which sets procurement requirements that apply statewide to all

NSW Health entities, and reflect the *NSW Government Framework*, is *PD2023_028 – NSW Health Procurement (Goods and Services) Policy* (**Procurement Policy),** developed by the Strategic Procurement Branch of the Ministry of Health. A copy of the *Procurement Policy* is at Exhibit 13 of the NSW Health Tranche 2 Consolidated Exhibit List.

34. eHealth operates under the NSW Health *Procurement Policy* and does not maintain a separate eHealth procurement policy.

35. Under the NSW Health *Procurement Policy*, eHealth is designated as having specific statewide responsibilities in relation to the procurement of ICT-related goods and services.

36. In performing its procurement related functions, eHealth is required to comply with the Commonwealth and NSW legislation as well as Government policies, including the following:

   a. *Public Works and Procurement Act 1912* (NSW)

   b. *Public Works and Procurement Regulations 2019* (NSW)

   c. *Government Sector Finance Act 2018* (NSW)

   d. *Independent Commission Against Corruption Act 1988* (NSW)

   e. *Security of Critical Infrastructure Act 2018* (Cth)

   f. Accreditation program for goods and services

   g. Accreditation program for Construction

   h. *Modern Slavery Act 2015* (Cth)

   i. *State Records Act 1998* (NSW)

   j. Supplier code of conduct

   k. Free trade agreements

   l. NSW Treasury Bid Cost Contributions Policy (2018)

   m. NSW Small Business Commissioner Faster Payment Terms Policy (2018)

   n. ICT/ Digital SME Procurement Commitments

   o. 20 Procurement Board Directions

   p. Small Business Short Payment Term Policy

   q. Regional and SME Procurement Policy

   r. Aboriginal procurement policy

s.   ICT purchasing framework

t.   Innovation Procurement Pathways

u.   Additional requirement imposed by various schemes and panels established by NSW Procurement.

37.   Further details are set out in the NSW Government Procurement Policy Framework August 2021 (Exhibit 16 NSW Health Tranche 2 Consolidated Exhibit List).

38.   In relation to other statewide services which eHealth is responsible for, the agency is guided by its determination of functions as set out in its establishment document, issued by the Secretary of NSW Health. The most recent revision of this document, dated 2 June 2023, is at Exhibit 124 of the NSW Health Tranche 2 Consolidated Exhibit List.

H.   PROCUREMENT PROCESSES FOR ICT

39.   It is assumed that by this question the Inquiry seeks information on procurement of goods and services, other than shared services delivered directly to LHDs/SHNs by HealthShare, eHealth and Health Infrastructure without the involvement of a third party.

40.   In addressing autonomy in relation to procurement of goods and services, this statement discusses autonomy at a LHD and SHN level as individual facilities within those LHDs/SHNs will be subject to additional governance set at LHD/SHN level, including by way of LHD or SHN procurement frameworks to implement NSW Health procurement policies and a local level Delegations Manual.

41.   Under the NSW Health *Procurement Policy*, there are prescribed financial and risk thresholds for ICT procurement that provide some autonomy to LHDs/SHNs. For larger scale or higher risk ICT procurement activities, there is a requirement to engage with eHealth.

42.   When procuring ICT-related goods and services, NSW Health entities (including LHDs/SHNs) must:

a.   Use whole-of-health or whole-of-government contracts for ICT-related procurements of any value, where available on an existing contract;

b.   Refer ICT procurement outside of whole-of-health or whole-of-government contracts valued at ore than $150,000 to eHealth;

c.   Use the ICT Services Scheme (SCM0020) where the ICT-related goods or services are valued at less than $150,000 and are not available on an existing contract.

43.   A relativity new addition to the NSW Health Procurement Policy is a requirement for NSW Health entities to obtain approval from eHealth before commencing procurement of laptops or desktop computers of any value. This requirement was added to the Policy in anticipation of a statewide initiative to standardise and, over time, consolidate procurement and management of end-user devices such as laptops and desktop computers. Such standardisation and consolidation is considered to be an enabler of the Single Digital Patient Record (SDPR) where a unified statewide clinical information

platform will require a high degree of standardisation of end user devices in order to be safe and fully operational. Being a new requirement, this is currently still being operationalised from a practical perspective.

44.   It is important to note that for certain types of ICT goods and services NSW Health is required to participate in, and be found by, the Whole Government procurement processes. Whole of Government contracts for ICT goods and services are set up and managed by the NSW Department of Customer Services (DCS), which has an overall responsibility for coordination and oversight of procurement in areas including telecommunication services, enterprise licensing agreements for selected software vendors (e.g. Microsoft, Oracle, SAP, Salesforce), as well as Cloud hosting services. NSW Health is represented in these processes by eHealth, and eHealth may participate in negotiations to set up or renew a whole of government contract as a significant consumer of contracted services.

45.   Pre-qualification schemes are set up and managed by the NSW Government within the Procurement Policy Framework. There are three pre-qualification schemes relevant to eHealth, and NSW Health *Procurement Policy*.

a.   SCM 0020 – ICT Services Scheme

This is managed by Digital NSW (within the Department of Customer Services) and mandated for use for all ICT Goods and Services. The scheme operates under defined rules. rules (exhibited at Exhibit 34 of the NSW Health Tranche 2 Consolidated Exhibit List), and the NSW Government's ICT Purchasing Framework (exhibited at Exhibit 80 of the NSW Health Tranche 2 Consolidated Exhibit List).

As a general principle, eHealth works only within this scheme, which is an approved list under the Enforceable Procurement Provisions. If a potential supplier is not registered on the scheme, eHealth requests that the supplier becomes registered as a condition of doing business. In all cases the contracts are formed under the ICT Purchasing Framework.

b.   SCM 0005 Performance and Management Services Scheme

This is managed by NSW Procurement and recommended for use at NSW government level. eHealth uses this scheme wherever applicable for all ICT related professional services sourcing, which is not covered by SCM 0020 ICT Services Scheme. The scheme operates under defined rules which include a standard form of contract (exhibited at Exhibit 125 of the NSW Health Tranche 2 Consolidated Exhibit List).

c.   NSW Government Legal Services Panel

eHealth sources all legal services from this Panel, using only Panel members and Legal Services Orders. There is no off-panel expenditure (exhibited at Exhibit 166 of the NSW Health Tranche 2 Consolidated Exhibit List).

46. Whole of Health contracts for ICT good and services are negotiated and managed by eHealth in consultation with LHDs, SHNs, Ministry of Health, Pillars and other agencies. The contract structure is generally a Master or Head Agreement with individual contracts or orders formed for the scope of demand within entities. Since the introduction of the ICT Purchasing Framework, all new Whole of Health contracts should be formed using the Master ICT Agreement (MICTA) / ICTA construct. Examples include: ICT Professional Services Panel; Data Carriage, Fixed and Mobile Voice Services; Single Digital Patient Record; Radiology Information System / Picture Archiving and Communication System.

47. Where centralised procurement activity is undertaken by eHealth, this is done in collaboration with LHDs/SHNs and other agencies to ensure that the outcome will meet their needs. For example, subject matter experts drawn from LHDs/SHNs may be invited to join an evaluation panel as part of a procurement process, or to provide technical, clinical, operational or other advice to eHealth in support of the procurement activity.

48. Where panel or multi-supplier arrangements are put in place, including standard methods of addressing commercial and contractual risk. LHDs/SHNs must operate within those arrangements but otherwise have autonomy on how and what to buy. For example, under the Health Grade Enterprise Network (HGEN) procurement, a statewide panel is being established consisting of two suppliers with several standard service offerings. LHDs/SHNs can choose a particular HGEN panel supplier to work with and a particular configuration of their service offerings that best meets their needs.

49. eHealth considers procurement to be one of the services it provides to NSW Health entities. As the accredited agency for ICT procurement under the NSW Procurement Framework, eHealth acts as a 'centre of excellence' in managing a procurement process, which is fully compliant with NSW Government policy whilst also ensuring that the defined need is addressed at individual entity level. eHealth will manage the procurement process on behalf of an individual NSW Health entity (e.g. a LHD, SHN or NSW Ambulance) for higher risk or significant contracts (as per the NSW Health Procurement Policy) even if the contract or service is for the single entity.

I. DELIVERY OF SHARED SERVICES BY eHEALTH

50. Section 126G of the *Health Services Act 1997* provides that the Minister may direct that a Public Health Organisation acquire specified services from the Health Secretary:

> "**126G   Directions by Minister in relation to acquisition of services**
>
> (1) The Minister may, by order in writing, from time to time—
>
> > (a) require a public health organisation to acquire specified services from the Health Secretary or some other specified person if and when such services are required, and
> >
> > (b) give a public health organisation any necessary directions for the purposes of paragraph (a).
>
> (2) The following conduct is specifically authorised by this Act for the purposes of the Competition and Consumer Act 2010 of the Commonwealth and the Competition Code of New South Wales—
>
> > (a) a requirement or direction of the Minister given under subsection (1),

(b) the entering or making of a contract, agreement, arrangement or understanding as the result of such a requirement or direction,

(c) conduct authorised or required by or under the terms or conditions of any such contract, agreement, arrangement or understanding,

(d) any conduct of the Health Secretary in carrying out the Health Secretary's functions or exercising the Health Secretary's powers under this Part,

(e) any conduct of a public health organisation, its agents, a person concerned in the management of the organisation or a person who is engaged or employed by the organisation—

    (i) in relation to obtaining services in accordance with this Part, or

    (ii) in complying with a requirement or direction of the Minister given under subsection (1).

(3) Conduct authorised by subsection (2) is authorised only to the extent (if any) that it would otherwise contravene Part IV of the Competition and Consumer Act 2010 of the Commonwealth and the Competition Code of New South Wales."

51. LHD and SHNs are directed to obtain certain services from eHealth in accordance with the Direction of the Minister as set out in s. 4.1 of the *Accounts and Audit Determination for Public Health Entities in NSW 2020* (**the Determination**), a copy of which is exhibited to this statement at Exhibit 35 of the NSW Health Consolidated Exhibit List.

52. The determination provides:

"**4.1 NSW Health Shared Services**

    a. Unless otherwise approved by the Health Secretary, PHEs other than AHOs must use the following NSW Health shared services:

        i. *HealthShare NSW*:
            1. Transaction services such as accounts payable, including VMO payment processing, accounts receivable, payroll, and general ledger reconciliations, interfaces and journal postings associated with transaction services
            2. Procurement services, including purchasing, warehousing and distribution
            3. Hotel and support services, including food and linen
            4. Disability support services through Enable NSW
            5. Asset register;
            6. Payment services, such as payments for accounts payable, including VMO payments, payroll and PAYG from a HealthShare NSW bank account.

        ii. *NSW Health Pathology* for pathology services, including public pathology, forensic and analytical services;

       iii.   *eHealth* for Statewide information and communication technology services;

       iv.   *Health Infrastructure* for the delivery and management of major capital works projects, and

       v.   *NSW Ambulance Service* for ambulance services (excluding Non-Emergency Patient Transport).

b.   an AHO may, with the approval of the Secretary, use the services of a Division of the Health Administration Corporation, as listed in a) above;

c.   unless otherwise approved by the Secretary, PHEs receiving services from a NSW Health Shared Service must pay the Shared Service recovery charge set out in the respective Shared Service Customer Service Charters, as adjusted from time to time. The Shared Service recovery charge will be paid by the Ministry on behalf of the PHE;

d.   if no applicable Shared Service recovery charge is included in the Customer Service Charters, PHEs must, subject to the receipt of a correctly rendered Tax Invoice, promptly pay the Shared Service for services received, within normal trading terms;

e.   PHEs must appropriately record in the PHE accounts all Shared Service Recovery charges paid by the Ministry to a NSW Health Shared Service on behalf of the PHE and other NSW Intra-Health payments made on behalf of the PHE by the Ministry through the Ministry of Health State Pool, as set out in the Accounting Manual for Public Health Organisations; and

f.   PHEs must promptly pay for other services received from other NSW Health entities on receipt of a correctly rendered tax invoice.

Use of HealthShare NSW for payments

a.   PHEs, other than AHOs, must use HealthShare NSW for all payroll and accounts payable transactions unless exempt by the Ministry and where the payment is urgently required and cannot be processed by HealthShare on the same or next Business Day; and

b.   if an urgent payment directly by the PHE is required, the payment must be made by cheque or electronic funds transfer and the payment approved by two officers authorised to do so under approved delegations."

53.   In relation to ICT and digital services, NSW Health entities are required to use standard statewide platforms and services offered by eHealth, including:

a.   Infrastructure services such as: Health Wide Area Network, hosting services (in the Government Data Centres and the Cloud), Statewide Directory Services, Statewide Email Services;

b. Corporate systems such as: StaffLink HR and Payroll, StaffLink Financial and Procurement, AFM Online, Recruitment and Onboarding, Performance and Talent Management, HealthRoster, My Health Learning, Incident Management System (ims+), and various core office productivity tools (Microsoft Office 365 and Microsoft Teams);

c. Clinical systems such as Electronic Medical Records (EMRs), Electronic Medication Management (eMeds), iPharmacy pharmaceutical management system, Electronic Records for Intensive Care (ERIC), Digital Imaging (RIS-PACS), Enterprise Imaging Repository (EIR), eMaternity, Ambulance EMR, HealtheNet clinical repository and others;

d. Consumer-facing digital tools and platforms such as electronic referral management system, and the HOPE platform;

e. Population health systems such as the School Vaccination System, and Disease Surveillance System;

f. Virtual Care systems such as NSW Telestroke Service, My Virtual Care video-consultation platform, Remote Patient Monitoring system, and Clinical Care Overbed Network;

g. Cyber security services, including Health Security Operations Centre;

h. Statewide Service Desk.

54. Policy Directive on NSW Health Foundation ICT Services and Platforms defines which statewide clinical, corporate and infrastructure ICT services, standards and platforms must be used by all NSW Health entities to ensure consistent foundational capabilities across NSW Health.

55. These ICT services, standards and platforms have been developed and implemented over a number of years in line with NSW Health's strategic plans and priorities, as well as the eHealth Strategy for NSW Health 2016 - 2026. ICT standards are developed by eHealth in collaboration with LHDs/SHNs and other NSW Health entities and are informed by industry standards and accepted good industry practice in ICT and digital health. The list of Foundational ICT Services and Platforms is regularly reviewed and updated to reflect ongoing developments in NSW Health's digital environment, especially when a significant statewide program or project is completed, and a new statewide capability becomes available for everyone's use.

56. For ICT platforms and services which are not available on a statewide basis or are not able to be offered by eHealth at a point in time, LHDs, SHNs and other entities can choose to develop or adopt their own solutions.

57. Sometimes, LHD/SHN adoption of an eHealth-run service is a function of the LHD's/SHN's history. A good example of this is the Statewide Service Desk, which was established even before eHealth existed as a standalone agency, but it took many years for some of the LHDs/SHNs who previously ran their own local service desks to migrate to the eHealth-run service. These change processes can be very complex as they involve people, processes and technology. eHealth's service provision also needed to mature

and expand over time in order to be able to offer a reliable and effective statewide service at scale.

58.   At other times, locally-specific solutions may have arisen, and may continue to be required, because of a highly specialised nature of a clinical service that an individual LHD or SHN provides, which in turn requires a highly specialised digital solution. In such cases, it can be more cost-effective and practical to deploy and run such technology locally. One example of this, amongst many, is a specialised wound care management system operated by Sydney LHD who provide a tertiary-level burn injury service and wound management service for NSW Health.

59.   An individual entity (e.g. LHD, SHN, NSW Ambulance, Pillar or other entity) may actively choose to use eHealth as its provider of a certain ICT support service. For example, an entity can decide that it is more cost-effective, secure and sustainable for eHealth to support a certain specific application for them as opposed to that entity continuing to support it themselves. In these cases, eHealth uses a structured service transition process to ensure that the responsibility for provision of the support service is transferred from the health entity to eHealth in a comprehensive and well-managed fashion, including the relevant technical and contractual documentation. A considerable number of such transitions has been successfully completed over the last five to six years.

J.   PROCUREMENT AND SHARED SERVICE DELIVERY EXPENDITURE

60.   The eHealth Financial Statements for financial year ending 30 June 2023 are provided at Exhibit 55 NSW Health Tranche 2 Consolidated Exhibit List. Total actual expenses as of 30 June 2023 reported through the Statement of Comprehensive Income were $819.2 million. Included in this amount is $43.1 million related to capital program expensing, which are costs related to the execution of capital programs that do not meet the threshold to be capitalised.

61.   Total amount that eHealth charged NSW Health entities via the mechanism of 'user charges' (see paragraphs 15 and 16) in the financial year ending 30 June 2023 amounted to $550.8 million. It should be noted that these charges include vendor cost (goods and services), as well as costs of eHealth's service provision (salaries and wages). The balance of funding is derived from recurrent supplementation from the Ministry of Health, funding from the NSW Government Digital Restart Fund and program funding from NSW Treasury via the Ministry of Health. It should be noted that in FY2022-23, $7.1 million in COVID-19 related funding was received.

62.   Where increases in user charges are observed between financial years, they reflect actual cost increases and are driven by a variety of factors, including: volume growth (e.g. increased number of users and/or activity increases), introduction of new systems, enhancements to existing systems, Consumer Price Index (CPI) increase, foreign exchange fluctuations, and Cloud hosting costs (part of technology shift from a Capex-based hosting infrastructure to Opex-based cloud services).

K.   ADVANTAGES OF THE CURRENT SYSTEM

63.   Prior to the establishment of eHealth, many of the functions and leadership provided by a dedicated digital health agency were delivered in a more devolved manner and split across many different NSW Health organisations. This often resulted in duplication of

effort and a fragmented and inequitable approach to ICT investment and implementation across the state as well as an inconsistent digital experience for staff who may not work across LHDs.

64. Significant streamlining and consolidation of statewide investments and implementations have been achieved since then, but the current 'federated' approach to ICT operations across NSW Health ensures that there is a balance between local innovations (driven by locally-specific needs and innovative models of care) and central coordination (driven by standardisation and statewide implementation of common platforms).

65. Having a focussed ICT procurement function, managed by eHealth as the ICT Category Manager has enabled NSW Health to procure at scale for sustainable management of ICT infrastructure (e.g. hospital networks), applications (e.g. digital radiology PACS-RIS system) and services (e.g. vendor support for key clinical applications such as the Electronic Medical Records).

66. Whole of Health ICT procurement enables NSW Health to leverage its scale to secure better pricing and/or negotiate better commercial terms than those able to be achieved by any individual entity. The pricing and/or commercial benefit achieved by the State as a whole is then equitably distributed so that all LHDs/SHNs, and in particular those with less buying power (whether due to size or geography), are able to gain the benefit of the whole of state approach.

67. Where individual entities may take on additional risk (e.g. lower performance standards, less secure technology etc.) or agree to less beneficial commercial terms (e.g. supplier driven contracts, lower liability), they may potentially be able to obtain lower prices by accepting such operational risks and less beneficial terms. However, in these cases, the operational management of multiple risk positions across the State has significant internal costs and implications.

68. eHealth is unaware of instances where individual entities are able to secure better pricing on an equivalent basis. Should such instances ever occur, eHealth NSW would request the vendors to match the lower price across the state if a lower price is offered to an individual entity.

69. In relation to procurement and contract management, eHealth has achieved savings through its eHealth ICT procurement function, and these benefits accrue to LHDs/SHNs directly as well as through reduced cost of eHealth service delivery. Additional benefits arise from having the specialised ICT procurement and strategic supplier management expertise within eHealth, as it is not feasible or efficient to maintain this level of specialised expertise within LHDs/SHNs.

70. All procurement savings are captured once a contract is executed or varied. The savings are calculated for both cost reduction and cost avoidance. The basis of the calculation is for the duration of the initial contract or the duration of the variation.

71. Cost reductions are some of the following:

    a. Negotiated reduction in unit price, early payment discounts, volume discounts and rebates;

    b. Process improvements (including reduced delivery times, hosting arrangements);

    c.   Labour cost reductions;

    d.   Reduction through demand managed, such as standardised products;

    e.   Reduction in complexity including support costs;

    f.   Improved payment terms negotiated with suppliers.

72.   Savings are calculated off a base line which is established at the start of the process, which may include business case, existing rates, supplier quotes, and contractual increase. Centrally managed vendors such as Cloud providers allow the implementation of 'FinOps' approach to optimise the utilisation of Cloud infrastructure, which results in significant savings at a Whole of NSW Health level.

73.   Cost avoidance is calculated and tracked, however this is not reported as a 'saving' to NSW Treasury. Cost avoidance examples include: services provided for no charge; preventing supplier increases; improved supplier warranty terms.

74.   Through a consolidated procurement approach and proactive vendor and contract management, eHealth has delivered savings to NSW Health (in the form of cost reduction and cost avoidance), and has reached or exceeded the Ministry of Health procurement savings targets, including the following:

    a. $62.8 million in FY2018-19;

    b. $81.0 million in FY2019-20;

    c. $61.4 million in FY2020-21;

    d. $19.7 million in FY2021-22;

    e. $48.5 million in FY2022-23.

75.   In addition to financial benefits, there are significant non-financial, risk management and operational benefits which arise from a centralisation of both procurement and service delivery within NSW Health, including:

    a.   Risk management (including cyber security);

    b.   Contract and service rationalisation opportunities;

    c.   Negotiation of optimal contractual and liability positions;

    d.   Reductions in bespoke and/or unmanaged technology assets;

    e.   Improved integration capabilities (e.g. integration with other systems within NSW Health, and with community-based providers such as GPs);

    f.   Improved data management capabilities and compliance with mandatory reporting requirements (e.g. for performance, safety and quality, and activity based funding purposes);

g.   Ability to standardise and rationalise diverse technology assets (e.g. laptops, desktops and other devices), ensuing that frontline clinicians have access to up-to-date modern tools and that the asset lifecycle management approach is taken, including safe disposal of obsolete items.

76.   NSW Health is an active participant in all-of-government procurement initiatives and has been successful in negotiating discounts greater than the generic NSW Government arrangements of key enterprise-wide licensing agreements with strategic vendors such as Microsoft, Oracle and ServiceNow.

77.   Strong and effective relationships with trusted industry partners and strategic suppliers enable eHealth to ensure that NSW Health needs are prioritised and addressed with greater urgency during times of challenge or disruption. As reported by NSW Treasury, increased globalisation has combined with the move towards 'just-in-time' inventory management.

> "This has resulted in undiversified global supply chains that operate on lean margins with limited capacity to respond to adverse shocks. Dependence on regular, predictable shipments further limit the flexibility of supply chains to respond to sudden shifts in demand. COVID-19 presented both a demand and supply side shock to global supply chains."
>
> (Exhibit 126, NSW Health Tranche 2 Consolidated Exhibit List)

78.   During the early part of the COVID-19 pandemic, there were significant ICT supply chain disruptions including the global microchip shortage. eHealth as a centralised procurement function was able to ensure NSW Health was a prioritised customer during this time. This would not have been possible at an individual entity level.

79.   During recent flood events, eHealth was highly involved in the restoration of services to the affected areas (e.g. telecommunications and computer networks) through strong relationships with vendors and the size of the managed spend at a whole of NSW Health level.

80.   As outlined in earlier sections of this statement, centralised procurement activities are undertaken in consultation and collaboration with LHDs, SHNs, Pillars and other NSW Health entities, and are supervised by the Ministry of Health. This ensures that local service priorities, delivery plans and clinical and business requirements are informing and guiding procurement activities while also remaining compliant with relevant policies and procedures.

81.   The same applies to the wider eHealth service provision, which is informed by the needs and priorities of LHDs, SHNs and other NSW Health entities. A collaborative and consultative approach is taken to the development of ICT standards and policies, development of investment business cases and, most notably, planning and implementation of significant programs and projects. This ensures that central coordination (through eHealth) and local implementation (through LHDs and SHNs) result in optimal project outcomes.

82. In 2022, eHealth introduced a new, consumption-based pricing model for the services it provides to NSW Health entities. The model was developed in response to customer feedback and the need for intuitive and transparent approach to pricing that accurately reflects IT consumption. It has given NSW Health organisations greater visibility and control over their IT expenditure. Supported by a specialised costing and pricing solution known as Apptio, the new approach enables creation of a 'Bill of IT' for each NSW Health entity and provides:

   a. a single source of truth for the cost of all eHealth services;

   b. simple and easy to use platform to analyse billing;

   c. transparency of price for each service offering;

   d. enhanced understanding of each organisation's IT consumption;

   e. a foundation to plan expenditure more accurately and monitor performance against targets.

83. Current service delivery arrangements have also enabled NSW Health to strengthen its cyber security posture in recent years and to significantly enhance its capabilities and risk management strategies in relation to cyber security. This includes eHealth's role in implementing 'Essential 8' controls, undertaking assurance activities across the system, liaising with central agencies (such as Cyber Security NSW and the Australian Cyber Security Centre), and advising LHDs and SHNs on their local cyber security responsibilities.

84. Through its strategic planning function, eHealth has successfully collaborated with LHDs, SHNs and other NSW Health entities to assist with the development of local digital health strategies and ensuring alignment between those strategies and the wider Whole of Health priorities and investment plans. This has reduced potential duplication of effort across the system and resulted in more effective delivery of ICT and Digital plans and innovations at local levels. Some of these local innovations have also become candidates for subsequent statewide solutions, enabling local innovations to be 'scaled up'. For example, an EMR Antimicrobial Stewardship module developed in one LHD was able to be adopted across a number of other LHDs once taken through a collaborative statewide design and testing process coordinated by eHealth.

L. DISADVANTAGES OF THE CURRENT SYSTEM

85. Notwithstanding the extensive collaboration and engagement, the current governance arrangements allow LHDs and SHNs to opt out of some statewide approaches. Limited or unclear authority to mandate processes and/or consequences of non-compliance means that savings from use of statewide systems are often based on optional take up of such systems. This in turn limits NSW Health's ability to commit combined expenditure and achieve greater savings.

86. Similarly, incentives and disincentives for individual entities compliance with statewide standards or contracts are limited and often unclear.

87. While considerable progress has been made in terms of standardisation and collaborative decision making, accountability for many ICT and digital systems is devolved to LHDs, SHNs and other NSW Health entities, with varied approaches in relation to authority, accountability and decision making at local levels. This has led to a situation where some applications or systems may not have a clear business owner, or where local system configurations may introduce operational and cyber security risk, including additional support costs.

88. The current procurement and service delivery arrangements are complex and require extensive engagement and collaboration across the NSW Health system, especially when combined with increasingly stringent safety, operational, industrial, commercial and cyber security requirements. This can result in lengthy, costly and time-consuming processes, that lack agility and responsiveness.

89. While it is sometimes perceived by local entities that statewide contracts and statewide platforms impede local innovation activity, there is nothing in these contracts or platforms that inherently prevent entities from exploring, proposing or locally progressing innovative projects. In fact, operational risks (e.g. cyber security risks) are best managed on known platforms and applications. In that sense, innovation should be focussed on development on established, fit for purpose platforms and applications wherever possible and practical.

90. eHealth and LHDs/SHNs are continuing to investigate new approaches to allow for innovation in the ICT and Digital space. It is generally accepted that innovations should be managed within a framework that ensures that they are safe, secure, scalable and sustainable. There are also innovation procurement pathways available that facilitate innovation projects while managing the risks of unqualified vendors, and data retention and security risks.

91. Interaction and relationship between eHealth's operational teams and individual entity / local ICT teams is generally positive, but can also be complex and at times challenging. In some areas of ICT service delivery, there is a lack of clarity of respective roles and responsibilities, as well as competing or divergent priorities for action.

92. There have been concerns and criticisms expressed about the transparency and/or accuracy of service charges that eHealth allocates to its customers (NSW Health entities). Complexity of the cost drivers (e.g. increases in licensing costs based on different types of operational metrics) can be challenging to communicate to business and requires ongoing effort from both eHealth and individual entities.

93. Concerns about increasing costs of ICT and Digital are accentuated by suboptimal operational expenditure funding arrangements where operational expenses associated with licensing, hosting and supporting new systems are not always factored into eHealth or local entity budgets even when they are correctly identified as part of original business cases for ICT projects. This leads to a situation where, at the completion of capitally funded projects, there is uncertainty or lack of operational funding that is required to operate a new system and continue to enhance it, often compounded by additional savings requirements instituted post original business case approval. Training and support for local users of these systems is also frequently identified as being insufficiently funded.

94. While 'benefits realisation' efforts, including cashable savings, from the introduction of new digital systems are continuously improving across the health systems, the savings and other benefits often require several years to be fully realised. There are also variable approaches used across the system in terms of driving, capturing and reporting of benefits. Similarly, decommissioning and retiring of legacy ICT systems does provide certain cost offsets, but this requires concerted effort and cannot be achieved quickly.

95. In recent years, digital technologies, including those used in health, have seen an increased adoption and use of the Cloud, which offers a range of advantages in terms of flexibility, agility and security of ICT infrastructure. This, in turn, has resulted in a move away from capability-funded infrastructure (i.e. purchasing servers and storage infrastructure) and towards recurrently-funded services (i.e. infrastructure and application provided as a service). While this trend has dramatically reduced the amount of capital funding required to refresh and update ICT infrastructure, it has resulted in an increase in recurrent expenditure. The trend is yet to be fully recognised in the funding models for healthcare and other public services, which poses a risk to financial and operational sustainability of the health system if left unaddressed.

M. OPPORTUNITIES

96. In relation to ICT and digital goods and services, supply chain pressures can be further addressed through ongoing improvements in the planning of ICT investments and projects, as well as further strengthening of partnership with key suppliers.

97. There is an opportunity to simplify the complex procurement landscape to enable more agile, higher quality procurement with reduced timeframes. This would require a reduction in the number, complexity and sometimes conflicting nature of policies, directives and frameworks that are currently in place (as outlined in section G of this statement).

98. Strengthening of the mandate to utilise statewide contracts and statewide systems/capabilities could deliver further benefits to NSW Health by avoiding the costs of duplication, integration and security risks that arise from disparate information management systems and duplicative capabilities. This may require changes to current governance arrangements.

99. Considerable joint effort and investment is already occurring between eHealth, HealthShare and other NSW Health agencies to improve procurement and supply chain capabilities in the system, including through the joint implementation of systems such as SmartChain and DeliverEASE. These advances will increase accuracy and predictability of ordering, improve monitoring of consumption, simplify procurement processes and ensure decision-making is based on reliable information. Investment in digital enablers of the Procurement Reform should be sustained, and greater cross-agency collaboration in implementing digital platforms should be encouraged and supported.

100. In terms of statewide standardisation, there is a significant opportunity to standardise devices (e.g. laptops, desktops) for different work scenarios, improving device operational resilience, saving clinician time and simplifying break-fix particularly in rural and regional environments where support is not always readily available on site. The potential time savings for clinical staff could be significant, whether achieved through

more resilient technology devices or simple 'hot swap' options that enable a rapid return to patient facing work.

101. Similarly, there are opportunities to reduce the complexity of the current technical support for NSW Health staff and clinical/business units. Designing a more consistent, better integrated and user-centric support model would lead to productivity gains and cost savings. These 'operating model' discussions are already underway between eHealth and LHDs/SHNs, but they should be accelerated and supported through a clearer organisational mandate coupled with changes in governance arrangements.

102. NSW Health has already achieved a significant digital transformation as result of the implementation of the eHealth Strategy for NSW Health over the last 8 years. The next phase of this journey is going to be critical in terms of implementing the flagship digital reforms, such as the Single Digital Patient Record and the Health Grade Enterprise Network. It is critical for NSW Health to maintain the pace of change, so its systems are modern, user-friendly, safe and secure through ongoing investment, focused effort, and deep engagement with frontline clinical staff, as well as patients and communities.

103. A sustainable funding model for digital health is required in order to address current funding gaps in relation to:

   a.   Transition from 'build and implement' phase of a new ICT system (usually run as capitally funded projects) to 'business as usual' phase (recurrently funded operational costs of the new system), the latter often lacking dedicated funding;

   b.   Ongoing enhancements of digital systems and capabilities in response to clinical and policy requirements, innovative models of care, technology changes and user feedback;

   c.   Global industry trends and NSW Government mandates to use cloud-based, recurrently funded ICT services instead of capitally funded and locally hosted ICT systems, which requires a shift from capital to recurrent funding streams.

104. The sustainable funding model should embrace the reality of ICT and digital enablement being an integral part of modern health service provision and, as such, needing to be incorporated into the core funding models for health.

105. NSW Health service provision and broader responsibilities for population health outcomes require a close collaboration and partnership with primary healthcare. There are considerable opportunities for closer alignment with the primary healthcare sector in relation to ICT and Digital. This should include the opportunity to leverage the capability of a large, specialised digital health organisation such as eHealth NSW to ensure that GPs and other community based providers have access to the digital tools already in place across NSW. The primary healthcare sector would benefit from a significantly reduced cost relative to having disparate systems that they individually fund and configure. Deeper engagement with primary care, including secure sharing of patient information is likely to require a review and modernisation of the legislation and the policy framework.

106. Ongoing, targeted investment in Virtual Care and Telehealth will be a key ingredient of healthcare reforms in NSW and nationally. NSW Health is well placed to lead the development of innovative, technology-enabled models of care, but these developments need to be supported by appropriate funding models at national level. Note: due to the focus of this statement being on ICT procurement and shared service provision, the topic of Virtual Care has not been discussed in depth. The same applies to the topic of introduction of new technologies, such as Artificial Intelligence.

Dr Zoran Bolevich

Witness:

31 January 2024

31 January 2024

Date

Date