



Health
South Eastern Sydney
Local Health District

South Eastern Sydney
Local Health District

ICT STRATEGY

2017 - 2022





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Letter from the Chief Executive

Our **Journey to Excellence** sets the priorities for our District to improve the health and wellbeing of the population we serve, and to deliver safe, effective, compassionate and person-centred healthcare. The demands on our healthcare system continue to increase as our population grows and ages, as more people experience long term conditions due to unhealthy lifestyles and with shifting consumer expectations, all to be met within fiscal constraint

A key priority of our health system is to continuously improve the safety and quality of healthcare and people's experience of care. To achieve this, we are implementing a range of leadership and workforce programs such as the 'heart of caring'. We have established a rigorous patient safety program across the system and launched an improvement academy. We have also introduced a range of value improvement programs which have led to a significant reduction in fiscal waste. Delivering integrated care for people experiencing multiple long term health conditions is another key focus for us which is being assisted by the application of new technologies.

The *eHealth strategy for NSW Health 2016–2026* outlines our direction for investment in technology over the next decade. It considers Whole of Government ICT strategies, the latest advances in health technology, policy directions at the state and commonwealth level. It identifies opportunities to improve the performance and healthcare quality and safety of services delivered to our community and our catchment.

We will be leveraging new technology advances, with local improvement initiatives and data analytics across the primary, secondary and tertiary care continuum, to deliver accessible, timely and compassionate care to build healthier and more resilient communities. A key enabler to achieve this will be the continued implementation of Core Clinical Systems and Integrated Care Solutions. This capability will assist us in establishing a consolidated view of a patient's needs across the entire network and support the establishment of a single integrated medical record.

This strategy sets the direction for our ICT focus areas over the next five years. It details the key areas of investment to support our vision of *'Working Together to Improve the Health and Wellbeing of our Community'*.

Our staff continue to demonstrate the highest calibre and dedication to making a difference for our patients. This strategy serves as a commitment to provide you with contemporary tools and technology that will keep us at the forefront of eHealth implementation and leaders in the provision of healthcare in NSW.

Gerry Marr, Chief Executive



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A key priority of our health system is to continuously improve the safety and quality of healthcare and people's experience of care.

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Access to the right information at the right time from anywhere, on any device.

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Executive Summary

We are at the forefront of eHealth implementation, driving a reduction in reliance on paper-based systems and supporting enhanced delivery of patient care through the provision of contemporary systems. This ICT strategy reinforces our commitment to leveraging technology effectively and has been developed to guide the investment of resources over the next five years into initiatives that demonstrate real value for patients and clinicians on the front lines of care.

The overarching objective for Health ICT is to enable access to the **right information** at the **right time** from **anywhere, on any device**.

As part of delivery planning to achieve this objective, Health ICT conducted District-wide consultation to expand our understanding of facility level objectives and identified the following key aspects for this strategy.

- Comprehensive integration
- Access from anywhere
- Clinical governance
- Dynamic support models
- Reliable systems
- Intelligent infrastructure
- A patient portal
- Enhanced communication





Our strategy aligns with the key eHealth NSW focus areas and assists in establishing a unified view of delivery toward our vision of *‘Working Together to Improve the Health and Wellbeing of our Community’*



Core Clinical Systems: We will continue the implementation of core clinical systems towards the establishment of an integrated health record, working jointly with eHealth NSW in the refinement of clinical requirements.



Integrated Care Solutions: We will be providing solutions for bi-directional sharing of clinical information with patients, carers, GPs and specialists. In addition, we will be supporting telehealth facilities to attend appointments and provide consultation flexibility to patients to increase their involvement in assessments and monitoring.



Workforce and Business Management Systems: We will leverage the corporate systems being implemented by eHealth NSW to attract and retain the best talent, effectively utilise our workforce, maximise our capacity to deliver patient care and effectively fulfil our duties as a public-sector organisation. In addition, we will be expanding our workforce education and professional development programs and rolling out further stock management systems.



Data and Analytics: We will apply the state-wide data standards, definitions and dictionaries in all operational and improvement program reporting to ensure consistency and alignment of reporting information. In addition, we will be expanding the electronic medical record (eMR) data integration, developing strategic partnerships with hospital leads and expanding on the data analysis and visualisation capabilities.



Access to Information: We will be leveraging expanded access to applications to provide accessibility to clinicians, implement a new content management system and facilitate the development of mobile solutions and eMR accessibility that provides convenient ways for health employees to interact and engage with digital health information.



Infrastructure and Security: We will be implementing leading-practice technology infrastructure as part of the redevelopments of St George Hospital, Sutherland Hospital and Randwick campus. We will also continue delivering clinical reliability initiatives and rolling out Wi-Fi to patients and guests.

In addition, We will be implementing a wide range of information security initiatives from within a specific Information Security Program and across the focus areas to grow staff competency to identify, protect, detect, respond and recover from security threats.

Two Stage Delivery

The strategy provides a two-stage model for moving towards a health network that is fully integrated and eliminates boundaries between providers through active sharing of health and treatment information.

Stage one: Establish tighter integration with core hospital systems. We will also expand on connections to clinics and GPs and reduce the boundaries between the hospital and broader healthcare network.

Stage two: Rationalise systems with tighter integration of core hospital systems and expand two-way connections to clinics and GPs across the entire health network.

The strategy also identifies the necessary supporting structures that will be put in place to ensure successful delivery. These structures include:

- the role of strategic governance channels to maintain clinician representation in decision making
- clinical requirements analysis to match emergent clinical requirements, patient safety program and evidence based practice requirements with potential IT solutions
- ICT culture changes and repositioning to be the business partner to the District by translating the possibilities available from technology
- capacity planning to support the delivery of large scale change.

The final section of the strategy outlines how the focus areas will be put into action to keep us at the forefront of health service delivery in NSW.



“ This strategy aligns with the key eHealth NSW focus areas ”

INTRODUCTION

We are at the forefront of eHealth implementation, driving a reduction in reliance on paper-based systems and supporting enhanced delivery of patient care through the provision of contemporary systems. We will continue our investment in ICT solutions and services to support clinicians in providing quality care.



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We recognise that in order to achieve our vision moving forward, we must respond to the changing demands on healthcare services.

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Priorities and focus areas

Our vision of ‘Working Together to Improve the Health and Wellbeing of our Community’ is patient-focused and respects the diverse and developing health needs of the community.

For many years, our health system has embraced innovations in ICT and digital health to achieve this vision by being at the forefront of eHealth implementation.

We recognise that in order to achieve our vision moving forward, we must respond to changing demands on healthcare services and the circumstances in which they are delivered by leveraging the capability of contemporary systems.

The *Journey to Excellence* outlines priority areas for action to address the challenges our health system is facing, such as:

- an ageing and growing population
- health inequities
- individuals with multiple long term conditions and social care needs
- shifting consumer expectations
- a challenging fiscal environment.

A series of initiatives to address these priority areas has been developed across the following three dimensions of the Triple AIM framework which include:

- Improved quality of care
- Improved population health
- Value and financial sustainability.

This ICT strategy provides direction and supports communication of the state-wide objectives with a South Eastern Sydney focus. It continues building on the District’s strong record of delivering excellent healthcare and patient outcomes by addressing the challenges identified to date, and establishes a five-year roadmap across six focus areas:

- Core Clinical Systems
- Integrated Care Solutions
- Workforce and Business Management Systems.
- Data and Analytics
- Access to Information
- Infrastructure and Security





Our focus areas will provide key capability to facilitate the delivery of excellence as per the *Roadmap to the Delivery of Excellence*.

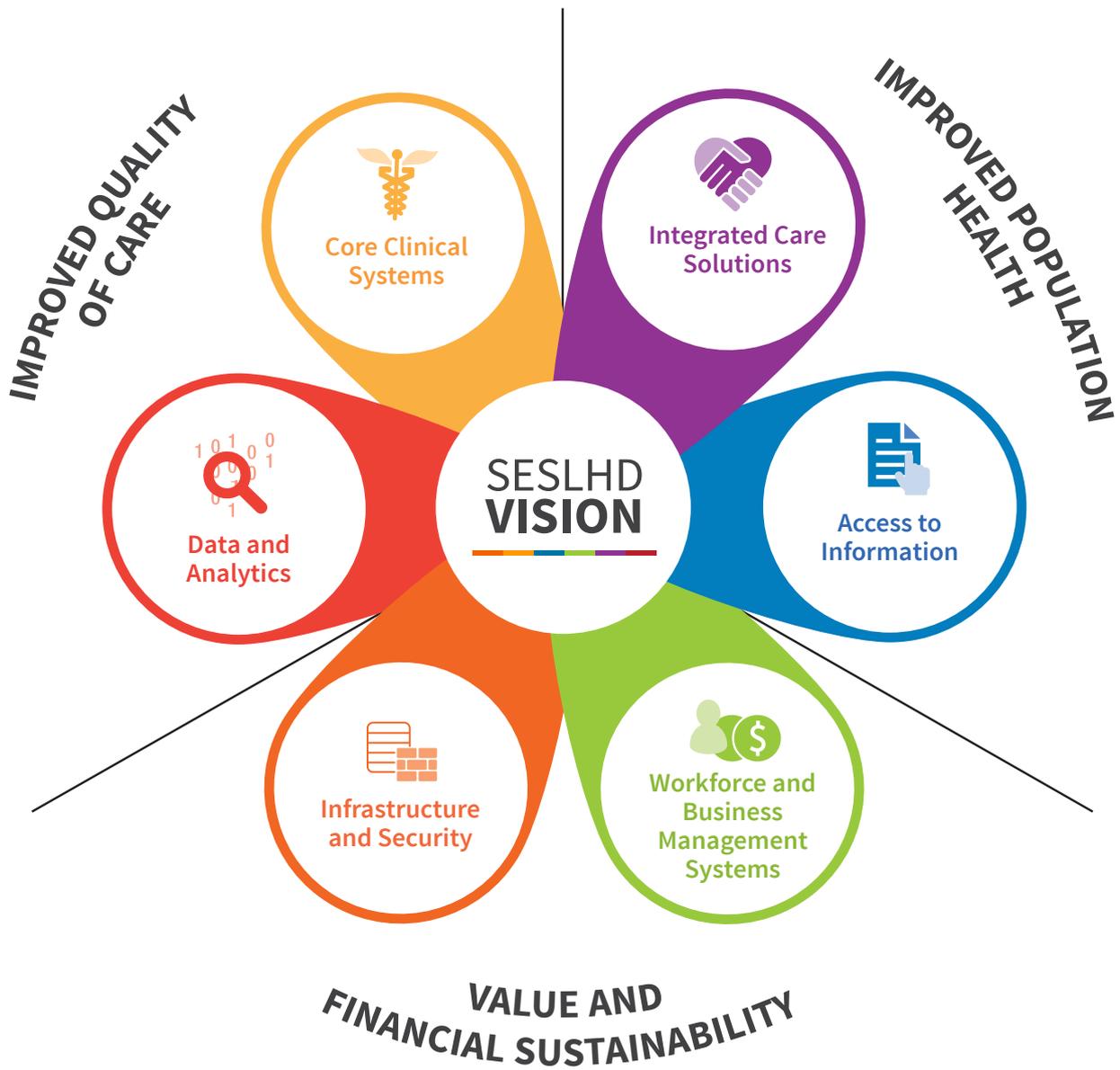


Figure 1: Achieving our vision with eHealth focus areas

Health ICT's vision

“Your vision, our commitment”

Health ICT is the business partner to assist in achieving SESLHD vision.

Health ICT's overarching objective is to enable access to the right information at the right time from anywhere on any device.

This objective will be met with the achievement of the following:

- Establishing a single view of patient record across all care providers
- Providing clinicians with access to patient information from anywhere in the District from any device
- Leveraging the latest technological aspects to drive innovative approaches to the delivery of care

As part of our commitment to achieving our objective, Health ICT ramped up its engagement with clinicians, specifically to inform and support the development of this strategy.

The consultation process

In March and April 2017, Health ICT conducted District wide consultation to gather feedback from staff on what key objectives and potential improvements could be made to meet the growing demands on healthcare.

Key questions during consultation included:

- What are we trying to achieve?
- Why is this important to us?
- What new ways of working would assist us in moving forward?
- What do we consider our most important objectives?

What does success look like?

The consultation process identified the following key aspects of what success looks like for our health system:

- **Comprehensive integration:** A single, integrated patient record accessible from one system that combines all information from multiple sources across the District.
- **Access from anywhere:** The ability to utilise patient information in the provision of care from any location.
- **Clinical governance:** Clinical engagement that assists in matching systems capability to address the emerging challenges of healthcare delivery.
- **Dynamic support:** Clinicians having access to a multifaceted support model on how to get the most out of current and forthcoming solutions
- **Reliable and safe systems:** Robust, secure systems providing a consistent user experience regardless of location or role.
- **Intelligent infrastructure:** Infrastructure that is aligned with, and supports integration of core solutions, peripherals and is integrated with new hospital builds currently underway.
- **A patient portal:** A single contact point available 24 hours to facilitate access to appointments and hospital information.
- **Communication:** Enhanced communication on key initiatives in progress, including progress updates.

This strategy outlines the key focus areas, initiatives and activities identified to deliver the required capability for our District.





Drivers for change

The NSW Ministry of Health recognises that rapid innovation in ICT is transforming how it engages with the community in the delivery of health services. The push towards eHealth is a fundamental part of providing safe, high-quality and effective healthcare moving forward. There are increasing expectations on us and eHealth NSW that are informing and driving the purpose of this strategy.

These drivers have been endorsed in the *eHealth strategy for NSW Health 2016-2026*, which builds on existing government strategies and establishes a state-wide direction for clinical change and transformation supported by technology. These drivers were reaffirmed during the District-wide stakeholder consultation in the development of this strategy, with staff providing vivid examples of challenges and responses to improving their daily activity.



“
This is an exciting time for us to leverage technology to catapult us into 21st century healthcare.”

- Workshop participant

| DRIVER | EXPLANATION |
|---|---|
|  <p>Patient redefined</p> | <p>Patient expectations of healthcare and how they engage with the systems are increasing.</p> <p>Technology is driving new ways for us to engage with patients and provide effective care.</p> |
|  <p>Workforce shifts</p> | <p>The ageing population, increasing burden of disease and greater focus on prevention is driving an increased demand for healthcare services and the workforce. Workforce expectations regarding the ability of ICT to support the provision of care are increasing.</p> <p>Our staff recognise Health ICT as a business partner to inform new ways of working and support the application of new solutions that make it easier to provide quality care.</p> |
|  <p>Integrated care</p> | <p>Healthcare demands are changing and increasing regarding the overall health needs of a person, including their physical and mental wellbeing.</p> <p>A large number of stakeholders consulted identified integrated care as the primary objective for the next five years.</p> |
|  <p>Digital disruption</p> | <p>There is rapid development and adoption of technologies that change the way we live and the way healthcare is provided.</p> <p>We have been at the forefront of eHealth implementation and have identified recent advancements available for further enabling capability to support the provision of patient care.</p> |
|  <p>Open information and big data</p> | <p>Greater access to quality data is increasing our understanding in managing a continuum of care. This improved access to information is expected to inform new approaches and models of care.</p> <p>We are seeking to leverage and append the existing data sets to develop insights into unique care needs of the District.</p> |

Table 1: Drivers for change

For details on eHealth NSW-specific drivers, please refer to the *eHealth Strategy for NSW Health 2016-2026*.



“

eHealth NSW delivers innovative ICT solutions across the public health system to enable excellent patient care now and into the future.

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What does the future hold?

Patients

Patients will experience the impact of clinicians having all relevant information available to inform their care. This will result in more applicable, informed and targeted care, specific to a patient's medical history. This early intervention will enable timely service provision and the elimination of repeated tests. In the longer run, this target care is expected to reduce the growth of presentations and admissions and the overall length of stay.

Clinicians

Clinical staff will be utilising integrated point of care information leveraging the mobility of solutions. Care will be provided across the patient journey and from any location, including the patient's home, health centres, general practice, outpatient clinics and the hospital. Clinicians will access information in real time settings, leveraging enhanced data and analytics to provide up-to-date diagnoses and applying customised patient pathways, specific to patient needs and the unique demands of the District.

Community

The community will have access to a truly integrated health system, with accessibility from multiple points. Telehealth capabilities will facilitate the ability to provide truly equitable care to regional areas, with virtual consults and the ability for clinicians to access patient information from anywhere, anytime.

eHealth NSW

eHealth NSW delivers innovative ICT solutions across the public health system to enable excellent patient care now and into the future. eHealth NSW has been established as a distinct organisation within the NSW Ministry of Health to provide state-wide leadership on the shape, delivery and management of ICT-led healthcare.

eHealth NSW is responsible for setting eHealth strategy, policy and standards, and works with Local Health Districts (LHDs) and Health Agencies to implement state-wide core systems and ensure compliance with state-wide standards. Its vision, goals and strategies are outlined in the *eHealth NSW Corporate Plan 2014-17*.

Health ICT

Health ICT will be the enabler and translator for addressing the drivers and meeting the local demands. This insight will allow the District to continually adapt and apply the latest health demographics information and target areas of health inequity, reduce patients repeatedly presenting, and streamline administrative functions as far as possible.

As part of this role, Health ICT will:

- support the establishment of governance channels to ensure clinical representation at the highest level
- support the establishment of clinical requirements to inform system selection and enhancements
- manage the implementation of new systems and enhancements
- support clinicians by providing alternative methods to enable improvements in healthcare provision for our District

Delivering the future

We have already commenced implementing ICT-enabled advancements. This strategy provides a consolidated view of these advancements and the planned ICT initiatives to deliver on the overarching vision for the District. It is the combination of all these initiatives that will enable the step change improvement in our care provision.



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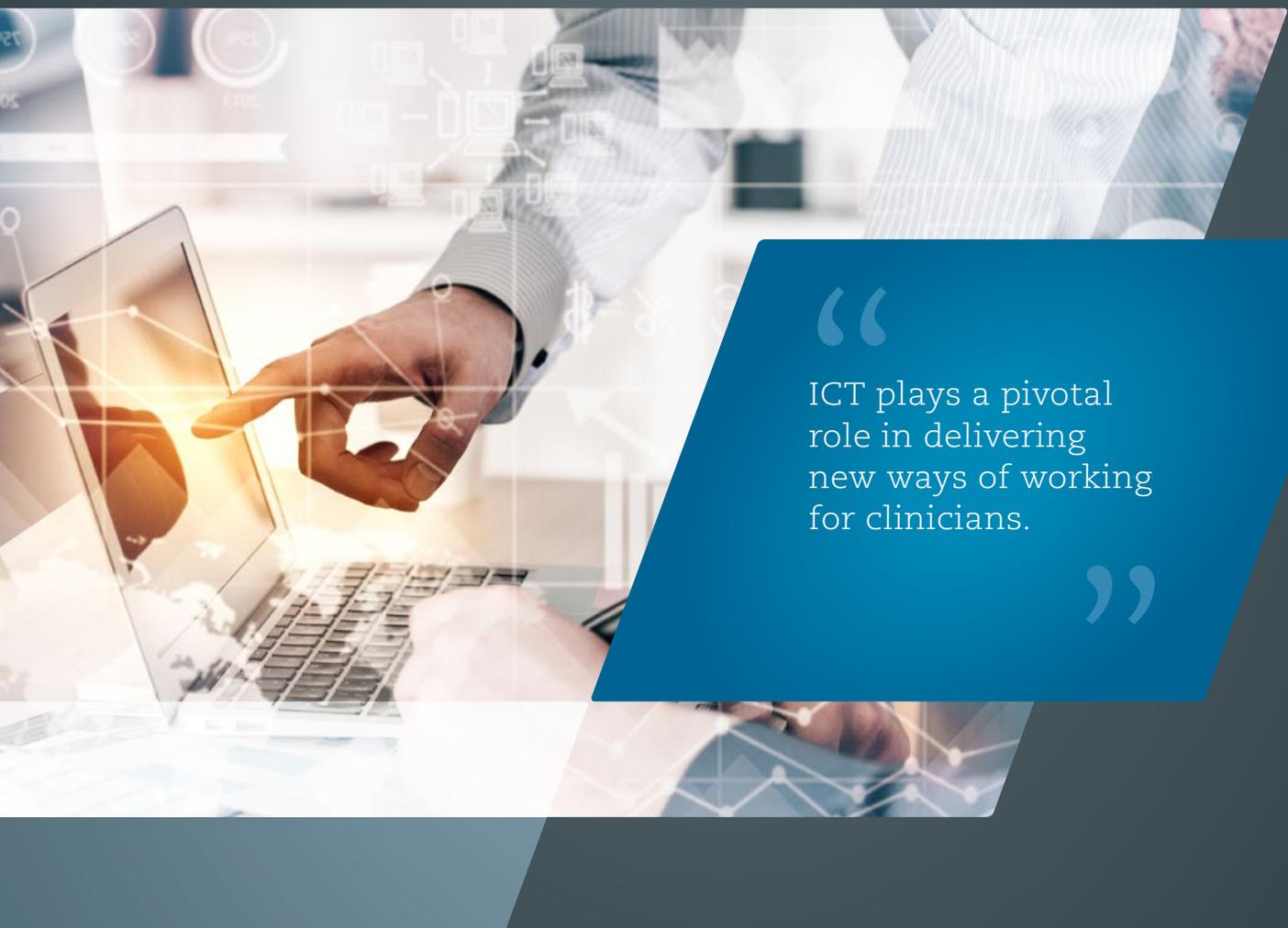
It is the combination of all these initiatives that will enable the step change improvement in our care provision.

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| FOCUS AREA | KEY OBJECTIVE(S) | INITIATIVES * Supported by eHealth NSW |
|---|---|--|
|  <p>Core Clinical Systems</p> | <p>Provision of key ‘paper-lite’ clinical systems and integration of core clinical information used by clinicians within the hospital.</p> | <ul style="list-style-type: none"> • Electronic medical records (eMR) • Electronic medications management (eMEDS)* • Electronic record for intensive care (eRIC) • eMR enhancements • Clinical integration (systems and devices) • Incident Management System* • Threat and Risk Assessments • Medical imaging upgrade |
|  <p>Integrated Care Solutions</p> | <p>Establishing a combined view of a person’s health needs across the entire health network (including patients, GPs and outpatient clinics).</p> | <ul style="list-style-type: none"> • Clinical information exchange • Telehealth • Shared care plans • Patient experience • Remote patient monitoring |
|  <p>Workforce and Business Management Systems</p> | <p>Enhancing information and tools to advance organisational effectiveness across workforce and business management systems.</p> | <ul style="list-style-type: none"> • Finance systems • Asset and facilities management* • Rostering* • Human capital management solutions* • Workforce education and professional development tools • Records management • Inventory tracking |
|  <p>Data and Analytics</p> | <p>Use of data to make informed and evidence-based decisions to improve health outcomes, health system planning and performance</p> | <ul style="list-style-type: none"> • Standardised data structures* • eMR data integration • Data improvement • Data analysis and visualisation • Preventative health analytics • Data protection |
|  <p>Access to Information</p> | <p>Improvements to the coordination and availability of core systems to NSW Health employees.</p> | <ul style="list-style-type: none"> • Mobile applications policy • Content management • eMR accessibility • Rapid access system |
|  <p>Infrastructure and Security</p> | <p>Establishment of minimum standards for infrastructure networks and security for NSW infrastructure assets.</p> | <ul style="list-style-type: none"> • St George Hospital redevelopment • Sutherland Hospital redevelopment • Randwick Campus redevelopment • Data centre reform program • Information security program • Security compliance • Digital identity management • Wireless implementation |

OUR FOCUS AREAS

The delivery of capability from our organisation and eHealth NSW-led initiatives aligns with the key focus areas identified during the extensive consultation in the development of this strategy. These focus areas provide the foundation for the delivery of capability that will assist us in meeting the unique demands of our District.



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ICT plays a pivotal role in delivering new ways of working for clinicians.

”

Introducing focus areas

ICT plays a pivotal role in delivering new ways of working for clinicians and supporting the delivery of effective care across multiple sites in our organisation. These new ways of working stretch across multiple focus areas, covering:

- **Clinical systems** to record information on patient care throughout the patient journey
- **Integration** of a combined view of a person's health, including patient observations
- **Workforce and business management systems** to support organisational effectiveness and efficiency
- **Data and analytics** to make informed and evidence-based decisions on healthcare
- **Access to information** that provides convenient ways to interact and engage with digital health information
- **Infrastructure and security** that facilitate the reliable and secure flow of information



“
These focus areas
provide the foundation
capability to improve
healthcare delivery.
”



Core Clinical Systems

The delivery of core clinical systems is leveraging global best practice with localised controls and customisation to suit the unique needs of our organisation.

We will continue the implementation of core clinical systems and work with eHealth NSW towards the establishment of an integrated health record.

Electronic Medical Records

An eMR securely shares patient care information to provide a more integrated picture of patient health across different care settings including hospitals, community and outpatient care, and speciality and diagnostics services.

The continued implementation of eMR across our District will provide:

- clinical documentation functionality, imaging and photography
- outpatient solutions
- electronic referral for admission
- workflow, task management, reminders and messaging functions
- integration with diagnostic solutions
- connectivity with other clinical solutions
- transcription and digital dictation
- a replacement of the National Inpatient Medication Chart (NIMC)
- IV infusions and fluid balance
- patient identification solution e.g. bar coding
- outpatient prescriptions
- enhanced patient matching (Enterprise Master Patient Index)
- automated updates from healthcare providers

In addition, the broader eMR rollout will include a state-wide implementation of the electronic Record for Intensive Care (eRIC).

eRIC is an electronic system that will integrate intensive care data every minute from bedside monitors, ventilators and specialised equipment into the eRIC application, applying evidence-based best clinical practice.

The eMR implementation supports delivery of patient care and the entire patient experience and is expected to reduce length of stay, readmissions, and overall presentations and re-presentation across the District.

Clinical integration

Information sharing requires a central repository to provide a state-wide view of clinical history and seamless information sharing between hospitals, community health providers, GPs, patients and private clinicians.

HealthNet information includes patient demographics and identifiers, eDischarge summaries from LHDs (including alerts, allergies and adverse reactions), inpatient and outpatient encounter listings and more.

We will be implementing the following information sharing platforms:

- pharmacy integration for dispensed medications
- clinical documentation (update letters, discharge summaries)
- patient flow management system
- integration layer replacement
- enhanced integration between the patient administration system (PAS) and eMR.

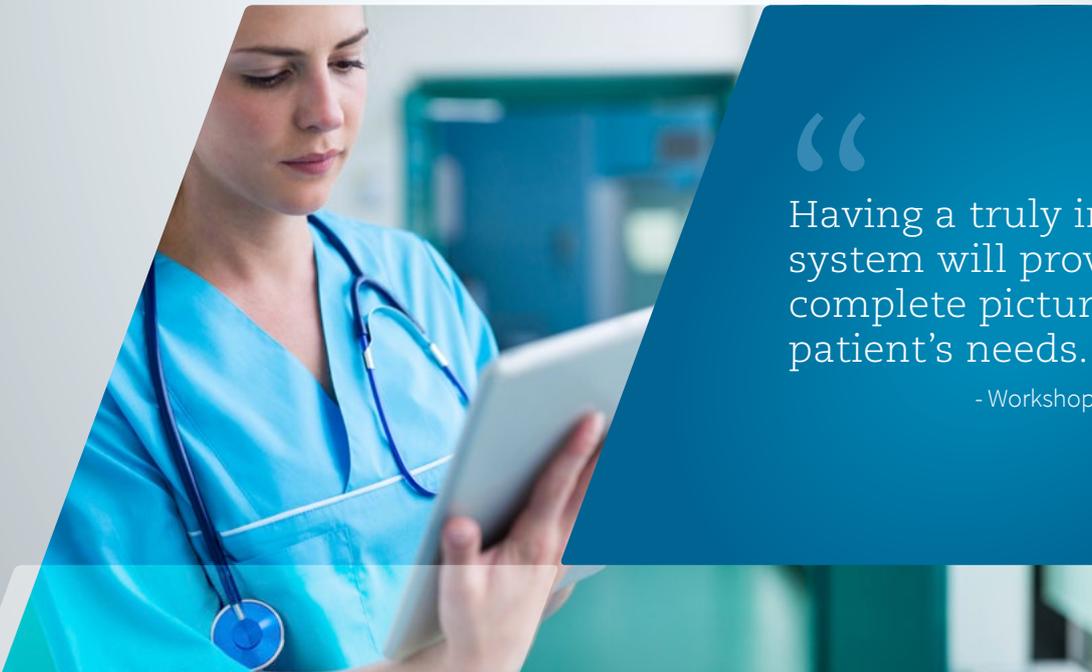
We will also be seeking to rationalise the number of mechanisms by which information is currently transmitted to maintain a single source of truth and provide greater access to patient information across LHD and specialist local health network boundaries.

Incident Management System

The Incident Management System (IMS) facilitates the process by which staff notify, document and manage incidents, near misses and systems risks through a user friendly platform integrated with other NSW Health systems.

We will leverage the state-based build of the IMS with the ability to:

- record, track and trend incidents across our facilities
- record feedback on incidents
- share learning of incidents with other staff.



“

Having a truly integrated system will provide me a complete picture of my patient's needs.

- Workshop participant

”



Integrated Care Solutions

Integrated care has been identified as one of the most pertinent opportunities for delivering improvements to patient care. New technologies are making it simpler and easier for consumers and healthcare providers to communicate with each other.

We will be providing solutions for:

- bi-directional sharing of clinical information with patients, carers, GPs and specialists
- supporting telehealth facilities to attend appointments and provide consultation flexibility
- patients to increase their involvement with the health system.

Secure messages and eReferrals

Healthcare secure messages (including eReferrals) contain clinical documents and/or other information shared between healthcare organisations. The sharing of these messages will be direct or through one or more messaging service providers and will need to conform to a pre-defined format and standards.

We will be setting up the foundation for clinical information exchange and leveraging the integrated care platforms in core clinical systems to share health information with the broader health community. The integrated share platforms combined with secure messaging will increase clinician access, regardless of organisational boundaries, to send further message types e.g. outpatient letters to providers, connecting with HealthNet and MyHealthRecord.

This will facilitate the provision of direct access to results and GP clinical notes for clinicians as part of the delivery of integrated care.

We are currently delivering integrated care with the connection of pathology results into HealthNet and MyHealthRecord to enable efficient sharing of results across the organisation.

Telehealth

Virtual consultations using video conferencing allows care providers to obtain broader input into a patient's treatment without requiring the patient to attend a face-to-face visit.

Video conferencing facilities are already available in much of the District and further implementation to broader areas is planned for the coming years to improve access for patients living rurally and remotely or who are unable to travel.

Shared care plans

Shared care plans allow providers from various care settings to collaborate through a single workflow tool.

We will be establishing the foundations and marketing of shared care services to primary care and internal clinicians to expand the visibility of shared care options. This will include a continuous learning component to expand and refine the broader implementation in line with integrated care and core clinical systems.

Patient experience and engagement

Patient portals allow the patient to play a more integrated role in the provision of their care and management of supporting services.

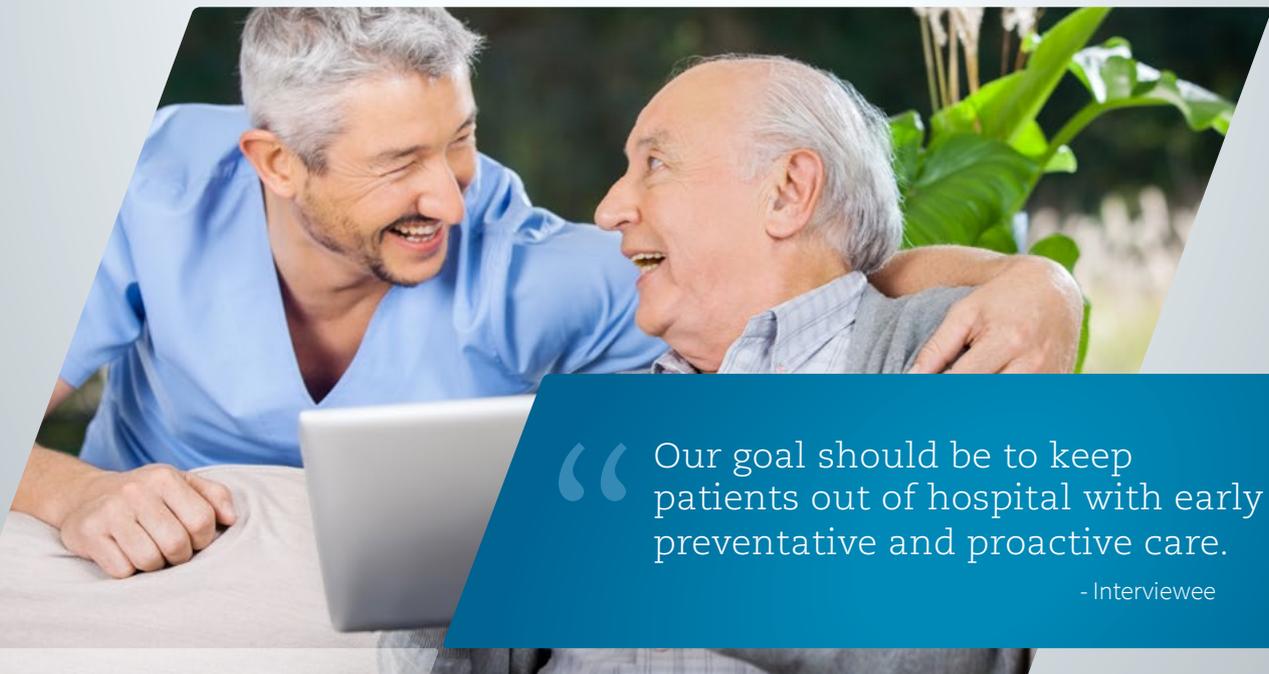
We will focus on developing alternative methods of patient engagement to improve the patient experience, which is expected to cover:

- self-registration (patient kiosk)
- online appointment requests
- accessing personal health information
- patient self-assessments (Patient Reported Measures)
- setting and management of reminders
- integrated entertainment systems
- inpatient and guest Wi-Fi
- online meal ordering
- patient queue management system.

Remote patient monitoring

Remote patient monitoring allows patient biometric information to be gathered remotely so that it can be reviewed in conjunction with other information held in the patient record or shared care collaboration tools.

We will be exploring the application of integrated mobile health to support patient self-management. A key initiative includes expanding the trial of a smartphone-based application to support gestational diabetes management.



“ Our goal should be to keep patients out of hospital with early preventative and proactive care. ”

- Interviewee



Workforce and Business Management Systems

Workforce and business management systems provide the tools to enable us to attract and retain the best talent, effectively utilise our workforce, maximise our capacity to deliver patient care and effectively fulfil our duties as a public-sector organisation.

Availability and access to workforce data

eHealth NSW has provided StaffLink as the foundation for workforce data sets and planning resources. Further investment in the reporting, analytical capability and integration with other corporate systems will provide accurate, up-to-date and manageable information based on historical trends and predictive analysis.

We will utilise the enhanced data sets provided by eHealth NSW as part of the StaffLink upgrade to inform long-term workforce decisions and resource allocation in line with the unique demands of the organisation.

Effective and integrated workforce management

eHealth NSW is providing an integrated Human Capital Management (HCM) suite that will support the District in recruiting and retaining the right people, managing their performance, and ensuring their effective deployment to meet patient care demands.

We will utilise the HCM suite, the state-wide rostering solution and associated reporting tools in the management of frontline staff to ensure compliance with state-wide standards, management of patient safety, and locum and agency costs.

Finance and asset lifecycle management

NSW Health has established a state-wide system for Asset and Facilities Management (AFM) to improve our capacity to deploy, track, manage and maintain clinical and non-clinical assets, ensuring they are in the right condition and available in the right place at the right time for optimal patient care.

We will utilise the state-wide AFM system to improve the visibility, tracking maintenance and utilisation of our assets. This will include the utilisation of the state-wide resource booking systems to improve the management of rooms and vehicles.

Workforce education and professional development tools

NSW Health will continue to develop and implement a state-wide credentialing system that helps minimise risk in the placement of clinical staff.

We will be conducting a radical re-design of our ICT training strategy with considerations for:

- induction programs tailored to facility/role-specific staff needs
- broader consultation with staff regarding training requirements
- the inclusion of systems-specific training e.g. eMR, electronic medications management (eMedS)
- the use of multiple training platforms and forums
- the use of system super users as mentors.

We will also be providing input into the planned enhancements of the state-wide Learning Management System and implementing a major update to the records management systems to allow for greater accessibility and control of internal records.

Inventory stock tracking solution

The inventory stock tracking solution is a point of care data capture system that records patient procedure data on a mobile computer, including:

- implants and other consumables
- procedures performed
- procedure timers to analyse and assess theatre utilisation
- attending staff, including consultants responsible for care.

We will continue the broader implementation of the stock tracking system to increase visibility and controls over patient procedure stock.





Data and Analytics

Health analytics is the use of data, technology, and quantitative and qualitative methods to provide greater visibility and improved decision-making capability for better patient care.

Standardised data structures, storage and reporting

NSW Health will focus on improving the consistency of corporate and clinical data, including metadata standards and definitions for use across NSW Health and, where necessary, align with other State and Federal Government agencies or the private sector in provision of:

- consistent state-wide data standards, definitions and dictionaries
- analytics and reporting capabilities that are aligned across local and state perspectives to provide standard insights into performance of LHDs and operational effectiveness of specific hospitals, speciality units and wards.

We will apply state-wide data standards, definitions and dictionaries in all operational and improvement program reporting to ensure consistency and alignment of reporting information. The consistent application of these standards will improve alignment with the NSW Ministry of Health direction and support our funding requests for targeted improvement initiatives.

eMR data integration

NSW Health will combine health data with data from other public, private and community sector agencies. New sources of data may also arise from medical and technological advances such as genomics, ‘wearables, ingestibles or implantables’, and new data sources outside the health system such as those generated by social services, education or justice.

We will integrate the following key data to support the establishment of combined data sets into the eMR:

- patient vital signs
- pharmacy records into eMR (eMEDS)
- patient allergies
- antibiotics
- blood types
- retinal treatments
- cardiac monitoring records.

Data improvement

We will be conducting a local education and communication drive to assist clinicians and business intelligence (BI) users to utilise the available data analytics tools. This initiative will educate users on the value of correctly entered data, where it goes and what it is and could be used for.

Data analysis and visualisation

We will continue to expand and leverage the growing analysis capability across the District. As the data flowing into eMR grows, we will seek to leverage the enhanced insights through the application of improved and contemporary analytics systems to enable dashboarding and visualisations. Harnessing these insights of combined and integrated data sets is expected to inform patient treatment, improve research capabilities and drive efficiency and sustainability.

We will also investigate and implement methodologies and approaches to support clinicians in the accurate recording and leveraging of data from the information systems to drive improvements to patient outcomes. We will build capacity in accessing and interpreting the available data with the establishment of ad-hoc reporting capability and snapshot reporting that supports informed decision making.

This initiative will assist clinicians in utilising new and existing tools accurately to ensure data is entered only once but leveraged many times.

“

We have an opportunity to break down silos of information and delivery truly integrated care.

- Workshop participant

”

Preventative health analytics

NSW Health will provide improved population health and population risk analysis using historic, predictive and prescriptive analytics, including developing and supporting population health information infrastructure and data management.

We will apply the insights gained from this analysis, combined with local insights to inform targeted interventions of high risk demographics, leveraging the latest available capability to influence trends as soon possible. This capability intervention will include proactive monitoring of early indicators to determine if targeted interventions are having the desired effect and timing of risk mitigation.





Access to information

Simpler technology interfacing, as well as better integration and coordination, means clinicians will need less training and administrative requirements while having a greater understanding of where to find information when they need it.

Workforce access to applications anywhere any time

NSW Health will focus on improving access to clinical and operational applications through online portals and mobile access solutions.

We will communicate and support the use of new capability provided by eHealth to access applications from anywhere and anytime through virtual desktops.

Content management

A content management system will assist us in the management of digital content contained in our business rules, policies and clinical guidelines. Initially this will involve providing information for our consumers on how and where they can access care.

We will apply a content management system framework across the internet and intranet with a view to providing a more suitable and functionality-rich solution. Our content management system will be mobile-friendly and provide seamless access to business rules, clinical guidelines, relevant content and well-matched search engines. This initiative supports decentralising the content, enabling staff to self-publish.

In addition, we will be conducting an evaluation of the current collaboration tools and content management platform with considerations for:

- collaboration of information across service providers
- implementing governance, standards and guidelines
- broader consultation with staff regarding requirements for a collaboration tool.

Highly mobile and intuitive solutions

NSW Health will focus on implementing more intuitive and mobile enabled solutions to help improve the usability, uptake and utilisation of technology capabilities.

We will be publishing a Mobile Devices Innovation Policy to assist staff with translating mobile application ideas into workable solutions. Further considerations for smartphone application development will be made through the Clinical Informatics Committee or supporting sub-committees. Details of these committees are provided in 'Supporting Structures' later in this strategy.

eMR accessibility

eMR integration initiatives will improve digital patient records through greater enablement of document scanning and point of care interactions between clinicians and patients.

We will be establishing seamless integration and continuing to work towards a single sign-on between the following core clinical information systems:

- eMR
- PAS
- eRIC
- eMEDs
- allergy management (Cerner)
- antibiotics management (Guidance)
- blood bank (Red Cross)
- retinal treatments (iDOSE)
- cardiac monitoring system (MUSE)
- electrocardiograms.

The tighter coupling of these core systems is expected to decrease the risk of information mismatch between systems and assist in providing a more complete view of patient treatment. It is also expected to facilitate appropriate user access and controls over sensitive data whilst streamlining accessibility for users.

“
Workforce access
to applications
anywhere any time.
”





Infrastructure and Security

St George Hospital redevelopment

We are in the process of redeveloping the St George Hospital to provide a state-of-the-art facility to service the community and meet increasing demands for healthcare. This includes significant investment in a new seven-storey acute services building and new emergency department. The new acute services building will include:

- intensive care
- high dependency unit
- cardiac intensive care
- eight operating theatres
- 128 acute inpatient beds
- sterilising services department.

Randwick Campus redevelopment

The Randwick Campus redevelopment project formally commenced in early 2015 with a ministerial announcement of \$500m for the Prince of Wales Reconfiguration and expansion, which included a new emergency department, extra beds, new operating theatres, expanded rehabilitation and ambulatory care facilities and a dedicated mental health precinct onsite.

Sutherland Hospital redevelopment

The Sutherland Hospital redevelopment features:

- a new and expanded emergency department with 44 treatment bays
- a purpose-built Children's Emergency Unit
- 60 new acute inpatient beds
- storage space for theatres to improve efficiencies.

The works will also provide an expanded medical imaging service and improved clinical services to serve the community well into the future.

The redevelopment across the St George, Randwick and Sutherland sites will include:

- core ICT infrastructure
- service delivery platforms
- service delivery applications
- operational processes.

Wireless services and standards

NSW Health will continue to focus on the installation of wireless networks in health facilities across the state and address gaps in coverage at critical sites supported by a bring your own device (BYOD) strategy.

We will continue the expansion of wireless to support mobile clinical access for St George Hospital, Sutherland Hospital and Sydney / Sydney Eye Hospital:

- eMEDs, as part of the planned go-live for the Prince of Wales Hospital and Royal Hospital for Women
- Eduroam to deliver University of NSW access through the Hospital Wi-Fi
- all-of-campus reviews post redevelopment.

Eduroam is a location-independent wireless network, allowing mobility between a participant's wireless infrastructure with seamless federated user authentication and enforcement of local security policy.

eHealth security and privacy framework

We will apply the eHealth NSW Privacy & Security Assurance Framework to ensure security, privacy and legislative controls are built into all eHealth programs, to comply with State and Federal Government security requirements and legislation.

In addition, we will be managing the migration of core systems to the NSW Government Data Centre environment and developing updated business continuity and disaster recovery plans.

Information security

We will implementing a wide range of information security initiatives from within a specific Information Security Program and across the other focus areas to grow staff competency to identify, protect, detect, respond and recover from security threats. This competency will:

- allow improvements to the protection of sensitive health information and critical systems
- Achieve compliance with the NSW Digital Information Security Policy
- Provide an enabler for integrated care solutions and sharing of devices
- Improve staff capabilities and awareness of threats to information security.

Expected initiatives to deliver this competency include:

- Information security governance and technology capabilities
- Information asset management
- Workforce education tools and associated awareness training
- The implementation of a security management system and associated security compliance
- Data loss prevention
- Enhanced identity and access management

Details of how the implementation of these initiatives and sub-initiatives will be enabled and operationalised are provided in the following section "Supporting Structures"

SUPPORTING STRUCTURES

To achieve our vision of *‘Working Together to Improve the Health and Wellbeing of our Community’* we will invest in governance, cultural and develop structures to assist us to deliver the initiatives from each focus area.



“

Clinician input is vital to aligning the capability delivered by systems with clinical requirements.

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Strategic governance

Clinician input is vital to aligning the capability delivered by systems with clinical requirements. We will continue to monitor and improve the mechanisms to support alignment of clinical requirements and solution capability with involvement of clinicians in system design and decision making.

We have identified people, information and technology as the key enablers to change healthcare processes to use clinical information in a way that drives quality patient care outcomes and maintains patient safety.

This will be done through the following committees:

- Clinical Informatics Committee
- Electronic Patient Record and Integrated Care Informatics Committee
- Research and Data Analytics Informatics Committee
- Corporate Informatics Committee.

The Clinical Informatics Committee (CIC) provides District-wide governance, strategic direction, oversight and prioritisation of clinical and clinical-related corporate informatics, including the integration of systems.

Key members include:

- medical executives
- District Directors
- General Managers from each facility.

The Electronic Patient Record and Integrated Care Informatics Committee is a District-wide committee established to provide direction and oversight of LHD effort to migrate to a shared electronic patient/ health record. The Committee oversees the informatics activity

of all groups involved in managing clinical information systems and paper patient records.

Key members include:

- clinicians
- subject matter experts in key solutions being implemented across the District
- local managers.

They are supported by the Investment Management Committee (IMC).

The IMC is a District-wide committee established to perform analysis and monitoring of projects prior to commencement, during project lifecycle and after completion. The IMC provides recommendations for the CIC to endorse:

- approval of projects for execution
- sequencing of execution
- significant changes to the agreed plan.

As part of this process, the IMC will support the degree of alignment of key initiatives across the following criteria:

- focus on patient
- focus on clinicians
- integrated care
- leveraging of talented people
- cost efficiency, flexibility and service quality.





The Research and Data Analytics Informatics Committee will provide oversight of District priorities for collaboration in data and information management, expected eHealth initiatives specific to data and analytics, and District performance management opportunities.

The Corporate Informatics Committee will provide oversight of the corporate systems and any prioritisation of planned updates to corporate systems, including new functionality or system implementations.

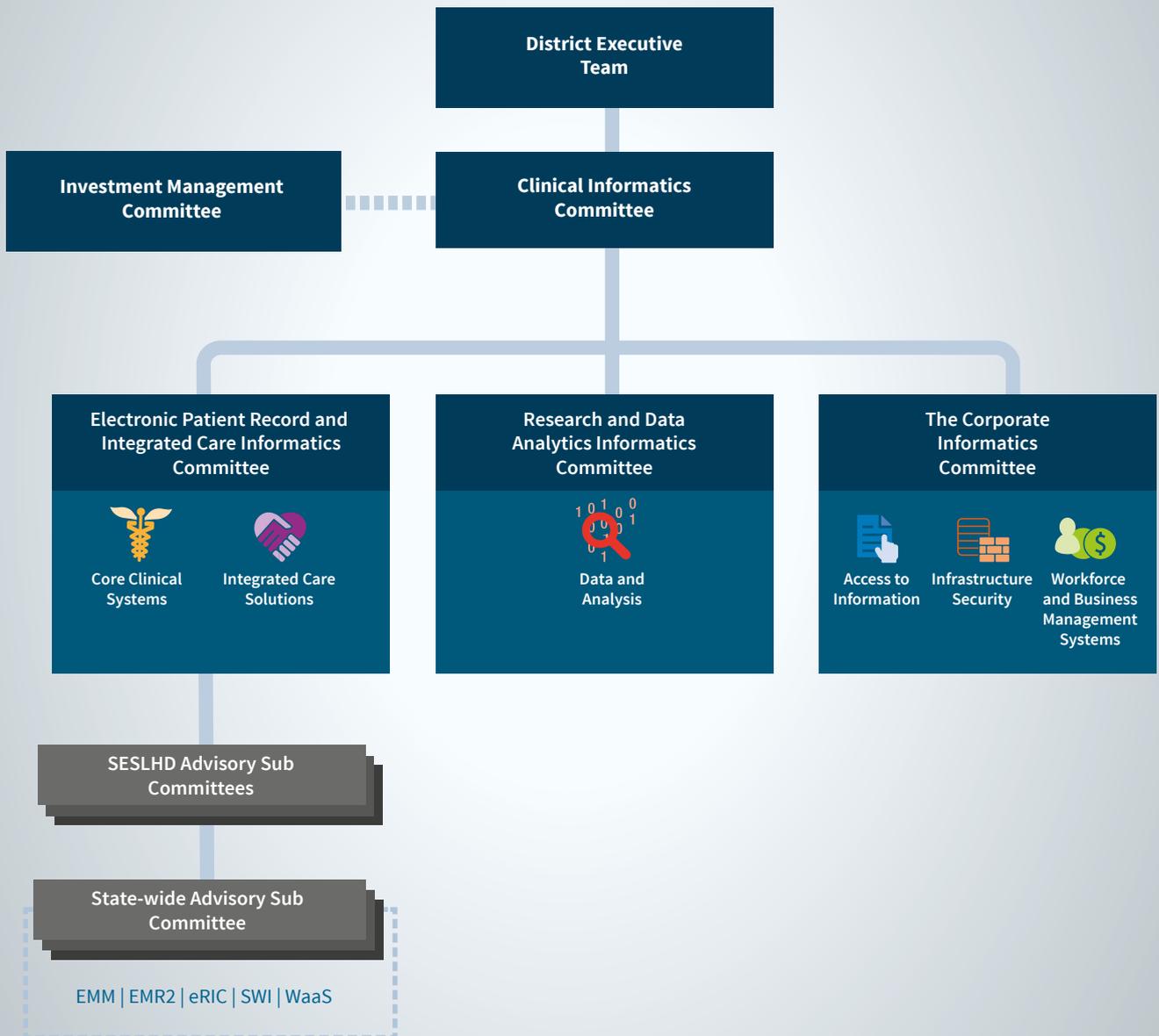


Figure 2: SESLHD Governance Channels



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We will continue to monitor and improve the mechanisms to support alignment of clinical requirements and solution capability.

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Aligning requirements with system functionality

The purpose of implementing a new solution is to provide new capability for clinicians to facilitate improvements in the provision of care.

As part of this process, clinical engagement to identify and refine the specific requirements from new systems is vital to ensure the selected systems add value across the patient journey. This also requires communicating potential new ways of working and capabilities to clinicians so they can be made aware of new operating models.

This reciprocal relationship will ensure that:

- core clinical requirements are met with the provision of contemporary technology solutions
- available enhancements are implemented as soon as possible
- systems facilitate the consolidation of information in effective structures to assist in data analysis.

Clinicians seeking to be involved in the requirements and evaluation process are encouraged to contribute to the SESLHD sub-committees of:

- Electronic Patient Record and Integrated Care Informatics Committee
- Research and Data Analytics Informatics Committee
- Corporate Informatics Committee.

The relationship also relies on the cultural shift within Health ICT towards supporting the provision of information to clinicians about the availability of new solutions.



Continued ICT culture shift

Health ICT recognises itself as a business partner to the health service in supporting the provision of effective and efficient care.

This role involves Health ICT in:

- working closely with clinicians to inform new ways of working and possibilities from ICT
- being proactive in solving challenges that impact on clinicians' ability to provide care
- translating technical information into simple terms and value propositions to inform options for clinicians
- solving customer challenges regardless of point of contact
- facilitating access to information to support clinical objectives and test scenarios
- assisting clients in understanding clinical requirements, overarching objectives and alignment with District policy and direction
- cross skilling through job swaps and succession planning
- sharing information on the progressive delivery and implementation of this strategy.



“ Health ICT recognises itself as a business partner to the health service ”

Capacity for delivery

We will be investing in the provision of supporting resources to assist staff in adapting to new processes and leveraging the capability provided by integrated solutions. This additional capacity is recognised as a necessary change management overhead that will be required over time to support staff in adopting the new work practice enabled by new solutions.

In addition, we are in the process of establishing several specialised program offices to support key components of the expected change to be delivered through these initiatives.

This support will provide:

- staff communications
- impact assessment information
- clinical engagement
- targeted training
- program and project management support
- benefits management support
- organisational development
- coaching.





PUTTING FOCUS AREAS INTO ACTION

We will deliver on the focus areas in stages and continue our successful track record with an action-orientated approach to drive toward the provision of truly integrated healthcare.



“

Each of the focus areas addresses a specific channel within the context of delivering integrated healthcare for our District.

”

Context

Each of the focus areas addresses a specific channel within the context of delivering integrated healthcare for our District. A balanced approach to address all aspects of these channels will assist us in delivering integrated systems of healthcare. A staged delivery will confirm the strength of the foundation capability currently being implemented and will set us up for success in a fully integrated healthcare system.



Figure 3: Context of healthcare delivery

Staged delivery

Our journey to delivering capability starts with our next steps. We will continue to plan and prioritise the implementation of the required change in a structured and coordinated way that creates real value for clinicians.

This planned capability will be delivered across two stages of increasing maturity. In addition, several integration initiatives will be improving connections between systems and accessibility across the health network throughout the five-year delivery timeframe.

Each stage will be delivered with a plan to review the methodology to test underlying assumptions and validate the actual results with expectations applying a Plan, Do, Review approach.

During planning, the Program Management Office will:

- develop program and project briefs for the identified initiatives to clarify scope
- engage stakeholders from each facility
- confirm the understanding of the change and associated impact on clinicians for aspects of capability expected.
- Develop a deeper understanding of the potential benefits expected from the solutions and how they could be measured

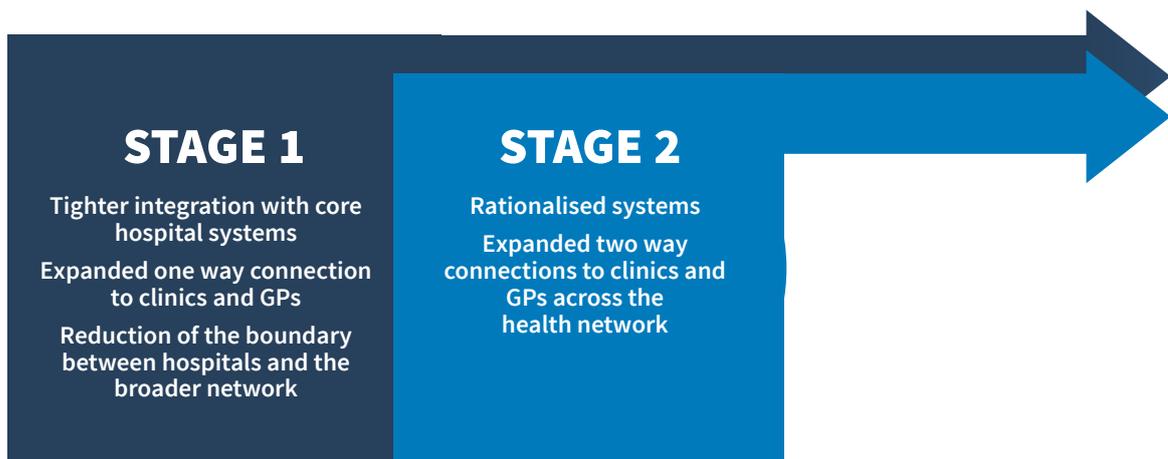


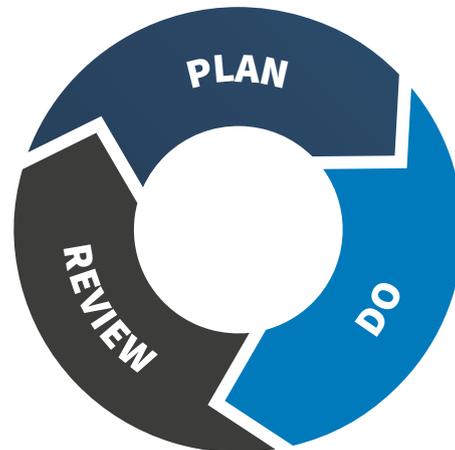
Figure 4: Stage delivery

During the implementation of new capability, the 'Doing' will involve:

- facilitating the establishment and refinement of requirements
- supporting any system configuration process
- translating of technical terms and maintaining alignment with clinician expectations

Post implementation, the Program Management Office will:

- confirm expectations are aligned with reality
- review lessons learnt
- manage and report on benefits realisation.



Roadmap to delivery

STAGE 1: 2017 - 2018



Core Clinical Systems

- Electronic medical records**
 - Electronic clinical documentation
 - Electronic record for intensive care
 - Electronic medications management
- Clinical integration platforms**
 - System rationalisation and integration
- Incident management systems**
 - IMS+ implementation
- Threat and risk assessment**
 - Clinical system threat assessments



Integrated Care Solutions

- Clinical information exchange**
 - Secure messages and eReferrals
 - HealtheNet/MyHealth record integration
- Telehealth**
 - Video conferencing
 - Skype for business rollout
- Shared care plans**
 - Primary shared care plan rollout
- Patient experience**
 - Patient experience (Stage 1)



Workforce and Business Management Systems

- Finance systems**
 - StaffLink upgrade
- Asset and facilities management**
 - AFM implementation
 - Facilities system integration
 - Information asset management
- Rostering**
 - HealthRoster implementation
- Human capital management**
 - Recruitment and onboarding
 - eCredentialing
- Workforce education**
 - ICT workforce integration
 - Workforce education tool
 - Information Security awareness, training
- Records Management**
 - System upgrade
- Information security organisation**
 - Security management

STAGE 2: 2019 - 2022

- Electronic medical records** - Electronic medical records enhancements
- Clinical integration platforms** - Device integration
- Integration engine

- Clinical information exchange** - HealtheNet/MyHealth record integration

- Shared care plans** - Primary shared care plan rollout
- Patient experience** - Patient experience (Stage 2)
- Remote patient monitoring** - Patient self management implementation

- Human capital management** - Talent and succession management
- Performance and development

STAGE 1: 2017 - 2018



Data and Analytics

Standardised data structures

- Data structure training program

Data improvement

- Data and analytics coaching program

Data analysis and visualisation

- Executive reporting framework
- Data definitions
- Performance metric establishment

Data protection

- Data loss prevention



Access to Information

Mobile solutions

- Mobile apps policy
- Virtual desktop refresh

Content management

- CMS implementation
- SharePoint strategy

eMR accessibility

- eMR from anywhere program



Infrastructure and Security

St George Hospital redevelopment

Sutherland redevelopment

Data centre reform

- Business governance capability

Wireless

Information security program

- Security governance capability
- Security technology capability

Security compliance

- Implement security management systems

Digital identity management

- Business continuity planning

STAGE 2: 2019 - 2022

eMR data integration

- Electronic medical record data integration

Data improvement

- Data and analytics coaching program

Preventative health analytics

- Metric development

- Monitoring function establishment

eMR accessibility

- eMR from anywhere program

Security compliance

- Certify management systems

Randwick campus redevelopment

Next steps

■ Immediate steps for action within the next six months include:

- supporting the establishment of District-specific governance for the CIC and IMC, including the establishment of reporting expectations
- defining and communicating the value proposition of Health ICT
- documenting the current roles and responsibilities in line with service catalogues between the District and eHealth NSW
- developing a view of the District's enterprise architecture
- establishing a Customer Service Improvement Program to drive a supportive and responsive relationship between all service providers, eHealth, Ministry of Health, State Wide Service Desk and Health ICT
- documenting the Health ICT baseline business processes
- developing a communication plan to support the realisation of this strategy
- clearing out the register of open support requests
- developing an engagement approach to support Health ICT staff in understanding their role as business partner to our organisation.





“

We will continue to plan and prioritise the implementation of the required change in a structured and co-ordinated way that creates real value for clinicians.

”

Scope of our initiatives

■ The table on the next page provides details of the specific scope of initiatives included for delivery of this strategy.





Core Clinical Systems

| Initiatives | SESLHD Activity | Activity summary | Stage |
|---|---|--|-------|
| eMR | Electronic Clinical documentation (EMR2) | Implementation of EMR2, covering <ul style="list-style-type: none"> clinical documentation functionality, imaging and photography outpatient solutions electronic referral for admission workflow, task management, reminders and messaging functions integration with diagnostic solutions connectivity with other clinical applications transcription and digital dictation | 1 |
| | Electronic Medications Management (eMEDS) | Implementation of eMEDS, a replacement of the National Inpatient Medication Chart (NIMC) | 1 |
| | eRIC | Implementation of eRIC <ul style="list-style-type: none"> State wide project to rollout to all ICUs HL7 interface to receive handover documents from eRIC into eMR Integration of eMR Allergy module with Intensive Care | 1 |
| | Electronic medical record enhancements (EMRe) | Implementation of: <ul style="list-style-type: none"> IV infusions Patient identification solution (e.g. bar coding) outpatient prescriptions enhanced patient matching (Enterprise Master Patient Index) automated provider updates | 2 |
| | Medical imaging upgrade | Major upgrades to medical imaging systems | 1 |
| Clinical integration | Systems rationalisation and integration | Rationalise the number of mechanisms by which information is currently transmitted to maintain a single source of truth for SESLHD | 1 |
| | Integration engine | Integration layer replacement (eGate replacement) | 1 |
| | Device integration | Connecting of various monitoring equipment to eMR for automatic data uploads. | 2 |
| Incident Management System | Implementation of ims+ | We will leverage the state-based build of the ims+ system with: <ul style="list-style-type: none"> the ability to record and track incidents in our facilities the patient portal to record feedback on incidents the ability to share learning of incidents with other SESLHD staff. | 1 |
| Threat and Risk Assessment (Part of Security) | Discover unidentified security risks | We will conduct threat and risk assessments of core clinical systems and infrastructure to identify and manage currently unidentified security risks. | 1 |



Integrated Care Solutions

| Initiatives | SESLHD Activity | Activity summary | Stage |
|-----------------------------------|--|---|-------|
| Clinical information exchange | Secure messages and eReferrals | We will be setting up the foundation for clinical information exchange and leveraging the integrated care platforms in core clinical systems to share health information with the broader health community. The integrated share platforms combined with secure messaging will increase clinician access, regardless of organisational boundaries, to send further message types. | 1 |
| | HealthNet/ MyHealthRecord integration | Integration of core clinical systems with HealthNet / MyHealthRecord integration, including: <ul style="list-style-type: none"> pharmacy community health discharge outpatient letters pathology | 1 |
| Telehealth | Video conferencing hardware implementation | Implementation of video conferencing to broader areas is planned for the coming years to improve access for patients living rurally and remotely or who are unable to travel | 1 |
| | Skype for Business rollout | Implementation, communication and support for use of Skype for Business | 1 |
| Shared care plans | Primary shared care plan rollout | We will be establishing the foundations and marketing of shared care services to primary care and internal clinicians to expand the visibility of shared care options. This will include a continuous learning component to expand and refine the broader implementation in line with the delivery of integrated care and leveraging the functionality in core clinical systems. | 1 |
| Patient experience and engagement | Patient experience (Stage 1) | Planning and delivery of projects to manage key aspects of patients touch points with the systems, Stage 1 will include: <ul style="list-style-type: none"> setting and management of reminders integrated entertainment systems inpatient and guest Wi-Fi online meal ordering patient queue management system (directing consumer where to go) | 1 |
| | Patient experience (Stage 2) | Planning and delivery of projects to manage key aspects of patients touch points with the systems, Stage 2 will include: <ul style="list-style-type: none"> self-registration (patient kiosk) online appointment requests accessing personal health information patient self-assessments (Patient Reported Measures) | 2 |
| Remote patient monitoring | Patient self-management implementation | We will be exploring the application of integrated mobile health to support patient self-management. A key initiative includes expanding the trial of a smart phone-based application to support diabetes management. | 1 |



Workforce and Business Management Systems

| Initiatives | SESLHD Activity | Activity summary | Stage |
|--|--|---|-------|
| Information Security Organisation | Establish Information Security Functions | We will plan for and establish organisational information security management and operational functions. These functions will be resources with sufficient capacity of competent staff to deliver and operate the information security identification, protection, detection, response and recovery capabilities. | 1 |
| Finance systems* | Support StaffLink upgrade | We will utilise the enhanced data sets from StaffLink to inform long-term workforce decisions and resource allocation in line with the unique demands of the District. | 1 |
| Asset and facilities management* (AFM) | Implementation of AFM | We will utilise the state-wide AFM system to improve the visibility, tracking maintenance and utilisation of our assets. This will include the utilisation of the state-wide resource booking systems to improve the management of rooms and vehicles. | 1 |
| | Facilities system integration | We will integrate the eHealth-provided AFM system with the Building Management System (BMS) security systems currently operating in the District. | 1 |
| | Information Asset Management | We will establish the definition and management of all information assets to enable the effectiveness of operational security capabilities and ICT service management. | 1 |
| Rostering* | Implementation of HealthRoster | We will utilise the state-wide rostering solution and associated reporting tools in the management of frontline staff to ensure compliance with state-wide standards, management of patient safety, and locum and agency costs. | 1 |
| Human Capital Solutions (HCM)* | Implementation of HCM solutions | Implementation of the following suite of solutions: <ul style="list-style-type: none"> Recruitment and onboarding solution eCredentialing Performance and Development Management Talent and succession solution | 1 |
| Workforce education and professional development | ICT Workforce Education | We will be conducting a radical re-design of our ICT training strategy with considerations for: <ul style="list-style-type: none"> induction programs tailored to facility/ role specific staff needs broader consultation with staff regarding training requirements the inclusion of systems-specific training e.g. eMR, eMEDS the use of multiple training platforms and forums the use of system super users as mentors ICT role specific information security training e.g. incident management, threat analysis | 1 |
| | Workforce Education Tool | We will also be providing input into the planned enhancements of the state-wide Learning Management System. | 1 |



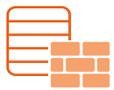
Data and Analytics

| Initiatives | SESLHD Activity | Activity summary | Stage |
|---------------------------------|---|---|-------|
| | Information Security awareness, training | We will establish an information security awareness program to educate all staff regarding security threats to enable them to effectively, identify, respond to and report potential security incidents. | 1 |
| Records management | Refresh of records management systems | We will be implementing a major update to the records management systems to allow for greater accessibility and control of internal records. | 1 |
| Inventory tracking | HTrak rollout | We will continue the broader implementation of the stock tracking system to increase visibility and controls over patient procedure stock. | 1 |
| Data structures | Data structure training program | We will apply the state-wide data standards, definitions and dictionaries in all operational and improvement program reporting to ensure consistency and alignment of reporting information. The consistent application of these standards will improve alignment with Ministry of Health direction and support SESLHD funding requests for targeted improvement initiatives. | 1 |
| eMR data integration | eMR data set consolidation | We will integrate the following key data to support the establishment of combined data sets into the eMR: <ul style="list-style-type: none"> • patient vital signs • pharmacy records into eMR (eMEDS) • patient allergies • antibiotics • blood types • retinal treatments • cardiac monitoring records. | 2 |
| Data Protection | data loss Prevention | We will define and implement data loss prevention capabilities to limit and protect the storage and transfer of sensitive data. | 1 |
| Data improvement | Data and analytics coaching and support program | We will be conducting a local education and communications drive to assist clinicians and business intelligence (BI) users to utilise the available data analytics tools. This initiative will educate users on the value of correctly entered data, where it goes and what it is used for. | 1 |
| Data analysis and visualisation | Executive reporting framework Data definitions Performance metric establishment | We will investigate and implement methodologies and approaches to support clinicians in the accurate recording and leveraging of data from the information systems to drive improvements to patient outcomes. This initiative will assist clinicians in utilising new and existing tools accurately to ensure data is entered only once but leveraged many times, including the establishment of ad hoc reporting capability to create snapshot report and inform clinical decisions. | 1 |



Access to Information

| Initiatives | SESLHD Activity | Activity summary | Stage |
|-------------------------------|---|---|-------|
| Preventative health analytics | Metric development | We will apply the insights gained from this analysis, combined with local insights to inform targeted interventions of high risk demographics, leveraging the latest available capability to influence trends as soon possible. This intervention will include proactive monitoring of early indicators to determine if targeted interventions are having the desired effect, and timing of risk mitigation. | 2 |
| | Monitoring function establishment | | |
| Mobile solutions | Development of mobile application policy | We will be publishing a Mobile Devices Innovation Policy to assist staff with translating app ideas into workable solutions. Further considerations for smartphone application development will be made through the Clinical Informatics Committee or supporting sub-committees. Details of these are provided in 'Supporting Structures' earlier in this strategy. | 1 |
| | Virtual desktop refresher | We will communicate and support the use of new capability provided by eHealth to access applications from anywhere and anytime through virtual desktops. | 1 |
| Rapid Access System | Enhanced access management | Improve security in clinical settings by enabling multiple staff to rapidly share a device while maintaining their own individual sessions. e.g. using staff ID proximity card to swipe on and off. | 1 |
| Content management | Implementation of content management system | We will apply a content management system framework across the internet and intranet with a view to providing a more suitable and functionality-rich solution. Our content management system will be mobile-friendly and provide seamless access to business rules, clinical guidelines, relevant content and well-matched search engines. This initiative supports decentralising the content, enabling staff to self-publish. | 1 |
| | Redevelopment of SharePoint strategy | We will be conducting an evaluation of the current SharePoint strategy with considerations for: <ul style="list-style-type: none"> • collaboration of information across service providers • implementing governance, standards and guidelines • broader consultation with staff regarding requirements for a collaboration tool. | 1 |



Infrastructure and Security

| Initiatives | SESLHD Activity | Activity summary | Stage |
|-----------------------------------|--|--|-------|
| eMR accessibility | Anywhere eMR program | <p>We will be establishing seamless integration and continuing to work toward single sign-on between the following core clinical information systems:</p> <ul style="list-style-type: none"> • eMR • PAS • eRIC • eMEDS • allergy management (Cerner) • antibiotics management (Guidance) • blood bank (Red Cross) • retinal treatments (iDOSE) • cardiac monitoring system (MUSE) • electro cardiograms. <p>This will be supported by the System rationalisation program.</p> | 1 |
| St George Hospital redevelopment | St George Hospital redevelopment | <p>These redevelopment will include:</p> <ul style="list-style-type: none"> • core ICT infrastructure • service delivery platforms • service delivery applications • operational processes. | 1 |
| Randwick Campus redevelopment | Randwick Campus redevelopment | | 2 |
| Sutherland Hospital redevelopment | Sutherland Hospital redevelopment | | 1 |
| Wireless | Wider Wi-fi program Eduroam | <p>We will continue the expansion of the wireless network with planned projects to support: eMEDS, as part of the planned go-live for the Prince of Wales Hospital and Royal Hospital for Women. Eduroam to deliver University of NSW access through the Hospital Wi-Fi.</p> | 1 |
| Information Security Program | Information Security Governance Capabilities | <p>We will to improve risk management of critical information assets and clinical systems by establishing core governance capabilities:</p> <ul style="list-style-type: none"> • Business Context and Leadership • Evaluation and Direction • Enterprise Security Architecture • Compliance, Audit and Review | 1 |
| | Enhance Information Security Technology Capabilities | <p>We will improve the protection of sensitive health information and critical systems by formalising information security technology capabilities in the following categories:</p> <ul style="list-style-type: none"> • identification of requirements, assets and risks • prevention of breach • detection of compromise • response and Recovery • measurement and Improvement | 1 |

| Initiatives | SESLHD Activity | Activity summary | Stage |
|------------------------------------|--|---|-------|
| Security Compliance | Implement and operate the Information Security Management System | We will implement the Information Security Management System to align with the NSW Digital Information Security Policy | 1 |
| | Certify the Information Security Management System | We will achieve compliance with the with NSW Digital Information Security Policy by attaining ISO certification of the Information Security Management System | 2 |
| Health Digital Identity Management | Enhanced Identity Management Capability | We will adopt and Integrate the eHealth Health Digital Identity Management capability as an enabler of Integrated Care Solutions. | 1 |
| Data centre reform program | Business continuity planning | We will be managing the migration of core systems to the NSW Government Data Centre environment and developing updated business continuity and disaster recovery plans. | 1 |

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Health
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