



Digital Strategic Plan and Roadmap

2021-2024

Artwork Acknowledgment

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Gold Coast Health Digital Strategic Plan 2021-2024

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Contents

Seize the Opportunity - message from the Board Chair.....	4
Setting the Strategy - message from the Executive Director Strategy, Transformation and Major Capital.....	5
Introduction	6
Gold Coast Health’s Digital Strategic Plan 2021-2024	8
Strategic Alignment	9
Guiding Principles	10
Strategic Focus Areas	11
Advanced Insights	12
Digital Liberation	16
Digital Literacy and Design	20
Virtual Healthcare	24
Digital Foundations	28
Delivery Methodology	32
Measuring and Reporting Performance	32
Digital Roadmap 2021-2024.....	34
Abbreviations	38

Figures

Figure 1 - Future Focus Ambitions	7
Figure 2 - Advanced Insights Roadmap	14
Figure 3 - Digital Liberation Roadmap	18
Figure 4 - Digital Literacy and Design Roadmap	22
Figure 5 - Virtual Healthcare Roadmap	26
Figure 6 - Digital Foundations Roadmap	30
Figure 7 - Performance Measures	33

Seize the Opportunity



Message from Ian Langdon, Board Chair

Gold Coast Health’s philosophy of Always Care is being reimagined as our clinicians face the challenges and opportunities brought on by the pandemic. Innovation is borne of adversity and our teams are proving the case across our organisation.

Never before has digital technology been called upon to urgently support care delivery to those who need it most. Clinicians from across the service have come to me with examples of technological innovation that seemed impossible only years ago.

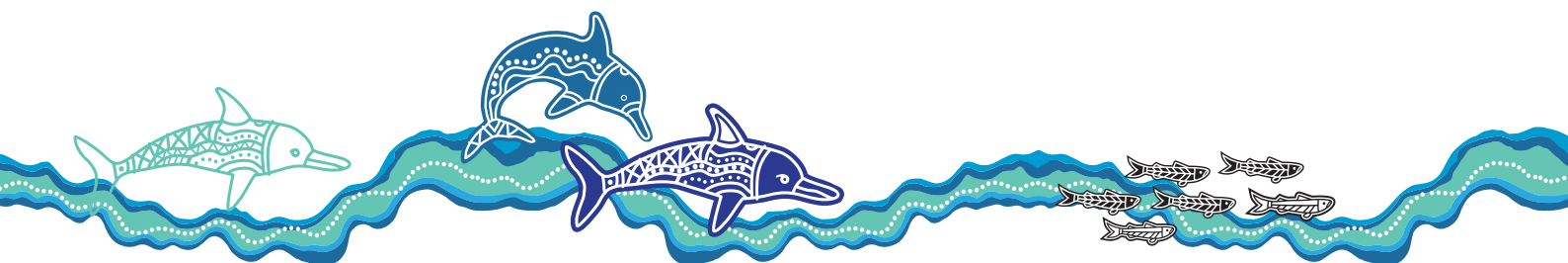
Our digital strategy will make all the difference to improving access to public health services in our community. Despite unprecedented demand, an ageing population and other external factors, our focus stays firmly on how to deliver better care in a contemporary setting. Virtual care, telehealth, technological advances and alternative models of care are being trialled and adapted across specialties and in community settings.

“ We want to empower our teams to be brave and seize the opportunities made possible by new tech. ”

Despite the challenges and disruption caused by COVID, our people continued to trial various new working models and are now building upon their successes. The future is a digital avenue of possibilities that can lead to whole new ways of thinking about care delivery.

Our focus is on improving access to quality health care for our community. Whether its supplying useful medical information, facility maps or offering more appointment choices, all our planning is focused on putting the patient first.

Wherever possible we want to empower our patients to have a say in their care. We are using digital advances to help patients find easier ways to access the care they need and providing them with more choices – from selecting and confirming their preferred appointment times to choosing a virtual consultation over a face-to-face visit at the hospital, our digital strategy is a means to improve patient care and ultimately, the patient experience.



Setting the Strategy



Message from Sandip Kumar, Executive Director Strategy, Transformation and Major Capital

The digital agenda to this point has been focused on digitally enabling our health service, through the adoption of integrated Electronic Medical Record or the SystemView Platform. Our emerging focus is to now digitally liberate our health service, by leveraging previous investments, new technologies and techniques to release time to care, to work at the top of our scope, to improve quality and experience of patient care, and overall community health.

It is no longer a matter of future possibilities, but available opportunities, as digital revolution is being embraced across all health systems internationally. The key driver being patient expectations for digitalisation and patients' needs to continue to access care, for example through pandemic, significant weather events or international restrictions. To ensure we still are contemporary in our approach, to meet these patient expectations, and to ensure staff have the tools they need to supply care when needed, we need to make sure we harness the potential of such available opportunities.

Gold Coast Health Digital Strategic Plan and Roadmap 2021-2024 (D24) sets out the ambitious digital program for our health service. The focus on bringing the digital transformation objectives in our Gold Coast Health Strategic Plan 2020-2024 from vision to an implementation pathway. The development of this roadmap has been achieved in broad consultation with staff, with a focus on opportunity identification and validation, and an end goal to ensure 'Board-to-ward' alignment. It encompasses the key elements for a transformative agenda: a bold vision, a clear plan, a focused and enabled set of staff to drive, and a collective commitment to deliver.

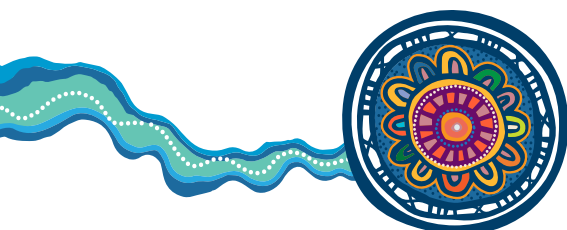
D24 has five key focus areas: Advanced Insights, Digital Liberation, Virtual Healthcare, Digital Literacy and Design, and Digital Foundations. Each of the focus areas has clearly defined programs of work, with supporting value creation and value realisation measures to validate outcomes delivered. The material focus of the plan is to enable information to be accessible at the right time to support decision making, to release time to care through digitally driven workflows, to drive automation and digital engineering, to enable concept of a hospital without walls, to ensure staff and patients are educated to use technologies, and to ensure that technologies are designed for ease-of-use.

It is for all staff at Gold Coast Health to embrace the digital revolution, to set high standards and acceptances for digitalisation, and to collectively drive D24.

I want to thank all Gold Coast Health staff for collaborating on this roadmap, in particular the Chief Digital Officer and the Digital Services team for their work on D24, and I look forward to forging ahead and digitally liberating our health system, to in turn, improve quality of patient care and patient experience, and overall community health.

*Cooper, B. (2022). World's Best Hospitals 2022. Newsweek. <https://www.newsweek.com/worlds-best-hospitals-2022>

*“Gold Coast Health is an internationally recognised health institution that has embraced digital transformation and innovation to improve patient care and patient experience.”**



Introduction

Gold Coast Health's vision of having the best health outcomes in Australia, combined with our philosophy of Always Care provides a focus on sustainable, compassionate and high-quality health care services.

Gold Coast Health patients, visitors and the community have benefited from growing maturity in health service provision, combined with innovative digital and technology improvements.

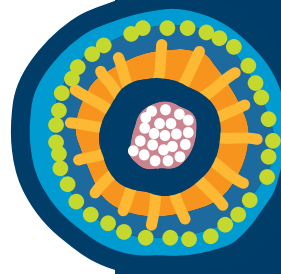
The Gold Coast Health Digital Strategic Plan and Roadmap 2021-2024 builds upon previous digital and technology strategies and plans to provide the framework for investments in digital technologies and services over the next three years.

About Gold Coast Health

Gold Coast Health was established as a statutory body in 2012. This has enabled rapid growth in size and scope, including evolution from community to tertiary hospital services.

Gold Coast Health services a resident population of more than 600 thousand, with a patient catchment between the northern Gold Coast and the New South Wales border and a high annual number of visitors and tourists. Gold Coast Health also provides services to patients in northern NSW, where those services are not provided within the area. Gold Coast Health manages more than 20 physical facilities including three hospitals and two health precincts. It also has partnerships with the private sector to provide services for public patients.





The Case for Change

The Gold Coast population is growing faster than the state average and much of this growth is in age groups who are greater users of health services.

In Queensland, an ageing population and the increase in obesity and chronic illness means greater spending on healthcare than ever before. This provides many challenges including:

- Service demand growth through population growth, an ageing population and declining private health insurance uptake
- Increase in market share as community expectations are increased and patients move from the private sector
- Increase in complexity with new practices, higher compliance standards and more complex patients with co-morbidities
- Cost pressures with increased fixed costs and declining or flat price payments
- Capital access through cost pressures and exhausted annual budgets
- Performance transparency through providing live, monthly and quarterly performance reporting and associated political and media disruption
- Increased incidence of mental health problems, substance use and domestic violence associated with COVID-19 pandemic impacts on the community

In addition to pressures caused by increased clinical demand, Gold Coast Health has faced challenges providing regular healthcare during the COVID-19 response. Increased demands on the workforce to sufficiently staff public health responses such as contact tracing, quarantine facilities and vaccination centres as well as access limits on clinical care in acute and outpatient settings created a need to rapidly adopt alternate care modalities.

Gold Coast Digital Health

Gold Coast Health is transforming service delivery through technology and is focussed on developing reliable, secure systems and digital care solutions that promote patient-focussed and integrated healthcare.

Since the introduction of the Gold Coast Health Digital Strategy 2018-2021, a number of digital initiatives have been successfully implemented.

The implementation of the integrated electronic Medical Record (ieMR) and Medical Imaging Informatics Solution (MIIS) in 2019 created a robust foundation for improved digital patient care. ieMR and MIIS have been supplemented by investments in digital clinical access through improved application access, task management, HR and financial system uplift and the introduction of consolidated and integrated office productivity applications.

Future Focus Program

Gold Coast Health embarked on a transformation program in 2020. Aimed at responding to the challenges faced by public health systems, the Future Focus program encompasses a series of initiatives to further support the development of a sustainable, value focused, integrated and digitally enabled health service.

Working across four key ambitions, the Future Focus program has supported the implementation of digital initiatives since inception and will continue to oversee and monitor initiatives that drive clinical, operational and digital change.

1

BEST-IN-CLASS CLINICAL DEMAND MANAGEMENT

Lead the way in customising and integrating our **service delivery** to the unique needs of our patients and community.

2

CLINICAL TEAMING AND INNOVATION

Deliver the best value health care through **innovative** care models and new ways of **teaming**.

3

VALUE-ADDING CORPORATE FUNCTIONS

Re-position our corporate functions as '**value adding**' services.

4

A DIGITALLY ENABLED HEALTH SERVICE

Leverage **digital and data** to transform the way we work.

Figure 1 - Future Focus Ambitions

Gold Coast Health's Digital Strategic Plan 2021-2024

Overview

The role of digital and information technology innovations in the provision of healthcare is well established worldwide, with the impact of COVID-19 rapidly accelerating the adoption of digital health solutions. Digital health provides opportunities for consumers and clinicians and underpins core functions required for sustainable care delivery.

Gold Coast Health's Digital Strategic Plan and Roadmap 2021-2024 (the Digital Strategic Plan) builds upon previous ICT and digital strategies to provide strategic direction and drive innovation and digital transformation across the health service. It aims to take advantage of previous advancements in digital healthcare implemented by Gold Coast Health, whilst leveraging industry best practice to extend digital technologies in clinical care.

The Digital Strategic Plan complements current Queensland Health, Queensland Government and Australian Government digital and ICT strategies and supports state-wide digital initiatives where applicable.

The Digital Strategic Plan aligns identified initiatives under seven guiding principles, five focus areas and three delivery cycles to provide transformative digital outcomes that improve patient care. The seven principles guide the initiatives identified in the Digital Strategic Plan. The five focus areas align the initiatives under broad themes to ensure investments deliver value. The three delivery cycles match the years of the Digital Strategic Plan, starting with foundational initiatives that provide for future development, then building to realise the value of investments through digital capabilities across latter years.

Once implemented, the Digital Strategic Plan will support a range of outcomes across patient and staff experience, system and financial performance and provide a solid base for future transformation and digital investment.



Strategic Alignment



The Digital Strategic Plan aligns with the Gold Coast Health Strategic Plan 2020-2024, as well as core Queensland Health digital strategies. Ongoing coordination and alignment will occur to ensure synergies are identified and the value of enterprise systems and state-wide digital strategies is maximised.

Gold Coast Health Strategic Plan 2020-2024

The Gold Coast Health Strategic Plan 2020-2024 highlights the values, objectives, and strategic priorities over a four-year period to 2024.

Aligned under the vision of having the best health outcomes in Australia and the Always Care philosophy, Gold Coast Health's Strategic Plan identifies three strategic objectives:

- Deliver world-class care – always
- Make the best use of our resources
- Drive future-focused change

The Gold Coast Health Digital Strategic Plan 2021-2024 aligns to the Strategic Plan across all five focus areas and aims to enhance the Health Service's approach to digital healthcare.

Gold Coast Health Service Plan 2016 - 2026

The Gold Coast Health Service Plan 2016-2026 identifies key priorities for Gold Coast Health over a 10 year timeframe. The Health Service Plan identifies key clinical and non-clinical priorities over 10 years, across clinical and non-clinical service lines.

The Health Service Plan is regularly reviewed to ensure alignment with current and changing priorities and to maintain currency. A review undertaken in 2021 has been aligned to the Digital Strategic Plan's focus areas over three years.

Other Gold Coast Health Strategies

The Digital Strategic Plan 2021-2024 aligns with and supports other HHS strategic plans and policies to ensure digital technologies and initiatives provide the necessary enabling solutions to underpin strategic objectives.

Queensland Health

The Digital Strategic Plan 2021-2024 is informed by and aligned to the digital strategies of Queensland Health.

Queensland Health manages strategies that define the strategic vision for healthcare, health service delivery, and digital health service delivery across Queensland. Queensland Health's core digital strategies, including the Digital Health Strategic Vision for Queensland 2026 and the draft Digital Health 2031 Strategy provide system wide strategic visions for digital investment.

The Digital Strategic Plan 2021-2024 leverages state-wide initiatives outlined in Queensland Health Strategies where applicable to Gold Coast Health, however also focusses on investing in initiatives that provide benefit to the organisation and Gold Coast community that may not be a priority for a statewide delivery.

Guiding Principles



Gold Coast Health has identified seven principles to provide direction and guidance to the development of digital initiatives and activities.

The seven Digital Principles will be considered when developing new and implementing planned activities to ensure all digital technologies align with our HHS vision, purpose and the Always Care philosophy.



Strategic Focus Areas

To deliver the value of digital transformation within Gold Coast Health, five strategic focus areas have been identified. These focus areas align objectives and outcomes across grouped programs of work to provide longer term value to the HHS.

The strategic focus areas are:



ADVANCED INSIGHTS

Enable clinical practice improvement, research and innovation through the use of our rich data assets

Building on existing investments in data management, this focus area will modernise our existing data platform to leverage cloud capabilities and services, build enriched data sets and models to support workflow automation and machine learning efforts.



DIGITAL LIBERATION

Using digital solutions to replace or enhance manual workflows

Gold Coast Health has a significant number of manual workflows, managing both clinical and non-clinical processes. Digital Liberation seeks to streamline manual workflows, optimise clinical and non-clinical administrative tasks and provide single points of interaction for staff and patients in accessing information.



DIGITAL LITERACY AND DESIGN

Making systems intuitive to use and providing the right education to staff and patients

Human-centred design and support will increase digital literacy and realise the full potential of our digital investment. Digital Literacy and Design will deliver platforms using good design to enhance a high-quality user interface experience across devices and incorporate education opportunities to further improve digital literacy for consumers and staff.



VIRTUAL HEALTHCARE

Using technology to create more options in how health services are delivered

The complexity and cost of healthcare is increasing, and patients are demanding more tailored and personalised care. Virtual healthcare reconsiders the traditional delivery models and provides innovative patient care modalities which provide alternative options for interacting with their care team.



DIGITAL FOUNDATIONS

Leveraging digital capacity and improving digital infrastructure

Gold Coast Health maintains a complex technical environment. A solid but agile approach to digital infrastructure and platforms is required to enable transformative digital delivery. Digital Foundations aims to deliver platforms and technologies for the long term to provide a solid technology core to leverage future opportunities.

1. Advanced Insights



Context

The ongoing provision of world class healthcare relies on accurate, timely and relevant data. Clinical and non-clinical data drives the operational and clinical performance of the Health Service and provides significant information for clinical care.

Gold Coast Health manages substantial data and information assets made possible via previous investments in clinical and non-clinical digital solutions. This is supported through data infrastructure such as a centralised data platform alongside descriptive and self-service analytics. In an increasingly time and resource-constrained environment, Gold Coast Health must further leverage these data and information assets to deliver better care to our community.

HHS Strategic Plan Alignment

The Advanced Insights Focus Area is aligned to the following objectives from the Gold Coast Health Strategic Plan 2020-2024

- 1.3 Continue to develop innovative service delivery models that meet community need and maximise our capacity to respond to healthcare demand – including hospital, community, home and virtual care
- 2.3 Streamline and coordinate governance, systems and processes to support logistics, assist prioritisation and enable resource allocation
- 2.4 Develop and implement a data strategy to leverage the opportunities of our digital health service
- 2.5 Effectively forecast, plan and act to make the best use of our infrastructure and secure resources for the future

Digital Strategic Objectives

- 1.1 Provide and use trusted data sources to improve clinical service delivery and decision support.
- 1.2 Enable internal and external partners to innovate on trusted Gold Coast Health data.
- 1.3 Structure data sources for multiple purposes, ensure digital data is integrated and a single source for data is identified, known and governed.

Programs of Work

Advanced Analytics Capability

Development of a data platform and capabilities in visual, predictive and real-time streaming analytics, machine learning and artificial intelligence to support clinical and non-clinical decision making, service delivery and workflow automation.

SystemView Development

Working with our partners, the continued development of the SystemView solution to provide insights to assist clinical and managerial leaders improve the performance of their services.

Clinician Decision Support Capability

Leveraging existing digital investments in the electronic medical record, the development of a platform and clinical tools providing user consumable decision support workflows and data insights for improved patient care outcomes.

Open Source Data Foundations

Framework, governance establishment and provision of data sharing capabilities with internal and external partners to enable improved consumer engagement, clinical innovation and research opportunities.

Advanced Health Service Benchmarking

Working with external partners to leverage comprehensive patient-level benchmarks to identify areas for service and quality improvements.

Multi-Modal Insights Delivery

Delivery of performance information and clinical and operational data on any device, regardless of location.

How will we measure success?

Value Creation

To measure success of the Advanced Insights Focus Area, we will assess:

- % increase in data sets available to support patient care
- # of digital data sets influencing patient driven decisions and pathways
- # of data sets integrated into digital workflows
- # of data sets enabling machine learning and Artificial Intelligence
- 100% of business cases and concept briefs are data driven
- Implemented an Advanced Data Capability to enable machine learning and Artificial Intelligence



Advanced Insights Roadmap

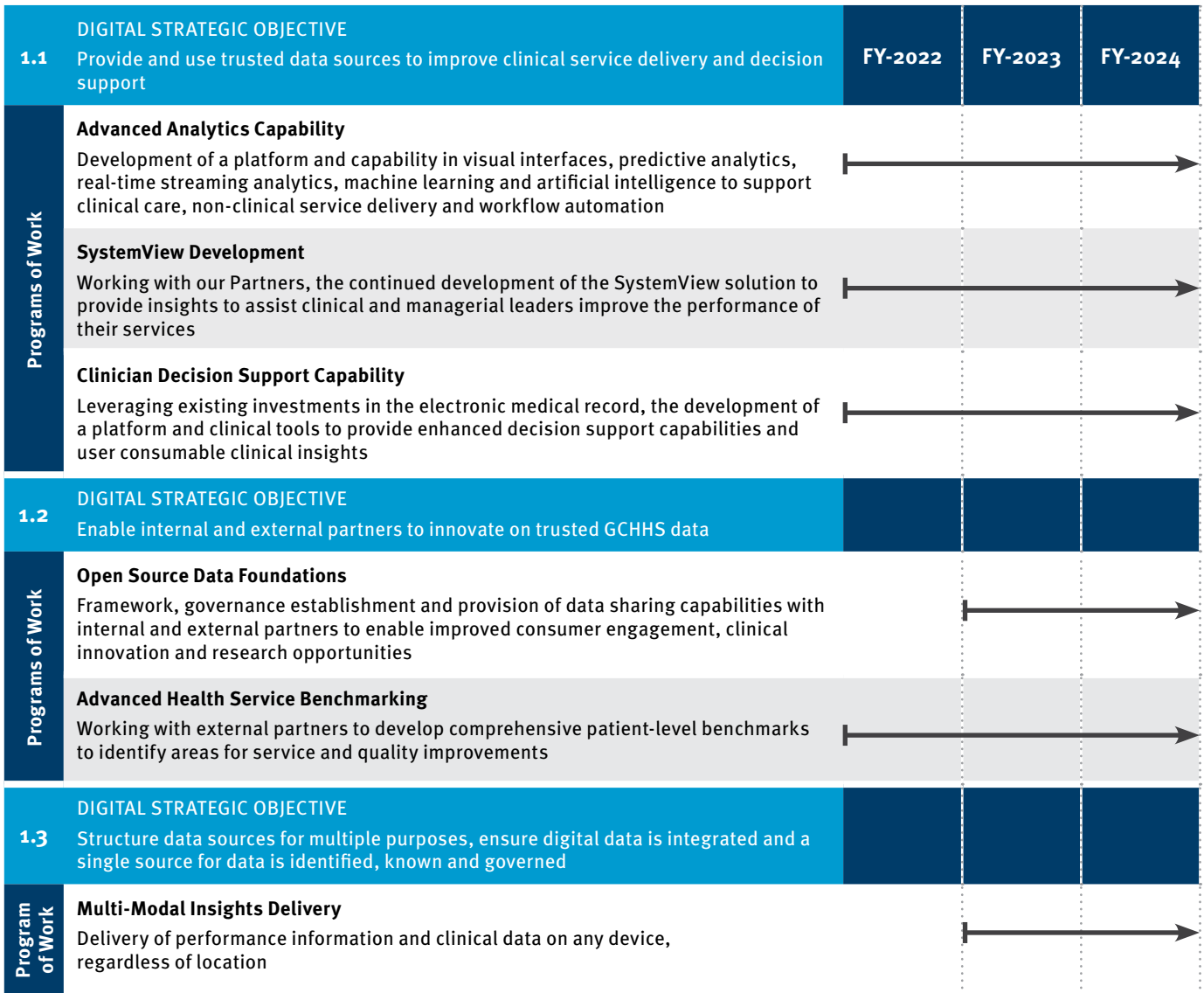


Figure 2 - Advanced Insights Roadmap



2. Digital Liberation



Context

Increasing demand for person-centred healthcare has heightened awareness of the need to release clinicians from time-consuming manual processes and give them back time to care.

There are many examples of manual processes that require significant involvement from clinical and non-clinical staff, but often add little value to the patient's journey, or to the provision of high-quality healthcare. The approach to digitise and automate processes will ensure that, where possible, digital solutions are implemented to solve business problems and provide increased clinical capacity for patient care, thus improving patient and staff experience.

HHS Strategic Plan Alignment

The Digital Liberation Focus Area is aligned to the following objectives from the Gold Coast Health Strategic Plan 2020-2024

- 1.3 Continue to develop innovative service delivery models that meet community need and maximise our capacity to respond to healthcare demand – including hospital, community, home and virtual care
- 2.3 Streamline and coordinate governance, systems and processes to support logistics, assist prioritisation and enable resource allocation

Digital Strategic Objectives

- 2.1 Streamline and automate manual processes to release workforce capacity to enable them to work at top of scope
- 2.2 Integrate digital systems to improve data accuracy and reduce errors
- 2.3 Ensure that staff facing workflows are intuitive and easy to use



Programs of Work

Digital Workflows

Design and development of a 'low code' platform to enable digitisation of manual workflows. The Digital Workflows initiative will also undertake definition of a governance approach to manage workflow requests and a scaled development team to assist citizen developers in business units to develop solutions.

Secure Messaging

Design and implementation of solutions to enable secure messaging, both between clinicians and with patients. Secure messaging will enable real-time and asynchronous text and image-based messages.

Robotic Process Automation

Leveraging the development of an Advanced Data Platform and digital integration capabilities, Robotic Process Automation will enable repetitive and predictable tasks, such as data transfer, to be performed without human interaction. Staff can be released to more high value tasks.

Digital Rostering and Allocation

Aligning with Queensland Health's Integrated Workforce Management program, the provision of improved digital rostering and allocation capabilities. Initially focussing on nursing and midwifery staff, the Digital Rostering solution is expected to be available to medical and non-clinical staff in future years.

Digital Scheduling

Utilising the capability provided by the Digital Integration Hub and Advanced Data Platform, providing enhanced scheduling options for planned care streamline administrative workflows and improve patient appointment attendance. Includes investigation into solutions to improve scheduling of staff across facilities/resources.

Digital Aggregation

Leveraging integration opportunities and utilising external and internal data sources, provision of a single interface for staff to manage multiple existing tasks.

Digital Referral Management

Implementation of a digitised workflow for clinical referral receipt and categorisation, including a system to enable digital referral receipt from General Practitioners, community-based referral processes and replacement of the existing internal referral solution.

Ambient and Automated Clinical Notes

Utilising artificial intelligence powered voice recognition technology, enabling automated medical transcription and clinical documentation.

How will we measure success?

Value Creation

To measure success of the Digital Liberation Focus Area, we will assess:

- % increase in digitally enabled workflows
- % increase in fully automated digital workflows
- % increase in consumer facing digitally enabled workflows
- % increase in digital workflows available on mobile devices
- % increase in clinical time available per FTE
- # of hours released through digital workflows and robotic process automation
- Implemented a secure messaging platform for clinical use

Digital Liberation Roadmap

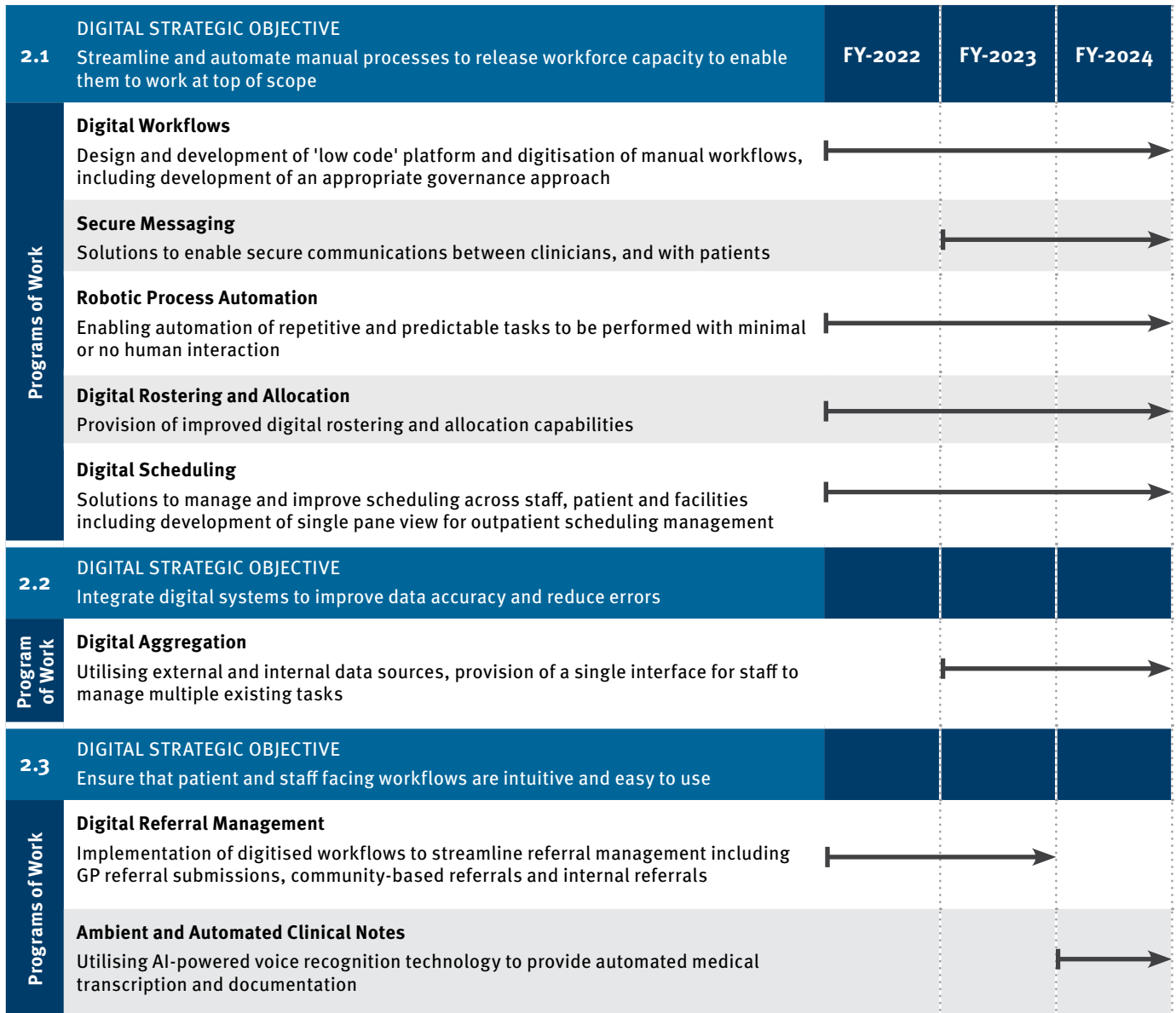


Figure 3 - Digital Liberation Roadmap



3. Digital Literacy and Design



Context

Digital Literacy means having the skills people need to live, learn and work in a society where communication and access to information is enabled through digital technologies. Digital Literacy is no longer just technical ability, or something held by a few experts. Digital Literacy involves everyone who accesses the Internet, social media platforms and mobile devices.

Gold Coast Health takes a human centred approach to service delivery and is conscious of providing culturally appropriate digital design to ensure inclusivity for all consumers.

Alignment to HHS Strategic Plan

The Digital Literacy and Design Focus Area is aligned to the following objectives from the Gold Coast Health Strategic Plan 2020-2024

- 1.4 Co-design compassionate, person-centred services in collaboration with our people, patients, partners and stakeholders
- 2.1 Continue to grow, develop and reward a capable, culturally safe, healthy and inspirational workforce who aspire to be the best health service in Australia

Digital Strategic Objectives

- 3.1 Follow human-centred design principles in the development of digital solutions
- 3.2 Continually grow staff, patient and consumer digital literacy skills to increase engagement with technology
- 3.3 Provide the environment and support for staff to innovate and develop digital solutions to business problems

Programs of Work

Digital Design Framework

Development of a framework to guide future development of digital applications and websites to ensure a focus on human-centred design and usability.

Web Transformation

The transformation of Gold Coast Health's existing Intranet and Internet presences into a scalable and unified website ecosystem, aligning with human centred design principles and web standards.

Staff Digital Literacy Program

Advancing and progressing our current digital training programs, improving digital literacy and engagement with digital technologies.

Consumer Digital Literacy Program

The development and provision of a digital literacy program for consumers, including patients, families and the broader community. It is anticipated that this initiative may align with existing consumer and community outreach and engagement programs.

Digital Ambassador Program

Identifying, educating and supporting embedded Digital Ambassadors identified in each division. They will provide information and guidance on specific change requirements, potential usage of digital implementations and will champion the use of digital innovation within their division.

Citizen Development

Aligning with other activities, the development of governance, support models and a community of practice to enable and encourage staff to create applications, analytics dashboards, reports and digital automation to solve business problems.

How will we measure success?

Value Creation

To measure success of the Digital Literacy and Design Focus Area, we will assess:

- % increase in consumer satisfaction score when engaging with digital tools and workflows
- % increase in consumer ease of use score when engaging with digital tools and workflows
- % increase in staff satisfaction score when engaging with digital tools and workflows
- % reduction in data quality errors at initial point of data entry
- % reduction in staff onboarding time through reduced training need
- # of citizen developers operating under the Centre of Excellence



Digital Literacy and Design Roadmap

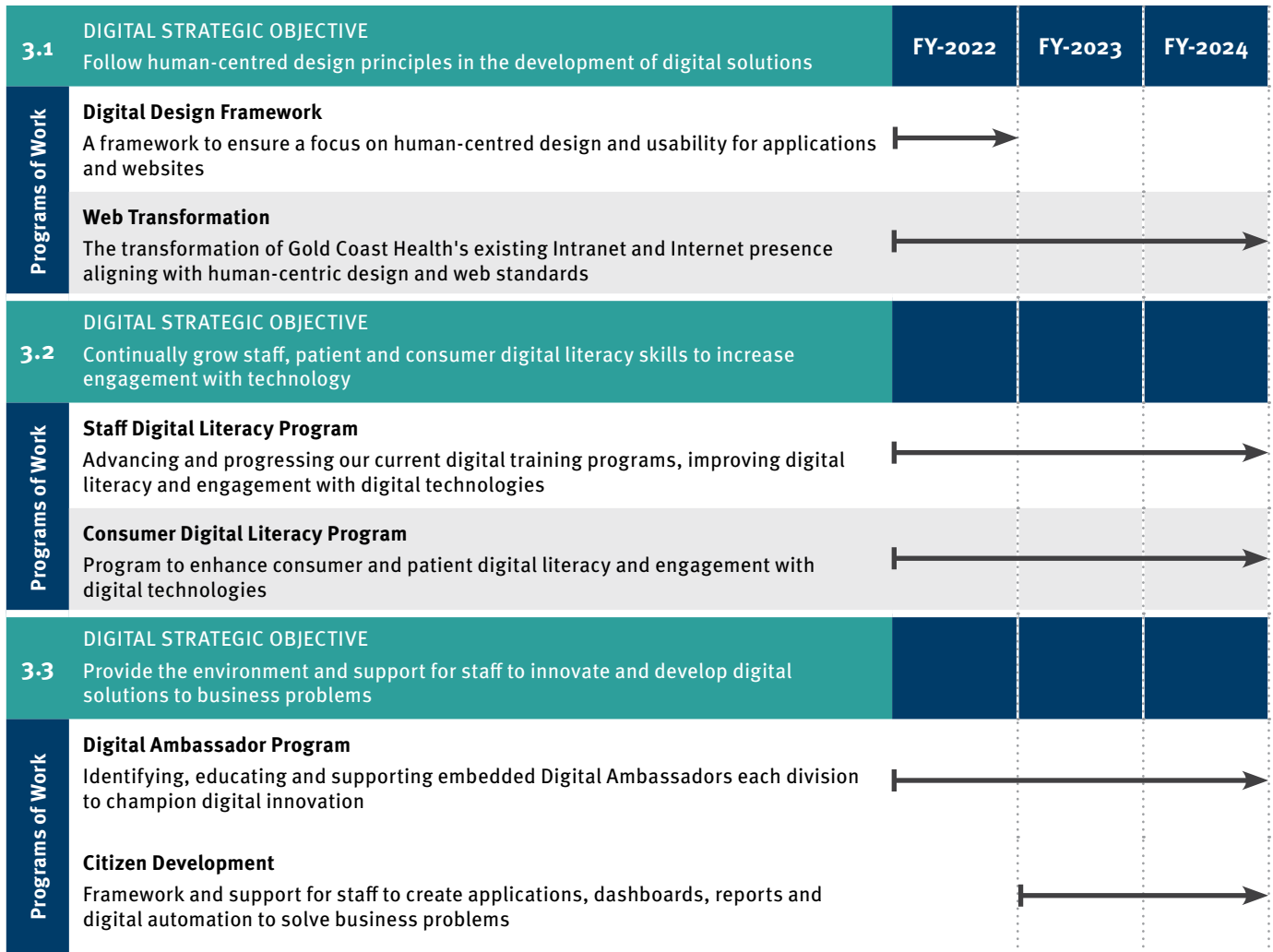


Figure 4 - Digital Literacy and Design Roadmap



4. Virtual Healthcare



Context

Virtual healthcare has existed at Gold Coast Health since 2014, enabling clinicians to connect with patients who are located elsewhere. Virtual healthcare has traditionally relied on Telehealth options including video conferencing to provide patient consultations. In 2020, COVID-19 highlighted the potential and the benefits of virtual healthcare's expansion into more flexible care models such as remote monitoring, virtual rounding and technology enabled home-based care.

Alignment to HHS Strategic Plan

The Virtual Healthcare Focus Area is aligned to the following objectives from the Gold Coast Health Strategic Plan 2020-2024

1.3 Continue to develop innovative service delivery models that meet community need and maximise our capacity to respond to healthcare demand – including hospital, community, home and virtual care

Digital Strategic Objectives

4.1 Grow and sustain the provision of high-quality healthcare enabled by digital solutions without the need for in-person attendance

4.2 Optimise the use of facilities and clinical resources by increasing virtual healthcare options and providing alternative pathways

4.3 Ensure that high reliability health care is available to meet the needs of patients regardless of geographic location

Programs of Work

Patient Communication Hub

A central, digital communication portal or hub providing a single point for all patient communication and information and allowing two way communication between patient and clinician.

Digital Assistant

Implementation of a digital assistant to provide patient and clinician information support. The Digital Assistant implementation will provide the foundation to enable future online pre-visit registration, patient-led initial information gathering and symptom checking.

Virtual Non-Admitted Care

Enabling pre-admission and outpatient care to be managed and delivered outside the hospital setting, including within the patient's home

Virtual Emergency Department

Provision of a platform to support urgent, unscheduled care. The Virtual Emergency Department initiative may leverage telehealth, virtual consultations and artificial intelligence technologies to provide virtual care options for patients and support primary care professionals in assessing patient needs.

Virtual Admitted Care

Working with clinical specialties; the definition and pilot of specific use cases for virtual wards, allowing patients to remain in their home while having inpatient treatment or while in the acute recovery phases.

ePrescriptions

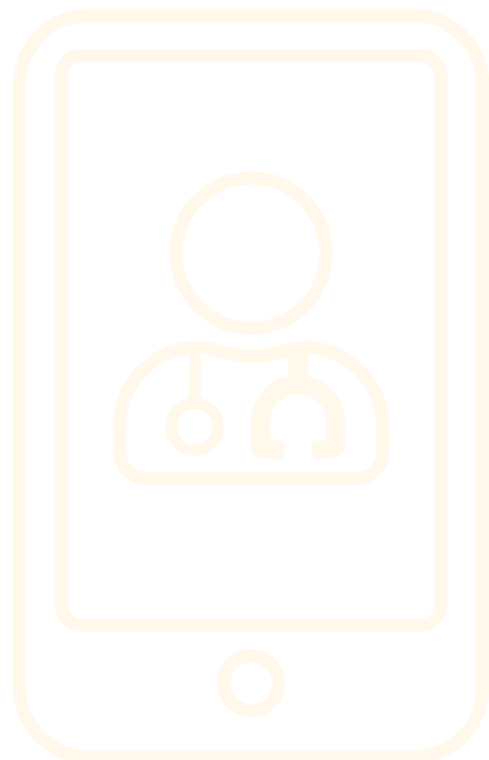
Technology and workflow changes to support the provision of digital prescriptions for patients, reducing complexity for patients and external pharmacies.

How will we measure success?

Value Creation

To measure success of the Virtual Healthcare Focus Area, we will assess:

- % increase in virtual hospital days
- % increase in virtual occasions of service
- % increase in revenue through video and virtual consultations
- % decrease of consumer phone calls requesting information on services and service provision
- % of consumers who have accessed digital or virtual services prior to presenting
- # of patients registered for the Patient Communication Hub



Virtual Healthcare Roadmap

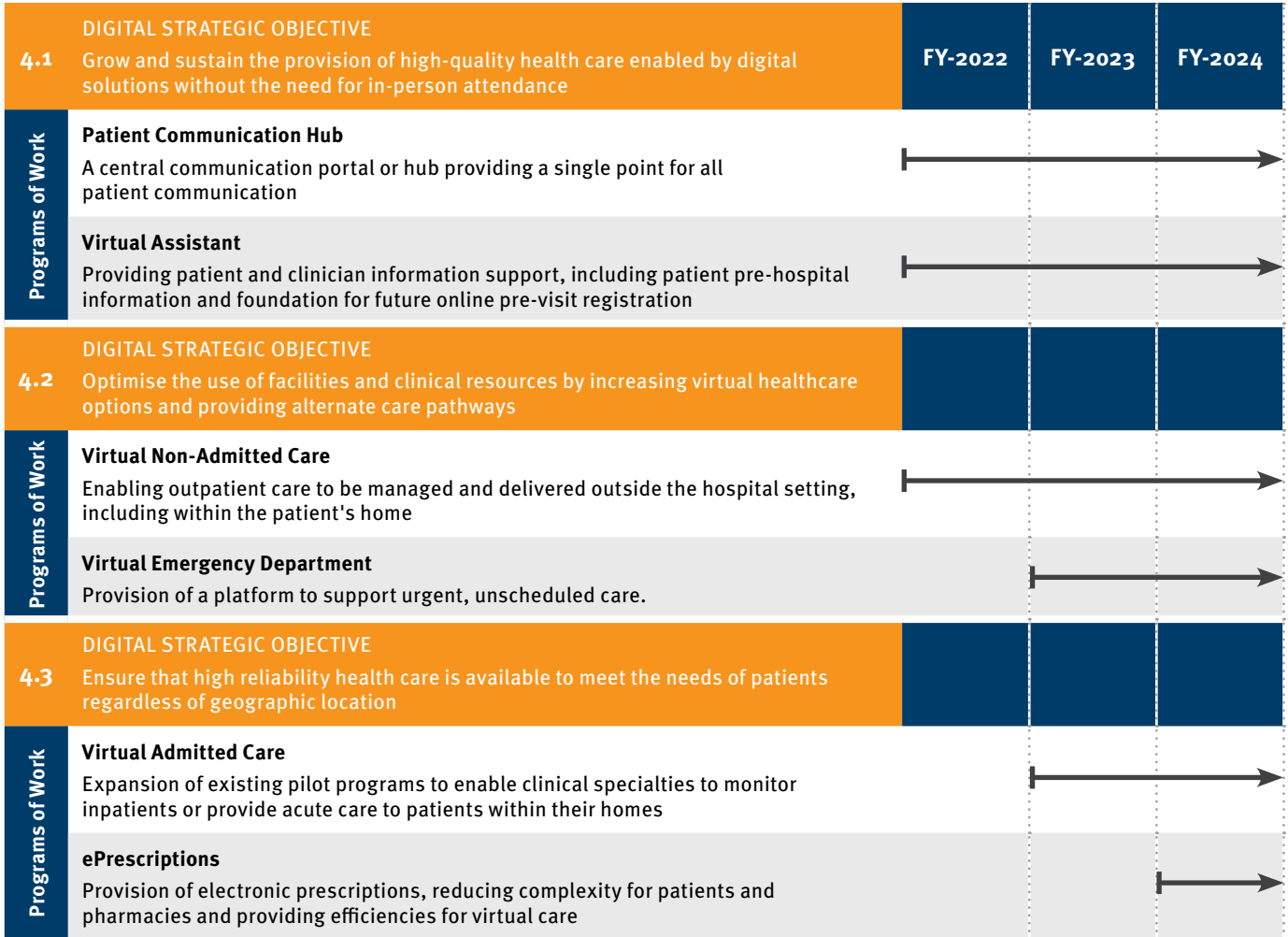


Figure 5 - Virtual Healthcare Roadmap



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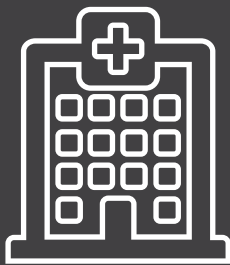
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Log Entry: 0013
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Connection status

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5. Digital Foundations



Context

Gold Coast Health's continued provision of world class healthcare relies on a strong digital foundation to enable clinical service delivery. The current digital landscape is complex, with multiple applications in use and an increasing need to ensure sustainable maintenance of existing systems while providing digital capabilities to support new uses.

Digital Foundations is a supporting focus area. It aims to build a set of core capabilities to support existing digital technologies, reduce duplication and provide a solid technology base for future clinical and operational initiatives.

Alignment to HHS Strategic Plan

The Digital Foundations Focus Area is aligned to the following objectives from the Gold Coast Health Strategic Plan 2020-2024

2.3 Streamline and coordinate governance, systems and processes to support logistics, assist prioritisation and enable resource allocation

2.5 Effectively forecast, plan and act to make the best use of our infrastructure and secure resources for the future

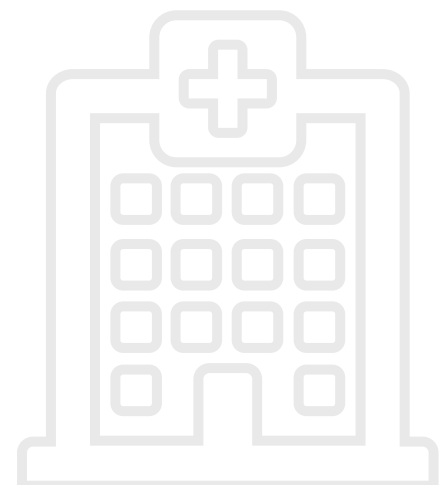
Digital Strategic Objectives

5.1 Provide reusable and integrated digital platforms and services to enable future innovation at speed and scale

5.2 Ensure a governed and strategic approach to the planning and delivery of technology services

5.3 Provide support to digital technology through transformation of Digital staff skills and capabilities

5.4 Maintain security, reliability and currency of digital technologies and maximise efficiency of digital systems



Program and Initiatives

Digital Integration Hub and Advanced Interoperability

Development of a local platform to enable application integration including development of a data store for patient events and an Integration Engine to allow for local HL7 processing and APIs.

Patient Identity Management

Leveraging existing national and state investments to enable digital patient identity confirmation.

Next Generation Nurse Call and Patient Engagement System

Replacement of the existing nurse call and patient engagement systems within inpatient facilities to include advanced patient communication options for virtual rounding and align with the Patient Communication Hub.

Imaging Management

Development of a roadmap for the expansion of the use of medical imaging technologies to improve clinical image management.

Digital Asset Management Framework

Development of a framework to support robust digital asset management and asset replacement planning.

Data Cataloguing and Standards

Enabling the broad use of analytics across the Health Service, the development of data standards will provide guidance on appropriate description and storage of data and information assets.

Digital Capability Enablement

Development of a framework and resource model to enable a digital development capability and reskilling of digital staff within Gold Coast Health.

Cloud Optimisation

Focus on a 'cloud-first' approach to delivering contemporary digital infrastructure and development on scaled, cost optimised, platforms as a service.

Edge Computing

Leveraging the Cloud Optimisation program, the pilot and initial phases to utilise distributed computing and storage to further improve infrastructure costs and scalability.

Information Asset Security and Management

Development of tailored frameworks, initiatives, and actions to identify information assets including security, access, and disclosure risks. Development of an Information Security Management System and actions to reduce inappropriate information disclosure.

How will we measure success?

Value Creation

To measure success of the Digital Foundations Focus Area, we will assess:

- Improved speed to value from ideation to implementation
- Reduction in the number of 'At Risk' ICT Systems
- Implementation of an Information Security management System
- Implementation of a Digital Asset Register for GCH owned digital assets
- # of applications integrated through the Digital Integration Hub

Digital Foundations Roadmap

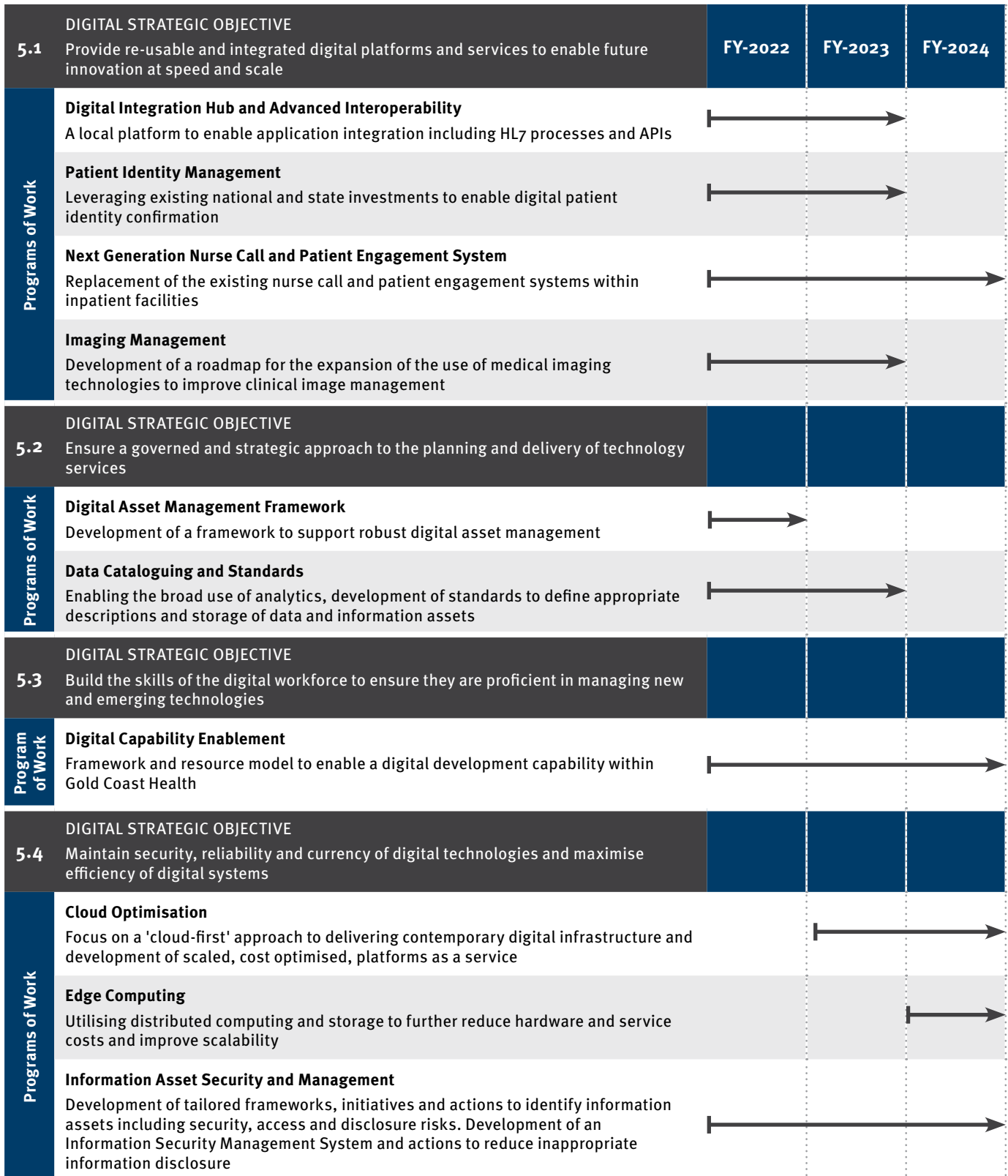


Figure 6 - Digital Foundations Roadmap





Delivery Methodology

The Rigorous Program Management (RPM) methodology is Gold Coast Health’s preferred program management methodology for Future Focus initiatives and projects.

RPM utilises a set of specific, objective tools to provide rigour and robust planning to high-value projects and initiatives. RPM provides a consistent and validated process for initiative development, monitoring and reporting.

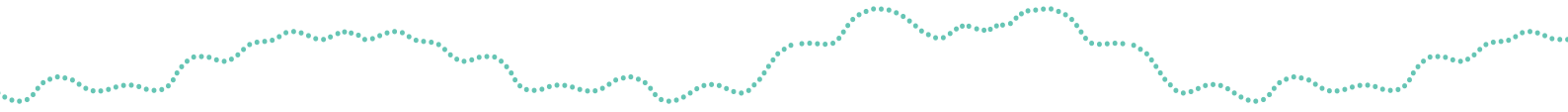
Programs of work that align with the Future Focus Program will utilise RPM for program governance, benefits definition and reporting. Programs of work not aligned with the Future Focus Program will utilise other appropriate project delivery methodologies as required.

Measuring and Reporting Performance

The Digital Strategic Plan 2021-2024 outlines key objectives and performance measures for each focus area. Performance measures outlined in this strategic plan will be reflected in the yearly Digital Services Operational Plan and other operational plans as appropriate. Where applicable, objectives and metrics will also be aligned to the Gold Coast Health Operational Plan.

Performance measures identified will be reported half yearly in line with organisational reporting cycles and will be further defined during the implementation of the programs of work.

The Digital Strategic Plan 2021-2024 will report to the HHS Board annually on the outcomes of the performance measures and programs of work and will provide updates to the Transformation Oversight Committee as required.



FOCUS AREA

MEASURE

ADVANCED INSIGHTS



- % increase in data sets available to support patient care
- # of digital data sets influencing patient driven decisions and pathways
- # of data sets integrated into digital workflows
- # of data sets enabling machine learning and Artificial Intelligence
- 100% of business cases and concept briefs are data driven
- Implemented an Advanced Data Capability to enable machine learning and Artificial Intelligence

DIGITAL LIBERATION



- % increase in digitally enabled workflows
- % increase in fully automated digital workflows
- % increase in consumer facing digitally enabled workflows
- % increase in digital workflows available on mobile devices
- % increase in clinical time available per FTE
- # of hours released through digital workflows and robotic process automation
- Implemented a secure messaging platform for clinical use

DIGITAL LITERACY & DESIGN



- % increase in consumer satisfaction score when engaging with digital tools and workflows
- % increase in consumer ease of use score when engaging with digital tools and workflows
- % increase in staff satisfaction score when engaging with digital tools and workflows
- % reduction in data quality errors at initial point of data entry
- % reduction in staff onboarding time through reduced training need
- # of citizen developers operating under the Centre of Excellence

VIRTUAL HEALTHCARE



- % increase in virtual hospital days
- % increase in virtual occasions of service
- % increase in revenue through video and virtual consultations
- % decrease of consumer phone calls requesting information on services and service provision
- % of consumers who have accessed digital or virtual services prior to presenting
- # of patients registered for the Patient Communication Hub

DIGITAL FOUNDATIONS



- Improved speed to value from ideation to implementation
- Reduction in the number of 'At Risk' ICT Systems
- Implementation of an Information Security Management System
- Implementation of a Digital Asset Register for GCH owned digital assets
- # of applications integrated through the Digital Integration Hub

Figure 7 - Performance Measures

Digital Roadmap 2021-2024

1. Advanced Insights

DIGITAL STRATEGIC OBJECTIVE		FY-2022	FY-2023	FY-2024
1.1	Provide and use trusted data sources to improve clinical service delivery and decision support			
Programs of Work	Advanced Analytics Capability Development of a platform and capability in visual interfaces, predictive analytics, real-time streaming analytics, machine learning and artificial intelligence to support clinical care, non-clinical service delivery and workflow automation	→		
	SystemView Development Working with our Partners, the continued development of the SystemView solution to provide insights to assist clinical and managerial leaders improve the performance of their services	→		
	Clinician Decision Support Capability Leveraging existing investments in the electronic medical record, the development of a platform and clinical tools to provide enhanced decision support capabilities and user consumable clinical insights	→		
1.2	Enable internal and external partners to innovate on trusted GCHHS data			
Programs of Work	Open Source Data Foundations Framework, governance establishment and provision of data sharing capabilities with internal and external partners to enable improved consumer engagement, clinical innovation and research opportunities		→	
	Advanced Health Service Benchmarking Working with external partners to develop comprehensive patient-level benchmarks to identify areas for service and quality improvements	→		
1.3	Structure data sources for multiple purposes, ensure digital data is integrated and a single source for data is identified, known and governed			
Program of Work	Multi-Modal Insights Delivery Delivery of performance information and clinical data on any device, regardless of location		→	

2. Digital Liberation

DIGITAL STRATEGIC OBJECTIVE		FY-2022	FY-2023	FY-2024
2.1	Streamline and automate manual processes to release workforce capacity to enable them to work at top of scope			
Programs of Work	Digital Workflows Design and development of 'low code' platform and digitisation of manual workflows, including development of an appropriate governance approach	→		
	Secure Messaging Solutions to enable secure communications between clinicians, and with patients		→	
	Robotic Process Automation Enabling automation of repetitive and predictable tasks to be performed with minimal or no human interaction	→		
	Digital Rostering and Allocation Provision of improved digital rosters and allocation capabilities	→		
	Digital Scheduling Solutions to manage and improve scheduling across staff, patient and facilities including development of single pane view for outpatient scheduling management	→		

Digital Liberation continued

	DIGITAL STRATEGIC OBJECTIVE	FY-2022	FY-2023	FY-2024
2.2	DIGITAL STRATEGIC OBJECTIVE Integrate digital systems to improve data accuracy and reduce errors			
Program of Work	Digital Aggregation Utilising external and internal data sources, provision of a single interface for staff to manage multiple existing tasks		→	
2.3	DIGITAL STRATEGIC OBJECTIVE Ensure that patient and staff facing workflows are intuitive and easy to use			
Programs of Work	Digital Referral Management Implementation of digitised workflows to streamline referral management including GP referral submissions, community-based referrals and internal referrals	→		
	Ambient and Automated Clinical Notes Utilising AI-powered voice recognition technology to provide automated medical transcription and documentation			→

3. Digital Literacy and Design

	DIGITAL STRATEGIC OBJECTIVE	FY-2022	FY-2023	FY-2024
3.1	DIGITAL STRATEGIC OBJECTIVE Follow human-centred design principles in the development of digital solutions			
Programs of Work	Digital Design Framework A framework to ensure a focus on human-centred design and usability for applications and websites	→		
	Web Transformation The transformation of Gold Coast Health's existing Intranet and Internet presence aligning with human-centric design and web standards	→		
3.2	DIGITAL STRATEGIC OBJECTIVE Continually grow staff, patient and consumer digital literacy skills to increase engagement with technology			
Programs of Work	Staff Digital Literacy Program Advancing and progressing our current digital training programs, improving digital literacy and engagement with digital technologies	→		
	Consumer Digital Literacy Program Program to enhance consumer and patient digital literacy and engagement with digital technologies	→		
3.3	DIGITAL STRATEGIC OBJECTIVE Provide the environment and support for staff to innovate and develop digital solutions to business problems			
Programs of Work	Digital Ambassador Program Identifying, educating and supporting embedded Digital Ambassadors each division to champion digital innovation	→		
	Citizen Development Framework and support for staff to create applications, dashboards, reports and digital automation to solve business problems		→	

Digital Roadmap 2021-2024 continued

4. Virtual Healthcare

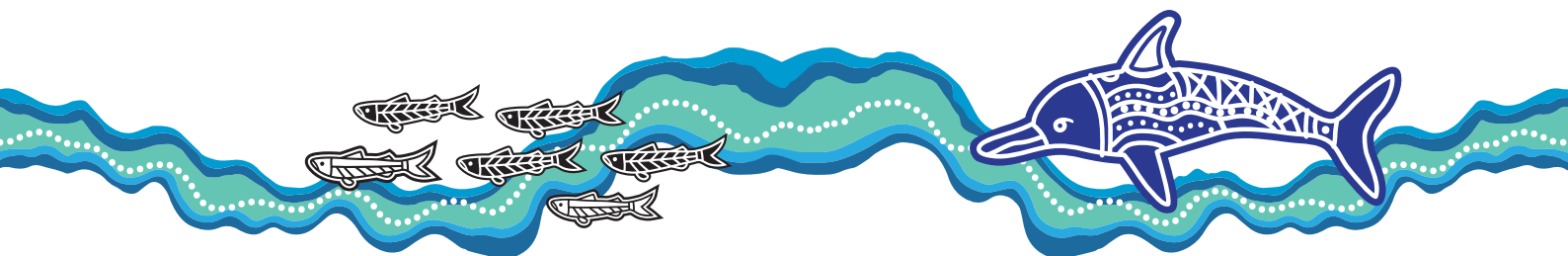
DIGITAL STRATEGIC OBJECTIVE		FY-2022	FY-2023	FY-2024
4.1	Grow and sustain the provision of high-quality health care enabled by digital solutions without the need for in-person attendance			
Programs of Work	Patient Communication Hub A central communication portal or hub providing a single point for all patient communication	→		
	Virtual Assistant Providing patient and clinician information support, including patient pre-hospital information and foundation for future online pre-visit registration	→		
DIGITAL STRATEGIC OBJECTIVE				
4.2	Optimise the use of facilities and clinical resources by increasing virtual healthcare options and providing alternate care pathways			
Programs of Work	Virtual Non-Admitted Care Enabling outpatient care to be managed and delivered outside the hospital setting, including within the patient's home	→		
	Virtual Emergency Department Provision of a platform to support urgent, unscheduled care		→	
DIGITAL STRATEGIC OBJECTIVE				
4.3	Ensure that high reliability health care is available to meet the needs of patients regardless of geographic location			
Programs of Work	Virtual Admitted Care Expansion of existing pilot programs to enable clinical specialties to monitor inpatients or provide acute care to patients within their homes		→	
	ePrescriptions Provision of electronic prescriptions, reducing complexity for patients and pharmacies and providing efficiencies for virtual care			→

5. Digital Foundations

DIGITAL STRATEGIC OBJECTIVE		FY-2022	FY-2023	FY-2024
5.1	Provide re-usable and integrated digital platforms and services to enable future innovation at speed and scale			
Programs of Work	Digital Integration Hub and Advanced Interoperability A local platform to enable application integration including HL7 processes and APIs	→		
	Patient Identity Management Leveraging existing national and state investments to enable digital patient identity confirmation	→		
	Next Generation Nurse Call and Patient Engagement System Replacement of the existing nurse call and patient engagement systems within inpatient facilities	→		
	Imaging Management Development of a roadmap for the expansion of the use of medical imaging technologies to improve clinical image management	→		

Digital Foundations continued

DIGITAL STRATEGIC OBJECTIVE		FY-2022	FY-2023	FY-2024
5.2	Ensure a governed and strategic approach to the planning and delivery of technology services			
Programs of Work	Digital Asset Management Framework Development of a framework to support robust digital asset management	→		
	Data Cataloguing and Standards Enabling the broad use of analytics, development of standards to define appropriate descriptions and storage of data and information assets	→	→	
5.3	DIGITAL STRATEGIC OBJECTIVE Build the skills of the digital workforce to ensure they are proficient in managing new and emerging technologies			
Program of Work	Digital Capability Enablement Framework and resource model to enable a digital development capability within Gold Coast Health	→	→	→
5.4	DIGITAL STRATEGIC OBJECTIVE Maintain security, reliability and currency of digital technologies and maximise efficiency of digital systems			
Programs of Work	Cloud Optimisation Focus on a 'cloud-first' approach to delivering contemporary digital infrastructure and development of scaled, cost optimised, platforms as a service		→	→
	Edge Computing Utilising distributed computing and storage to further reduce hardware and service costs and improve scalability			→
	Information Asset Security and Management Development of tailored frameworks, initiatives and actions to identify information assets including security, access and disclosure risks. Development of an Information Security Management System and actions to reduce inappropriate information disclosure	→	→	→



Abbreviations

AI	Artificial Intelligence
API	Application Programming Interface
ED	Emergency Department
GCHHS	Gold Coast Hospital and Health Service
HR	Human Resources
HHS	Hospital and Health Service
HL7	Health Level 7
ICT	Information Communication Technology
IEMR	Integrated Electronic Medical Record
MIIS	Medical Imaging Informatics Solution
RPA	Robotic Process Automation
RPM	Rigorous Program Management
FTE	Full Time Equivalent



