Te Whatu Ora
Health New Zealand

National Digital Facilities Framework

(for Major Facility Redevelopments and New Health Facility Programmes)

November 2022

Disclaimer note: this document is a living document that will be amended overtime to ensure alignment with Te Whatu Ora Operational Framework and Design Guidelines. Commercially sensitive information has been redacted in this public version of the Digital Framework Guide document.

Te Kāwanatanga o Aotearoa
New Zealand Government

Citation: Te Whatu Ora – Health New Zealand. 2022. *National Digital Facilities Framework (for Major Facility Redevelopments and New Health Facility Programmes)*. Wellington: Te Whatu Ora – Health New Zealand.

Published in November 2022 by Te Whatu Ora – Health New Zealand
PO Box 793, Wellington 6140, New Zealand

ISBN 978-1-99-106706-7 (online)

Te Whatu Ora
Health New Zealand

This document is available at **tewhatuora.govt.nz**

Contents

1 Introduction 5

1.1 Background and context 5

1.2 What is the Digital Framework? 6

1.3 When to use the Digital Framework? 8

1.4 Benefits of implementing the Digital Framework 9

2 Framework overview 10

2.1 Guiding principles 10

2.2 Scope definition 10

2.3 Phases 11

2.4 Resource and cost 12

2.5 Assumptions and constraints 15

3 Framework implementation 16

3.1 Digital workstreams 16

3.2 Delivery structure management 22

3.3 Stakeholders, roles and responsibilities 24

3.4 Sub-programme interdependencies 25

3.5 Team structure 27

4 Governance arrangements 29

4.1 Governance structure 29

4.2 Terms of reference 30

5 Quality and reporting 31

5.1 Reporting 31

5.2 Reviews and health checks 31

6 Detailed guide 33

6.1 0. Identify 35

6.2 1. Define 42

6.3 2.a Design – preliminary design 47

6.4 2.b Design – developed design 56

6.5 2.c Design – detailed design 62

6.6 3.a Deliver – procure 68

6.7 3.b Deliver – construct 75

6.8 3.c Deliver – facility commission 84

6.9 4.a Transition / Debrief – operational commission 91
6.10 4.b Transition / Debrief – go live 97
6.11 4.c Transition / Debrief – operate and debrief 100

Appendix A - templates, tools, guides and standards register..... 104

Definitions and abbreviations

Term	Definition
AHFG	Australasian Health Facility Guidelines
BaU	Business as Usual
CDHO	Chief Digital Health Officer
CIO	Chief Information Officer
DIA	Department of Internal Affairs
FF&E	Furniture, Fixtures and Equipment
FTE	Full Time Employee
HIMMS	Healthcare Information and Management Systems Society
I&I	Infrastructure and Investment department
MBIE	Ministry of Business, Innovation and Employment
MVP	Minimum Viable Product
MC	Main Contractor
SI	Systems Integrator
SME	Subject Mater Expert
SRO	Senior Responsible Officer
The Digital Framework	National Digital Framework for Major Facility Redevelopments and New Health Facility Programmes

Introduction

Background and context

Te Whatu Ora – Health New Zealand includes an Infrastructure and Investment group (I&I), responsible for leading health investment by planning, prioritising and monitoring capital infrastructure projects, and standardising the way projects are designed and delivered.

Digital technology has become a key enabler of any modern health facility with complex interdependencies regarding design and commissioning. As such it is important the digital scope is well represented and considered as part of the business case and funding submission. In addition, the digital design and delivery approach (including roles and responsibilities) must be well-defined to mitigate issues during the construction and commissioning processes. The approach for defining and integrating digital infrastructure and digital solutions for major facility redevelopments and new health facilities into wider service design processes must also be considered along with the skills, experience and capability required to contribute to facility design.

The National Digital Framework for Major Facility Redevelopments and New Health Facility Programmes (the "Digital Framework") outlines a standard format and process by which the digital scope is defined and managed across all health capital infrastructure projects.

The Digital Framework has been developed jointly by the Infrastructure and Investment (I&I), and Data and Digital functions of Te Whatu Ora with input and learnings from previous and current New Zealand health infrastructure projects; recent Australian health infrastructure projects; digital, engineering and construction sectors. The Digital Framework considers active application of the Te Tiriti of Waitangi (Te Tiriti of Waitangi Framework) throughout each phase of the process and includes engagement of clinical, consumer and Mana Whenua advisors.

While the Digital Framework considers district, regional and national strategies and parallel programmes of work it specifically focuses on the digital sub programme as it relates to a health facility programme. Furthermore, the Digital Framework does not consider digital capabilities beyond the scope of the facility (i.e. community) and assumes this to be the scope of other national / regional digital programmes.

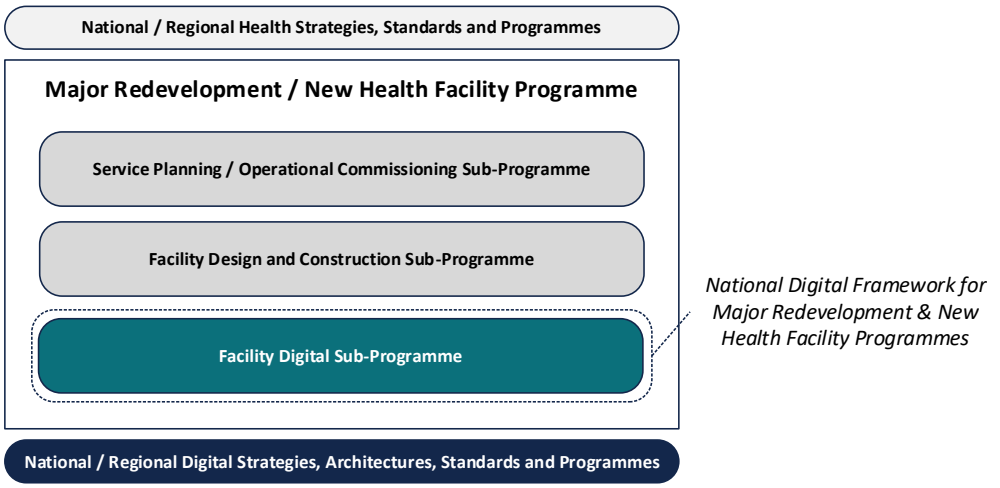


Figure 1 Digital Framework context

As shown in Figure 1, the facility digital sub-programme is one of three sub-programmes required to achieve the outcomes of a major redevelopment / new health facility programme. The Digital Framework only focuses on the facility digital sub-programme and as such, the detailed activities of the service planning / operational commissioning sub-programme and facility design and construction sub-programmes, etc are not defined in The Digital Framework (with the exception of key dependencies).

It is important to note there are key dependencies between the three sub-programmes and unless they are all funded, resourced and progressed in parallel the overall outcomes of the new facility programme are unlikely to be achieved. For example, if the new facility is designed based on a planned reduction in onsite outpatient activity, new models of care and service profiles must be developed by the service planning sub-programme to define the details. This in turn may require new digital technologies to support the updated workflow which will impact the scope of the facility digital sub-programme.

What is the Digital Framework?

The Digital Framework intends to be a 'living document', and it will continue to be refined as further information or insights become available.

The document provides structure and tools to guide the facility digital sub-programme through the phases of the I&I design, construction and transition process. For each phase, the Digital Framework identifies external inputs / dependencies and outlines the key activities and deliverables of the facility digital sub-programme.

The Digital Framework separates the facility digital sub-programme into workstreams each focused on specific aspects including:

- **Digital sub-programme Management Office (PMO)** – Facility digital sub-programme wide management functions including sub-programme / project management, risk, quality, financial, procurement, testing etc.
- **Digital sub-programme Change and Engagement** - Facility digital sub-programme wide change and engagement functions including digital service design, communications, training, commissioning, support and transition.
- **Group 1 Digital Infrastructure & Equipment** - Design and delivery of passive digital components (e.g. comms rooms, structured cabling) and engineering systems (e.g. BMS, Security, etc) by the Main Contractor.
- **Group 2 / 3 Digital Infrastructure & Equipment** - Design and delivery of active digital components (e.g. network, audio visual, computers, printers, nurse call, etc) by a Systems Integrator contracted to the Main Contractor. Group 2 refers to fixed equipment while Group 3 refers to loose equipment.
- **Group 4 Digital Software Solutions** - Extension and reconfiguration of existing software solutions (local, regional and national) and implementation of new local software solutions by the facility digital team to enable the facility to function.
- **Group 5 Digital Software Solutions** - Parallel national / regional wide implementation of new "core" software solutions (e.g. EHR, EMR, patient portal) by the regional / national digital team, funded separately.

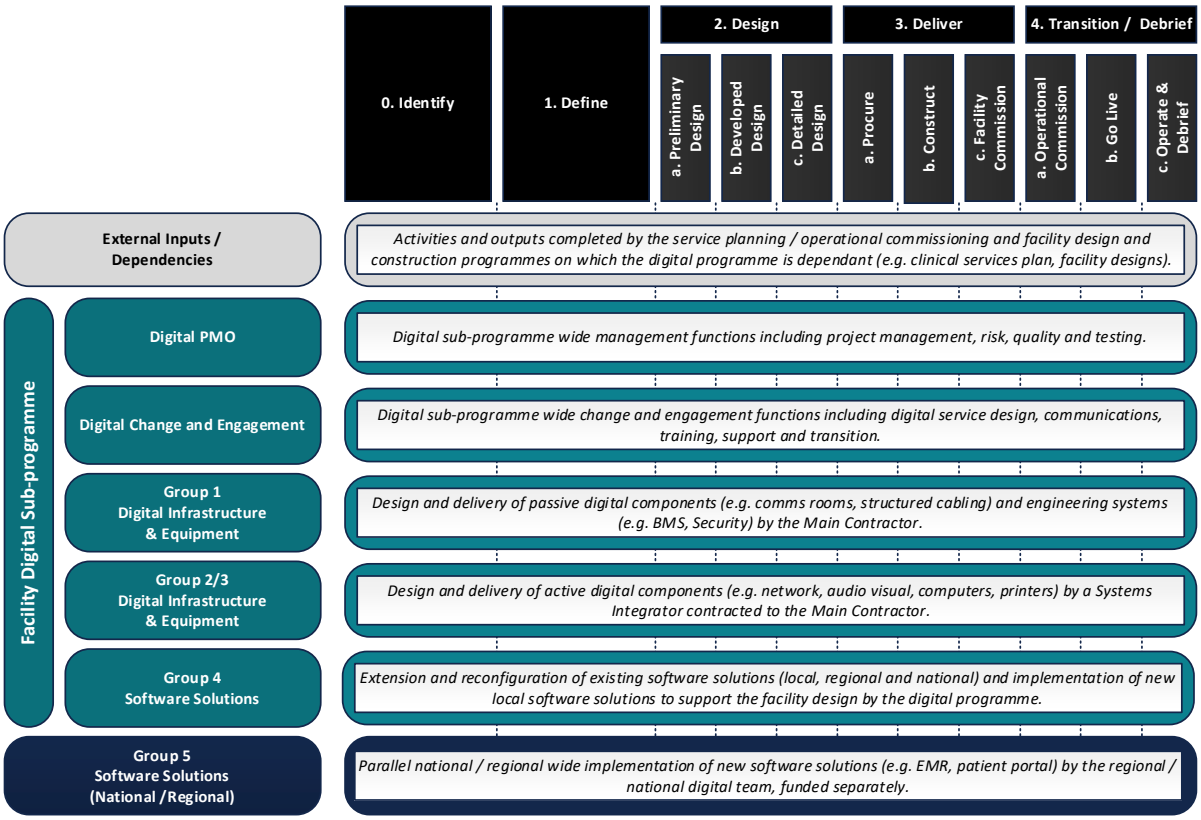


Figure 2 Digital Framework overview

When to use the Digital Framework?

The Digital Framework is a mandatory guide for all major redevelopments and new health facility programmes which have a digital component but initially limited to the scope of the facilities within the I&I regional hospital redevelopment programme. For example, this may include a large-scale greenfield hospital or a new / refurbished building on an existing campus. Any components within the Digital Framework which are mandatory will be clearly designated using the word ‘must’, (e.g. development of a digital blueprint) as opposed to highly recommended using the word ‘should’ and optional using the word ‘could’.

The Digital Framework should be applied at *Phase 0. Identify* and followed throughout the full lifecycle of the new facility programme. Responsibility for adherence to the Digital Framework sits with the digital SRO but may be delegated to a digital sub-programme director, once appointed.

While the Digital Framework is only intended to be used with major redevelopments and new health facility programmes some elements including templates, samples and guides may be useful for minor refurbishment projects or other discrete digital or equipment related projects.

The Digital Framework provides a comprehensive catalogue of templates and tools, however it is recognised that some directorates may have their own templates which can be used in place of those included with the Digital Framework.

The Digital Framework can be accessed online by clicking on the following link: **https://mohgovtnz.sharepoint.com/sites/FacilityTechnology/SitePages/Digital-Facilities-Framework-Guide.aspx?csf=1&web=1&e=HMdOL0**. Guidance and

support regarding the use and implementation of the Digital Framework can be accessed by emailing: **facilitiestechnology@health.govt.nz**.

Benefits of implementing the Digital Framework

The expected benefits of the Digital Framework include the following.

- **Standardisation** on the digital scope and approach related to capital infrastructure projects across Te Whatu Ora; identifying areas of consolidation, efficiency, and decreasing waste.
- Appropriate digital budget allowance in capital infrastructure business cases and increased value for money.
- Increased predictability of the digital scope delivery contributing to the overall success of capital infrastructure projects.
- Identification of potential standards (or guidelines) for digital hospital infrastructure components (e.g., Nurse Call, CCTV, Patient Engagement System, etc) to support new capital infrastructure projects and other digital initiatives where appropriate.
- Clearly defined roles and responsibilities in the delivery of the digital scope related to capital infrastructure projects.
- Better support of new health facility programmes across Te Whatu Ora through the establishment of a central capability and repository of resources.
- Clearly defined digital minimal viable product (MVP) for mandatory inclusion in new facility programmes across Te Whatu Ora.
- Provide a level of clinical assurance that digital sub programme components are on track, fit for purpose, and facilitates benefits realisation by using a developing a standard internal series of health check assessments.
- Progressively develop a collection of master agreements (contracts) for digital components which can be leveraged by future digital facility sub-programmes.
- **Integration** of data and digital requirements into early investment planning
- **Consolidation** of data and digital investment across HNZ through standardisation of scope and approach and improved collaboration and sharing of digital solutions within regions and nationally

Framework overview

Guiding principles

The Digital Framework is aligned to the Data and Digital guiding principles and applies them in the following manner.

Data and Digital principle	Framework application
Person and whānau centred	The Digital Framework includes a defined digital change and engagement workstream including the development of digital service designs and digital workflows centred on staff and consumers and their whānau.
Customer driven	The Digital Framework includes detailed requirements gathering activities for each workstream ensuring consumer (staff, other NGO users, patients and whānau) requirements are collected, considered and managed.
Accessible to all	The Digital Framework is published online and accessible to stakeholders working on new health facility programmes.
Private and secure by design	The Digital Framework includes cyber security activities and deliverables including adherence to standards, design reviews and security testing.
Iterative delivery	The Digital Framework supports the iterative definition of designs and specifications and acknowledges “day 1” requirements versus future capacity and capabilities.
Maximising value	The Digital Framework supports standardisation of the digital scope and approach identifying areas of consolidation, efficiency, and decreasing waste.

Table 1 Guiding principles

Scope definition

Scope inclusions

The scope of the Digital Framework includes the framework diagram, the Digital Framework Guide (this document) and a portfolio of templates and tools to support its’ implementation across major facility redevelopments and new health facility programmes.

The dimensions covered by the Digital Framework include:

- Overall programme and project management of the digital scope including stakeholder engagement, business analysis, risk management and status reporting.
- Specification, design, procurement, integration and commissioning of all digital components.

- Unit, system, integration and user acceptance testing of all digital components.
- Development / revision of user training material and delivery of training for any “new” digital components.
- Raising technical change requests and coordinating changes to the production environment.
- Development of “as built” documentation and transition / handover of all digital components to the appropriate operational stakeholders.

The technical scope covered by the Digital Framework includes:

- Group 1 digital infrastructure & equipment (e.g., comms rooms, structured cabling and engineering systems (e.g., BMS, Security)).
- Group 2/3 digital infrastructure & equipment (e.g., network, audio visual, computers, printers).
- Group 4 software solutions (local, regional and national).

Scope exclusions

The scope of the Digital Framework excludes the following components outlined below.

- Digital architectures or designs for specific infrastructure, solutions or services.
- Definition of clinical workflows.
- The use of digital solutions outside of the facility, for example to deliver care closer to home or in the community.
- Consideration of small refurbishments (i.e., the Digital Framework focuses on major redevelopment / new health facility projects only).
- Use of the methodology on non-digital facility projects.
- Group 5 new “core” software solutions (regional and national).

Phases

The phases of the Digital Framework are aligned with the I&I design and construction process used to manage major facility redevelopments and new health facility programmes. The below diagram outlines the phases and provides a guide for the duration of each phases noting *3.b. Construct* is directly dependant on the construction scope and will vary significantly from programme to programme.

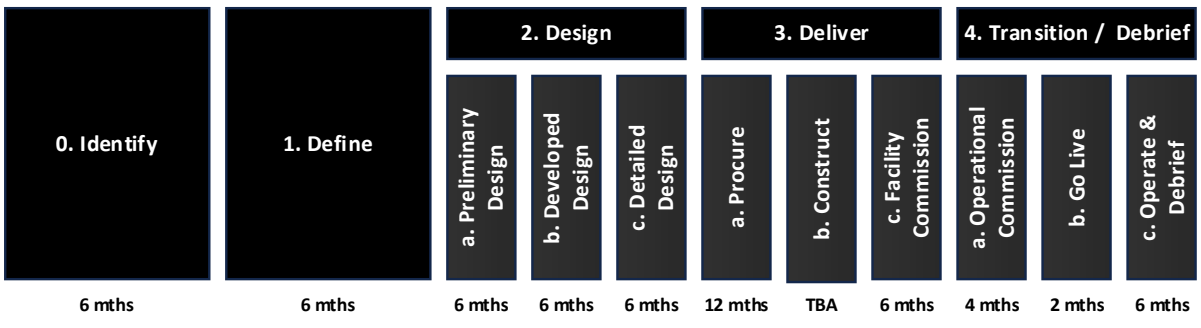


Figure 3 Framework phases

The phases can be described as follows.

- **0. Identify** – Identifying a new programme including developing a high-level programme and digital scope.
- **1. Define** – Defining the programme including the development of business cases and project plans inclusive of digital.
- **2. Design –** Designing the new models of care / service plans, facility and the digital environment.
- **3. Deliver –** Delivering the programme including construction of the facility, as well as the building, testing and integration of the digital environment.
- **4. Transition / Debrief – O**perational commissioning of the facility, support of go live, transition of the facility and digital environment to operations and debrief of the programme.

Resource and cost

With a view that new health facility programmes should deliver, at a minimum, digital ready facilities (HIMMS level 6 infrastructure) and aspire to deliver contemporary digital hospitals (HIMMS level 6 software solutions), the total cost of the facility digital sub-programme should be approximately [redacted] of the construction costs of the new health facility. This is consistent with a recent refence project (STARS, Queensland Health) and the Queensland Health digital budget allowance ([redacted] for digital ready facilities). The costs include:

- Facility digital sub-programme team, (FTE and contractors as required).
- Consultants, (design consultants, delivery partners (system integrators) and external assurance).
- All hardware, software and vendor services associated with Group 2 / 3 infrastructure.
- All software and vendor services associated with Group 4 software solutions.
- Costs associated with deployment and transition of digital infrastructure and software solutions, (e.g. backfill, go-live support etc).

The costs exclude:

- The specification, design and delivery of Group 1 infrastructure (included in construction costs).
- The specification, design, build, test and delivery of Group 5 new “core” software solutions (funded separately through national / regional programmes). Note: the transition component will be included in Group 4.
- The specification, design, build, test and transition of FF&E including major medical and biomedical equipment (funded via the FF&E workstream). Note: the integration activities for biomedical equipment may be included in Group 4 by agreement.
- The upgrade or extension of infrastructure or solutions into existing facilities. Note: the site may choose to extend new solutions into their existing facilities however the cost to do this will be at the sites expense.

Below is a sample breakdown of indicative digital costs by phase for a new health facility with a [redacted] construction cost. Note:

- Cost estimates are an indicative guide only.
- Cost estimates exclude Group 1 (included in the construction cost) and exclude Group 5 (funded separately).
- Cost estimates are based on a low-risk approach which aims to “front load” work to improve the chance of success. If programme risk tolerance is higher, then activities and resources may be deferred until later phases, thereby reducing the overall cost.
- Cost estimates are based on Full Time Employees (FTE). The costs will be higher if contract labour is used.
- Costs estimates exclude whole of life costs, e.g. on-going support and maintenance, replacement costs, etc however the digital sub-programme will be required to provide input into a financial operating cost model developed by the service planning / operational commissioning sub-programme.

Category	Phase 0.	Phase 1.	Phase 2.	Phase 3.	Phase 4.	TOTAL
Resources (internal staff)						
Consultants						
Digital Infrastructure						
Digital Software Solutions						
TOTAL						

Table 2 Sample cost breakdown

Responsibility for the digital budget to deliver groups 2, 3 & 4 will be delegated to the Facility Digital Sub-Programme Steering Committee, however any contingency budget will be managed at the overarching new health facility programme level.

Assumptions and constraints

The key assumptions and constraints regarding the Digital Framework are outlined below.

- The activities required to enable a new facility to open from a digital perspective are sufficiently complex to require them to be managed as a ‘digital sub-programme' within the context of the overarching facility programme.
- To enable the digital sub-programme to deliver on time / budget it is essential the construction sub-programme and service planning sub-programme both deliver their dependencies on time e.g. models of care, service plans, early access to facility etc. Subsequently inter programme dependencies must be tracked and managed at the overarching facility programme level.
- The I&I process considered in development of the Digital Framework is current and correct. Should the process change, the Digital Framework will require updating and realignment.
- Facilities will open at a minimum, as digital ready facilities (equivalent to a HIMMS level 6 infrastructure) and aspire to open as contemporary digital hospitals (equivalent to HIMMS level 6 software solutions).
- The facility digital sub-programme budget will include the local implementation of existing national / regional solutions but will not fund the ‘build’ of new / core national / regional solutions.
- National / regional programmes (funded separately) will provide “core” enterprise solutions such as an Electronic Medical Record system, (EMR), Financial Systems, (FPIM, Payroll etc) however the costs to “localise” and transition at the site will be funded within the overarching new health facility programme budget.
- The funding required to implement the digital activities, infrastructure and solutions will be included in the overarching new health facility programme budget for all capital infrastructure projects.
- The facility digital sub-programme will not fund upgrades or resolve technical debt associated with existing facility digital infrastructure.
- The facility digital sub-programme will be a sub-programme of the broader new health facility programme.
- The site may have their own programme management framework which they prefer to use however the site must follow the Digital Framework as a guide and will be subject to Digital Framework health checks to confirm ‘fit for purpose’.
- The facility digital sub-programme may choose to use the overarching new health facility programme PMO and Change & Engagement workstreams or to create their own workstreams that are dedicated to the digital facility sub-programme.
- The site Chief Digital Health Officer (CDHO) will be the Digital Senior Responsible Owner (SRO) unless otherwise specified.
- Mana Whenua will be engaged by the overarching new facility programme and a Mana Whenua advisor will be assigned by the Iwi. The new facility programme will consider the facility digital sub-programme when completing a cultural values assessment or equivalent.

- Delegated financial authorities are established and the pathway to gaining approvals is clear and timely. For example, dates of Board meetings are known in advance, and there is allocated space on the agenda for consideration of material at the approval stage gates.
- There is no change to central government requirements regarding business case development and approvals.
- There is no change to current government procurement rules.
- The facility digital sub-programme will adhere to the Secure digital communications within the NZ health & disability sector: Implementation guidance (June 2019).

Framework implementation

Digital workstreams

The facility digital sub-programme consists of several workstreams as outlined below. These are aligned with the traditional Furniture, Fixtures and Equipment (FF&E) procurement groups (1,2,3) outlined in the Australasian Health Facility Guideline (AHFG) and are supplemented with additional management functions including a Programme Management Office (PMO) and a Digital Change and Engagement function.

The Digital Framework also identifies those activities which are delivered external to the facility digital sub-programme (by the service planning / operational commissioning and facility design and construction sub-programmes) on which the facility digital sub-programme is dependant.

Finally, the Digital Framework also recognises various software solutions, the “core” of which may be delivered external to the programme and in parallel (defined as Group 5) through various regional / national programmes and funded separately.

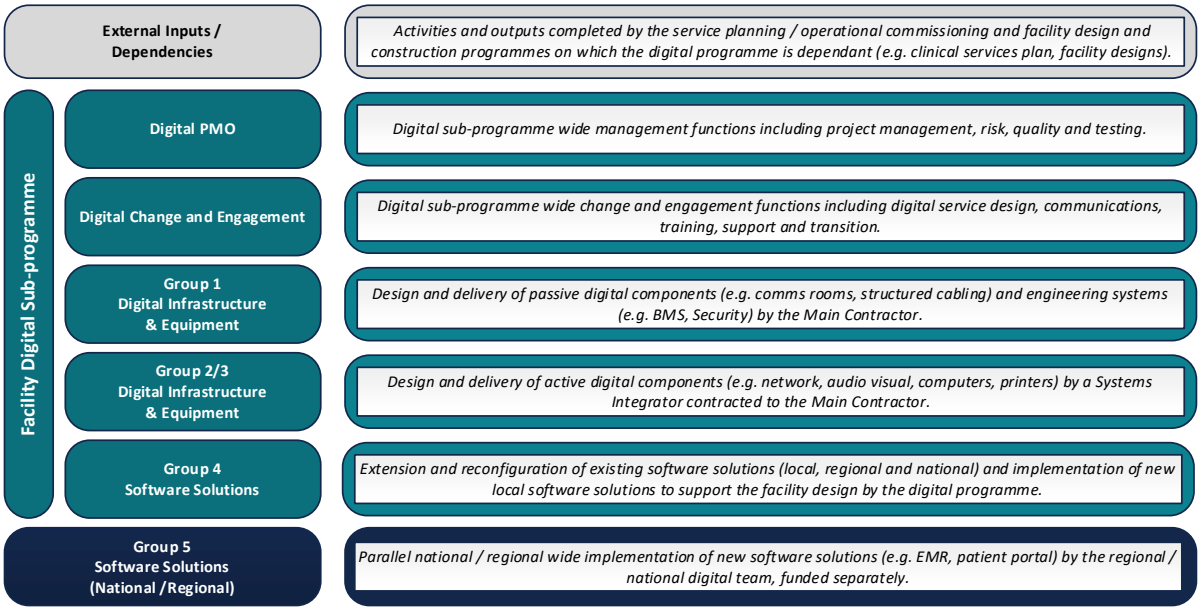


Figure 4 Digital workstreams

The following table provides a detailed definition of the scope included in each digital workstream.

Workstream	Definition	Inclusions	
External Inputs/ Dependencies	Activities and outputs completed by the service planning/ operational commissioning and facility design and construction sub-programmes on which the digital sub-programme is dependant (e.g. clinical services plan, facility designs).	Service planning / operational commissioning • Models of care • Workforce • Scenario testing • Facility Go Live Support • Facility operations	Facility design and constructions • Business cases • Facility design • MC procurement • Construction • FF&E

Workstream	Definition	Inclusions	
Digital Sub-programme Management Office (PMO)	Facility digital sub-programme wide management functions including project management, risk, quality and testing.	• Programme / Project Management • Programme / Project Governance • Digital Architecture & Design Management • Schedule Management • Procurement • Release Management	• Sub Programme Reporting • Testing • Quality & Risk Management • Budget • Sub Programme Recruitment • Document Management • Dependency Management
Digital Sub-programme Change and Engagement	Digital change and engagement functions including communications, training, support and transition.	• Digital Org Change • Digital Communications • Digital Service Design • Digital Benefits Management • Operational Support & Handover	• Stakeholder Engagement • End user training & documentation • Digital Go live planning & support

Workstream	Definition	Inclusions	
Group 1 Digital Infrastructure & Equipment	Specification, procurement, design and delivery of passive digital components (e.g. comms rooms, structured cabling) and engineering systems (e.g. BMS, Security) by the Main Contractor.	• WAN Links • Pit & Pipe Infrastructure • Structured Cabling (cabling support, outlets, patch leads) • Comms Rooms • Equipment Racks (power rails, rack monitoring, rack shelves) • Paging System • Whole of Government Radio	• Distributed Antenna System (DAS) • 2-Way Radio • Public Address System • Engineering Systems (BMS, EMS) • Electronic Security and Access Control Systems (CCTV, SMS, EACS
Group 2/3 Digital Infrastructure & Equipment	Specification, procurement, design and delivery of active digital components (e.g. network, audio visual, computers, printers) by a Systems Integrator contracted to the Main Contractor.	• Network • Wide Area Network (WAN) • Local Area Network (LAN) • Wireless Local Area Network (WLAN) • Network Security • Compute & Storage • Local On-site Servers and storage • Hosted / Cloud Services (IaaS) • Operational Monitoring • Unified Communications • Integrated Unified Communications Platform • Telephony • Conferencing	• Secure Vendor Remote Access • File / Print Services • Audio visual • Meeting Rooms • Training Rooms • Simulation Rooms • Digital Artwork • Background Music System • Audio Visual Resource Management System • Room Booking System • Multimedia Streaming System / IPTV Headend • Digital Wayfinding • Digital Information System • Digital Displays • Digital Signage

Workstream	Definition	Inclusions	
		• Wired and Wireless handsets • Softphones • Hands Free Voice Activated Devices • Message Integration Engine • End User Computing • Virtual Desktop Infrastructure (VDI) • Desktop PCs and Laptops • Tablets and Handheld Devices • Point of Care Terminals • Workstations on Wheels • Printers, scanners and Multifunction Devices (MFDs) • Peripherals (handheld scanners, label printers) • Directory and Identity Services • Active Directory & Domain (Identity Management) • Single Sign-on / Rapid Access Systems	• Patient Observation System • Patient Journey Boards • Virtual Care and Telehealth • Facility Systems • Nurse Call • Real Time Locations Systems (RTLS) (including asset tracking and wireless duress) • Electronic Bed Cards • Check-in kiosks & Queueing • Visitor Management System • Inpatient Engagement System • Distributed Antenna System (DAS) – Carrier Headend Equipment Only • FF&E Integration • Major Medical Equipment • Biomedical Equipment • IoT devices • Logistics automation
Group 4 Software Solutions	Extension and reconfiguration of existing software solutions (local, regional and national) and implementation of new local software solutions required to enable the new facility to function. Note inclusions listed are an indicative list of functions based on the	• Digital Service Experience • Consumer Portal • Providers / Consumer Apps • Telehealth • Analytics and Insight Services • BI and Decision Support	• Radiology • Oncology • Mental Health • Gynaecology • Ophthalmology • Gastroenterology • Cardiology • Anaesthetics • Surgical • Neonatal • Paediatrics

Workstream	Definition	Inclusions
	draft NZHSA Capability model. A current state assessment must be undertaken by the digital sub-programme to identify all specific functions and software solutions in place and impacted by the programme. Also note the scope of the workstream excludes upgrades or remediation of existing software solutions and/or extending new facility solutions into existing site buildings.	• Quality Assurance (QA) and Quality Improvement (QI) insights • Collections and Reporting • Population Health • Surveillance • AI / Machine Learning • Research • Integration and Access Services • Integration Platform • API Management • Event Management • Care Delivery - Core • Electronic Medical Record (EMR) • Communication • Health Pathways • Observations • Assessments • Care Coordination • Case Management • Clinical Documentation • Transfer of Care • Allergies Management • Image Management • Progress Notes • Charting • Medications Management • Community Care / Facility Specialties • Care Delivery – Specialty • Maternity • Disability Support • Emergency • Pharmacy • Respiratory • 'Other' speciality systems e.g. speech, audiology etc • Care Administration Operations • Demographics • Activity History • Notifications • Alert Management • Health Promotion • Waitlist Management • Referral Management • Patient Flow Management • Scheduling • Resource / Staff Rostering • Capacity / Bed Management • Task Management • Patient Acuity • Patient Bookings • Support Services • Orderly Services • Volunteer Services • Transport Management • Food Services • Blood / Organ Doner • Cleaning & Housekeeping • Transcription Services • Sterilisation Services • Meals Management • Enterprise Functions • Finance and Assets

Workstream	Definition	Inclusions
		• Dental • Palliative • Geriatric • Pathology Infection Control • Chronic Disease Intensive Care • Strategy and Planning • Risk and Assurance • Human Capital Management • Backoffice Services
Group 5 Software Solutions (National /Regional)	Parallel national / regional wide implementation of new “core” software solutions (e.g. EHR,EMR, patient portal) by the regional / national digital team, funded separately.	Group 5 includes any of the functions described under Group 4 where new “core” software solutions are implemented via a parallel regional / national programme. Examples may include EHR, EMRs, Consumer Portals, Enterprise Corporate systems etc.

Table 3 Digital workstream definitions

Delivery structure management

The delivery structure approach uses external consultants in a similar approach used for other trade packages to support the facility digital sub-programme team and reduce the dependency on the Business as Usual (BaU) digital team. The external consultants also provide skills and experience that the BaU digital team is unlikely to have and ensures the consideration of innovation and industry trends from experience on other projects.

The facility digital sub-programme will be controlled and managed by a dedicated facility digital
sub-programme team. The services of an external design consultant will be funded to define the scope, develop the high-level designs and specifications and assure all works completed under each of the workstreams.

The Main Contractor (MC) will be directly responsible for delivery of the Group 1 while the risk and responsibilities for Group 2 / 3 will be shared between the MC and the facility digital sub-programme team.

For Group 2 / 3 the MC will subcontract a Systems Integrator (SI) jointly selected and appointed by both parties, (the design and construction sub-programme and the facility digital sub-programme). The MC / SI will manage procurement and delivery while the digital sub-programme team will provide requirements, select products and manage price risk. This ensures the digital facility sub-programme team receive the technical products required and avoids complicated delivery interdependencies between the MC and the digital sub-programme team.

Group 4 software solutions will be managed directly by the digital facility sub-programme team. As appropriate, the Group 4 software solutions workstream may issue work packages

to various national or regional teams for the reconfiguration and extension of software solutions managed and supported by their teams. The Group 4 software solutions workstream therefore may be further subdivided into:

- **Group 4A** - software solutions project managed and delivered directly by the digital sub-programme team.
- **Group 4B** - software solutions project managed by the digital sub-programme team, but work packaged to the local BAU digital team for delivery.
- **Group 4C** - software solutions project managed by the digital sub-programme team, but work packaged to the regional digital team for delivery.
- **Group 4D** - software solutions project managed by the digital sub-programme team, but work packaged to the national digital team for delivery.

Group 5 software solutions will be managed externally by the relevant regional or national teams and will be funded separately. The Group 4 workstream will be responsible for coordination and monitoring of Group 5.

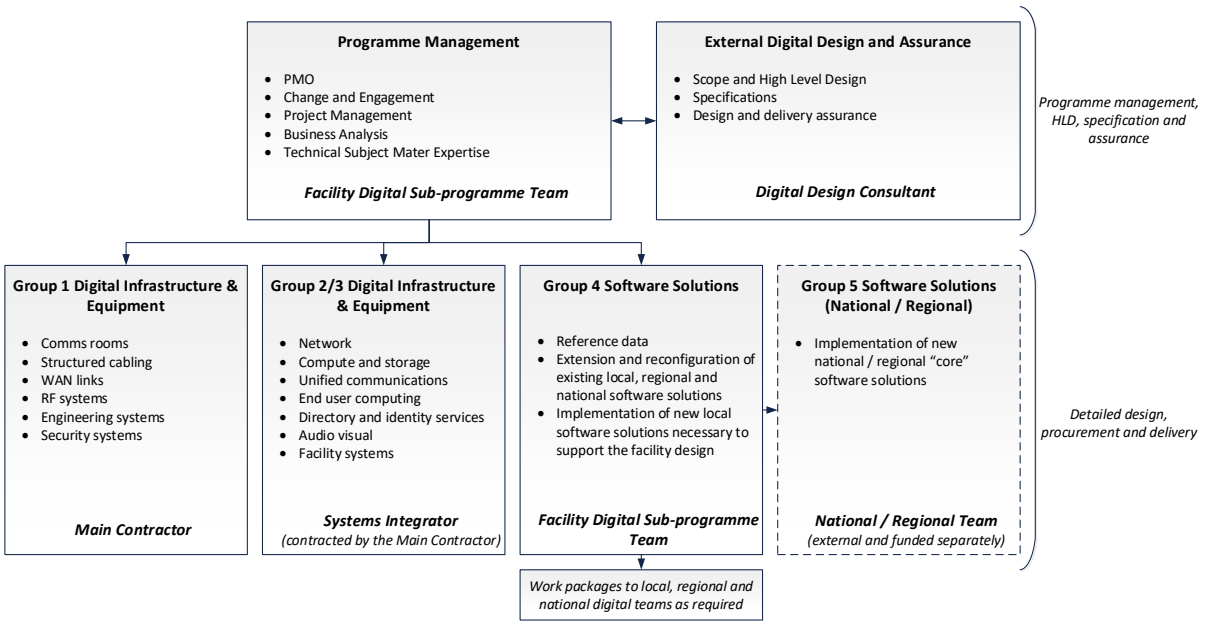


Figure 5 Delivery structure

Stakeholders, roles and responsibilities

The key stakeholder groups and their corresponding roles and responsibilities are as follows.

Stakeholder	Abbr.	Roles and responsibilities
Facility Digital Sub-programme Team	FDPT	• Overall programme management and delivery of the digital blueprint • Project management of each workstream • Management of risk, schedule, budget and status reporting • Technical expertise across each digital domain • Engagement with key stakeholders • Testing and training management • Technical change management • Management of governance forums including the Digital Design Authority and Digital Sub-programme Control Group • Specification and appointment of a Digital Design Consultant • Delivery of Group 4 software solutions • Develop and manage reference data for all applications • Assurance of all specifications and designs against local policies and standards • Go live support • Operational handover of relevant digital components, documentation and debrief
Digital Infrastructure Design Consultant	DIDC	• Definition of scope and high-level design • Detailed design and specification • Design & delivery assurance • Requirements traceability • Ensure end to end solution integration • Participate in governance forums as required
Main Contractor (including subcontractors / vendors)	MC	• Procurement, build, test and transition of Group 1 • Subcontract a Systems Integrator (SI) • Oversight delivery of Group 2/3 (managed by the SI) • Participate in governance forums as required
Systems Integrator	SI	• Procurement build, configuration, test and transition of Group 2/3

Stakeholder	Abbr.	Roles and responsibilities
(including subcontractors / vendors)		• Participate in governance forums as required
National / Regional Teams	NRT	• Procurement, design, build, test and transition of "core" national / regional software solutions • Delivered in parallel and funded separately • Support, guidance and assurance of digital facility programme • Manage the relationship with Te Aka Whai Ora
New Health Facility Programme Teams	FPT	• Manage and deliver the overarching project • Design of the facility • Procurement of the Main Contractor • Service design and operational commissioning • Procure and manage FF&E • Manage the relationship with Te Aka Whai Ora and Mana Whenua
Clinical and Business Users (via the service design / operational commissioning sub-programme)	CBU	• Provide requirements • Participate as SMEs in design • Participate in witness and integration testing • Participate in governance forums as required • Promote digital solutions and ensure departments are ready for use of solutions at go-live • Go live support • Provide 'Business Owners' and accept operational handover of relevant digital components

Table 4 Stakeholders, roles and responsibilities

Sub-programme interdependencies

As described previously, the Digital Framework relates only to the facility digital sub-programme, and predominantly those activities which are the responsibility of the client. There are however significant interdependencies (and some minor overlaps) between each of the sub-programmes and some digital activities which occur within the other sub-programmes, particularly the facility design and construction sub-programme.

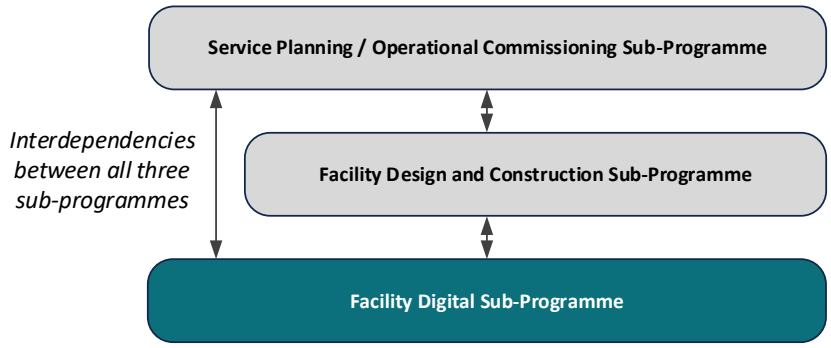


Figure 6 Sub-programme interdependencies

Facility design and construction sub-programme

The facility design and construction sub-programme is responsible for managing the overall design, engaging a MC and managing the overall construction and commissioning of the facility. This includes provision of ICT systems to support the design and construction process including:

- Design and Building Information Modelling (BIM) software.
- Data management and BIM collaboration software (e.g. dRofus).
- Project and document management software (e.g. Aconex).
- Risk and issues management software.
- Asset management software.

In addition, the facility design and construction sub-programme is responsible for the specification, design and delivery of all Group 1 components. The digital design consultant engaged by the Facility digital sub-programme however will be responsible for working with the facility design and construction sub-programme to ensure all digital requirements have been included and the specifications and a coordinated, integrated environment has been designed across all procurement groups.

Service planning /operational commissioning sub-programme

The service planning / operational commissioning sub-programme will manage all aspects of service planning including developing new Models of Care (MoCs), service plans, workforce, financial operating cost model, etc, which may lead to and inform digital requirements and scope. Among other things the service planning / operational commissioning sub-programme will be responsible for:

- Identifying if new / different services will be available in the new facility compared to the old
- Identifying if different configuration of services is required in the new building compared to the old (e.g. outpatient clinic rooms being shared across specialties with a combined booking system).
- Identifying any MoCs / service changes required to support assumptions regarding efficiency gains and the need for digital enablement. (e.g. the new building may have a footprint that assumes a 30% efficiency gain, and requires digital tools to support this).

- Identifying any physical constraints of the new building which require new workflow and digital solutions such as no space built for paper requiring a "Paper-lite" or "Paperless" approach.

Team structure

The structure of the facility digital sub-programme team should ensure oversight and management of all digital workstreams and consider integration with the new health facility programme team. The following diagram represents an indicative team structure noting that depending on the size and complexity of the facility digital sub-programme additional roles, quantity of resources and / or additional management layers may be required.

Where possible teams should consider appointment of existing BaU staff to programme roles while backfilling their original positions. This will increase the local knowledge included in the programme team and better support the transition to operations.

The facility digital sub-programme will also draw on a dedicated group of clinical informaticians who will be responsible for engaging with clinicians more broadly through the overarching change and engagement functions within service planning / operational commissioning sub-programme.

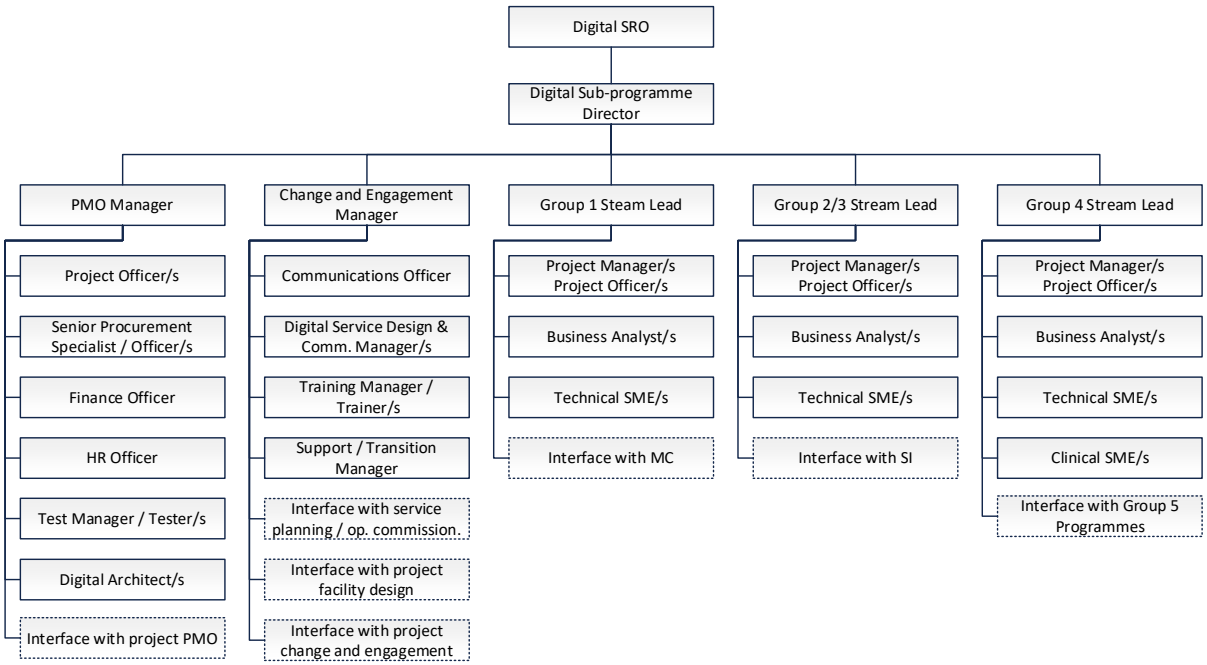


Figure 7 Digital sub-programme team structure

The digital Senior Responsible Officer (SRO) must be identified ASAP at the commencement of *Phase 0. Identify*. and is likely to be the regional Chief Digital Health Officer (CDHO) or equivalent, who will be responsible for ensuring implementation of the Digital Framework, supported by the Data and Digital – Facility Technology team. Initially the SRO is likely to appoint a project director or project manager to assist in completion of the phase 0 activities depending on the breadth and complexity of the activities.

During *Phase 1*. *Define* the Digital Sub-programme Director should be appointed to develop the digital sub-programme plan and provide input into the new health facility business case.

Once the project business case is approved key digital resources should be recruited and onboarded during *Phase 2. Design.* This includes the stream leads, other PMO functions and a core team of project managers, project officers, business analysts and technical SMEs.

Finally, during *Phase 3. Delivery*, additional resources may be added to provide additional capacity to the existing team along with the introduction of trainers and a Support / Transition Manager.

The following tables described the key roles outlined above and the phase of the programme at which they should commence.

Role	Phase	Responsibilities
Digital SRO	0	Overall accountability for the facility digital sub-programme and implementation of the Digital Framework.
Digital Sub-programme Director	1	Responsibility for delivery of the digital sub-programme in accordance with the Digital Framework.
PMO Manager	2	Manage programme wide functions including governance, risk, reporting, procurement, architecture, testing.
Change and Engagement Manager/s	2	Manage stakeholder engagement and change aspects across the digital sub-programme including communications and training.
Stream Leads	2	Manage each of the delivery streams (Group 1, 2/3 and 4) including the projects within.
Project Managers	0,2,3	Manage projects and the delivery of specific digital components.
Project Officers	2,3	Support the project manager in administration of projects.
Senior Procurement Specialist	1	Manage the strategy and execution of procurement across the digital sub-programme.
Finance Officer	2	Manage the budgeting and financial tracking across the digital sub-programme.
HR Officer	2	Manage the recruitment and all HR maters across the digital sub-programme.
Test Manager	2	Manage requirements and testing across the digital sub-programme.
Tester/s	2,3	Execute tests and track results.
Digital Architect	2	Manage the digital architecture, key design decisions and assurance of all designs across the digital sub-programme.
Communications Officer	2	Manage communications to internal and external stakeholders.

Role	Phase	Responsibilities
Digital Service Design & Commissioning Managers	2,3	Manage the development of digital service designs, digital workflows and support commissioning of services.
Training Manager	2	Manage the strategy and execution of training across the digital sub-programme
Trainers	3	Develop training material and delivery training across all new digital technologies
Support / Transition Manager	3	Manage go live support and transition to operations.
Business Analyst	2,3	Collect and document digital requirements.
Technical SME	2,3	Provide subject matter expertise across various technology domains.

Table 5 Digital sub-programme team roles

Governance arrangements

Governance structure

The facility digital sub-programme should be governed by a steering committee responsible for managing the overall facility digital sub-programme and reporting to the new health facility programme. Given the size of investment and risk profile it is recommended that the site or regional Chief Digital Health Officer (CDHO) or Chief Information Officer, (CIO) is appointed as the Senior Responsible Owner, (SRO) and that they chair the digital sub-programme workstream.

Management of each workstream should be governed through a series of specific project control groups along with an additional group focused on integration of the digital environment.

A series of advisory groups will also be required to assure all aspects of the specification, design and delivery of all digital infrastructure, equipment and software solutions along with service specific working groups required to develop requirements and inform design decisions, (e.g. maternity working group, endoscopy working group etc). Where possible the digital projects should attempt to leverage the broader facility programme working and advisory groups via the service planning/ operational commissioning sub-programme.

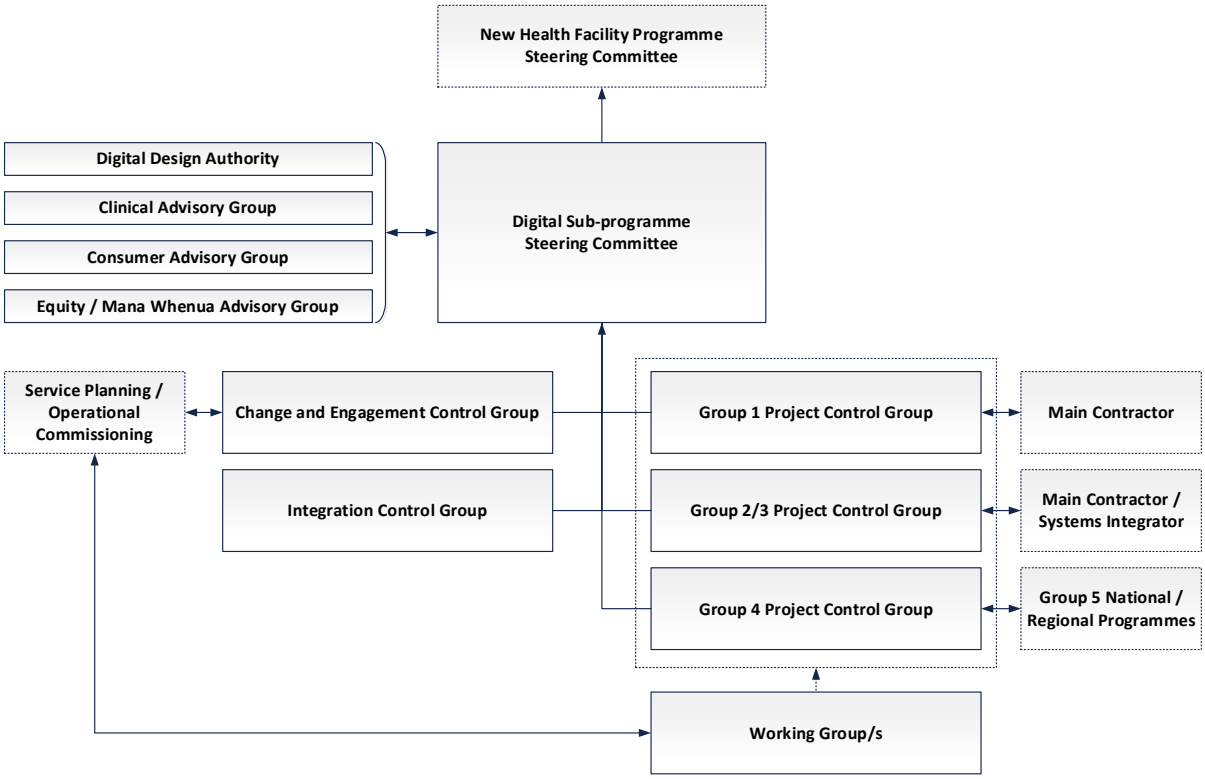


Figure 8 Indicative digital governance structure

Terms of reference

The proposed terms of reference for each digital governance group are defined below.

Group	Abbr.	Terms of Reference
Digital Sub-programme Steering Committee	DPSC	Chaired by the Senior Responsible Officer (SRO), who has overall accountability for the digital programme and for ensuring it remains within the approved scope, timescales, budgets and remains on track to realise the projected benefits.
Digital Project Control Groups	DPCG	Chaired by the corresponding stream lead, with the project manager reporting status updates to the group to monitor and control progress and status of the projects.
Digital Change and Engagement Control Group	CECG	Chaired by the Change and Engagement Manager, responsible for ensuring effective stakeholder engagement and communications to internal and external stakeholders.
Integration Control Group	ICG	Chaired by the digital architect and responsible for oversighting the implementation and execution of all integration activates across the digital environment.

Group	Abbr.	Terms of Reference
Digital Design Authority	DDA	Chaired by the digital architect and responsible for oversighting the implementation and execution of a coordinated design approach.
Clinical Advisory Group	CAG	Chaired by the clinical lead dedicated to the digital programme and will be responsible for assisting in the development of requirements and providing a clinical interface to the organisation.
Consumer Advisory Group	CSAG	Chaired by a nominated consumer to ensure consumer requirements are effectively gathered and considered throughout the design process.
Mana Whenua Partner and Equity Advisory Group	EAG	Chaired by the mana whenua partner and responsible for providing advice on cultural values. It aims to ensure that mana whenua's cultural values, interests, and associations of digital are being incorporated.

Table 6 Digital governance groups

Quality and reporting

Reporting

Programme governance is supported and enabled by clear and timely reporting. Regular monthly reporting by each control group and the digital sub-programme steering committee will ensure they have sufficient visibility of project status and risks to perform their function. Reports should be concise and focus on the status, risks and issues and be supported by verbal updates.

Processes and tools should be established to manage compliance and reporting including programme control registers, contract management databases, probity registered and financial trackers.

Reviews and health checks

The quality of the digital sub-programme will be monitored and maintained through internal reviews completed by advisory groups, regular health checks completed by the Data and Digital - Facility Technology team and various quality and gateway reviews competed by external entities.

The following table outlines the reviews and health checks to by undertaken by the digital sub-programme at each phase.

Phase	Reviews and health checks	Completed by	Purpose
0. Identify	Cultural Values Assessment, Digital perspective	External	Document of key cultural values that are important to be incorporated as part of overall digital requirement.
1. Define	Technical Quality Assessment	External	Review the digital blueprint and confirm appropriate scope.
	Investment Quality Assessment	External	Review the digital sub-programme plan and budget estimates and confirm appropriate planning and cost estimates.
	Digital Health Check	Facilities Technology Data & Digital	Confirm digital readiness to kick-off digital facility programme.
	Gateway Review	External via The Treasury	Confirm Gate 0/1 criteria has been met.
2. Design	Programme review of all specifications and designs	Programme Advisory Groups	Confirm al requirements have been captured and standards have been applied.
	Technical Quality Assessment	External	Review the design and specifications and ensure alignment with the digital blueprint and industry standards.
	Digital Health Check	Facilities Technology Data & Digital	Confirm Digital readiness to move to procurement stage.
3. Deliver	Gateway Review	External via The Treasury	Confirm Gate 2/3 criteria has been met.
	Digital Health Check	Facilities Technology Data & Digital	Confirm digital readiness for testing.
4. Transition / Debrief	Gateway Review	External via The Treasury	Confirm Gate 4 criteria has been met.

Phase	Reviews and health checks	Completed by	Purpose
	Digital Health Check	Facilities Technology Data & Digital	Confirm digital readiness for go-live.
	Project Closure Review	External	Confirm all project activities have been completed.

Table 7 Reviews and health checks

Detailed guide

The following section provides a detailed guide to implementing the Digital Framework by outlining the key objectives, activities and deliverables to be completed by the digital sub-programme at each phase of the new health facility programme along with the estimated duration, resource requirements and costs.

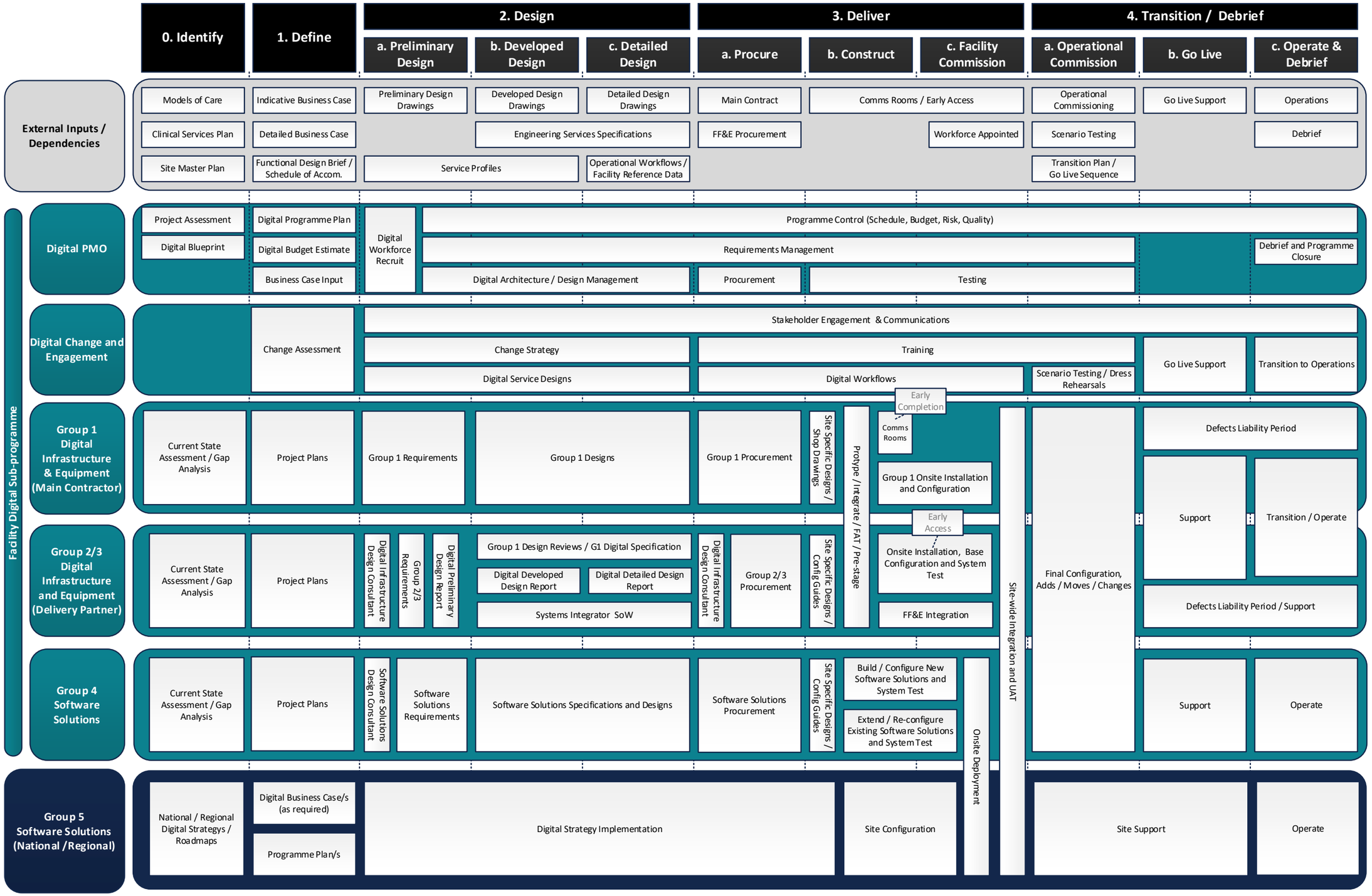
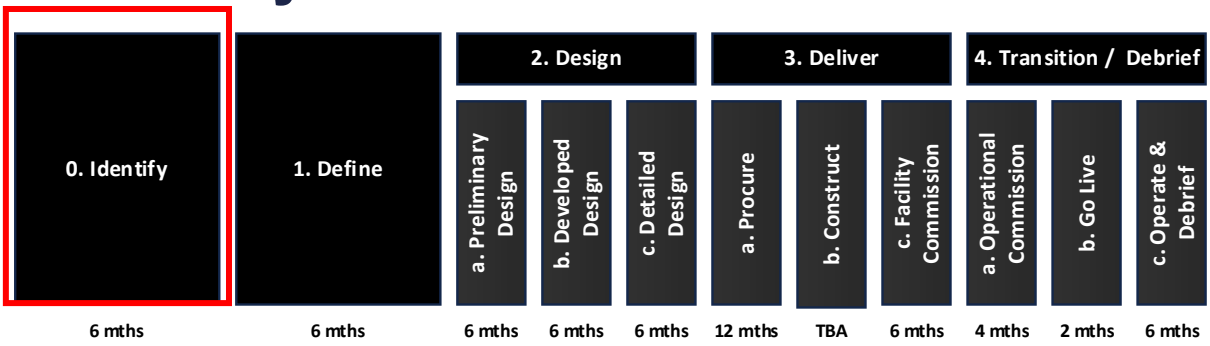


Figure 9 National Digital Framework for Major Facility Redevelopments and New Health Facility Programmes

0. Identify



Overview and objectives

The key objectives of the phase are to assess the scope of the proposed new health facility programme and assess the current state of the impacted digital environment. This information is then used to draft an indicative digital blueprint outlining the proposed high-level scope of the facility digital sub-programme. The blueprint must also identify the digital components and requirements which support cultural values, meeting the principles of Te Tiriti o Waitangi.

Approach

SRO appointment

At commencement of the phase 0 *'Identify'*, the new health facility programme must identify the digital Senior Responsible Officer (SRO), likely to be the regional Chief Digital Health Officer (CDHO) or equivalent, who will be ultimately accountable for the successful implementation of technology into the new facility. The SRO will also be responsible for ensuring the implementation of the Digital Framework, supported by the Data and Digital – Facility Technology team.

New health facility programme assessment

At least 6 months prior to the date the identify phase is due to complete, the digital sub-programme should commence. This will be initiated by a **kick-off" meeting (5)** , chaired by the SRO, and include all programme stakeholders, aimed at gaining a common understanding of the new health facility programme scope and the activities and effort associated with implementing the Digital Framework. The meeting will also confirm availability (or target dates) of key documents required by the digital sub-programme including the clinical services plan and the site master plan.

Following the "kick-off" meeting, and availability of key documents (Models and Care, Clinical Services Plan and Site Master Plan), the SRO will undertake a digital programme assessment by completing the **programme assessment tool (1)** to determine the digital risk and complexity associated with the new health facility programme (including any clinical risk associated with new digital solutions) to inform the digital sub programme scope. The SRO should consult with Mana Whenua advisor to ensure cultural values are considered as part of this assessment.

The SRO will then be responsible for presenting back to the new health facility programme their understanding of the programme along with a series of digital principles for endorsement. Once endorsed the principles will guide development of the digital sub-programme scope and will confirm such things as: an increase in capacity vs a transformational uplift in digital capability; a desire to extend and reuse existing digital components vs implement new components; the extent to which the scope will consider digital infrastructure and / or digital software solutions.

Digital current state assessment

In parallel to the programme assessment activities detailed above, the SRO must also commence assessment of the current state of the existing digital environment. The current state assessment will be completed using the **current state assessment tool (2)** and identify such things as: the current digital technologies used in the existing facility, their support and maintainability; their fitness for purpose as considered by the business users; and any perceived gaps in digital capability. The current state assessment will also identify any existing architecture, standards, roadmaps or in-flight projects which may impact the scope of the digital sub-programme. The **Digital Components Guide (04)** may be useful in helping workshop participants consider the full spectrum of technology that will be required.

The SRO will be required to appoint resources to complete the current state assessment. This may be in the form of an internal FTE (estimated 1 FTE for 3 months of a project manager), with access to existing Business as Usual (BaU) staff or contracted resources. The Data and Digital – Facility Technology team can assist in identifying suitable resources if required.

The current state assessment is best completed through a series of workshops supported by a review of any existing documentation ("as built" documents, architectures, processes, etc). At a minimum, the workshops should include:

1. **Building infrastructure**. Based on the Group 1 scope, the focus of the workshop should be on the size, quantity and condition of current passive communications infrastructure (structured cabling, communications rooms, antenna systems, etc) along with the types and status of existing engineering systems (BMS, Security, etc). Attendees should include representatives from BaU teams including digital infrastructure, building and engineering services, and security. Note, if the scope of the new health facility programme is a greenfield facility on a new site this workshop is of less relevance. If, however, the scope of the new health facility programme includes a new building on an existing campus and / or a refurbishment of an existing building then this workshop is of high importance. The outcome of this workshop will help inform the digital sub-programme scope, including any extension and / or integration with any existing systems and the proposed treatment of any latent conditions which may impact the digital sub-programme.

2. **Active digital infrastructure and equipment.** Based on the Group 2 / 3 scope, the focus of the workshop should be on the type, design and condition of current active infrastructure and equipment (network, unified communications, audio visual, etc). Attendees should include representatives from the BaU digital infrastructure team and / or any entity responsible for support of the current digital infrastructure. Like workshop 1, if the scope of the new health facility programme includes a new building on an existing campus and / or a refurbishment of an existing building then this workshop is of high importance. The outcome of this workshop will help inform the digital sub-programme scope including any extension and / or integration with any existing systems

and the proposed treatment of any latent conditions which may impact the digital sub-programme.

3. **Software solutions.** Based on the Group 4 and Group 5 scope, the focus of the workshop should be on the type, design and condition of current software solutions (care delivery, care administration, etc). Attendees should include representatives from the BaU digital software solutions team and / or any entity responsible for supporting the current software solutions. At this stage it should be confirmed which software solutions are supported and maintained locally versus at a regional or national level and attendees should also include representatives from any national / regional initiatives which may impact the software solutions scope of the digital sub-programme.

4. **Business users.** In order to identify the fitness for purpose and / or any perceived gaps in digital capability (including in relation to the Te Tiriti o Waitangi) a final workshop should be held with a representation of business users to provide their views on the current state of the digital environment. This activity may also be complemented (or replaced) with an online survey or questionnaire.

Definition of the high-level digital sub-programme scope

Once the programme assessment and the digital current state assessments have been completed the SRO (assisted by a project manager) must complete the **digital blueprint template (3)**.

Guided by the principles developed earlier, the blueprint will define the scope of digital components included in the digital sub-programme along with their proposed treatment (new, extend, transfer, etc). Development of the digital blueprint is supported by the **digital components guide (4)** which provides a complete list and definition of all components to be considered by the digital sub-programme.

The indicative blueprint will also propose an initial delivery structure with groupings and responsibilities for each digital component.

Once complete the SRO must present the digital blueprint to the new health facility programme for endorsement as the indicative digital sub-programme scope.

Note, at this phase the digital blueprint is high level and indicative only. This document will be further developed at later stages and continue to be updated and maintained throughout the life of the programme acting as the authoritative source for definition of the digital scope.

Key activities and deliverables

The approximate duration of the phase is 6 months. The associated digital activities however, will take approximately 3 months and should be completed in the latter half of the phase, once the initial planning has been completed by the new health facility programme.

The key activities and deliverables of this phase are summarised below. “Start” and “End” indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**SRO appointment**				
1.1	Appoint the digital SRO	1	1	New Health Facility Programme SRO	
2	**Project assessment**				
2.1	Hold a “kick off” meeting and gather key project planning documents.	4	4	Digital SRO	**Kick off Meeting Template (5)**
2.1	Complete the sub-programme assessment template	4	4	Digital SRO	**Digital Sub-Programme Assessment (1)**

ID	Key activities	Start	End	Completed by	Templates & tools
	to determine scope and complexity of the new health facility project. Consider the physical scope of the proposed build and the impacted services.				
2.1	Hold a workshop to present and endorse the digital scope principles.	4	4	Digital SRO	
3	**Current state assessment**				
3.1	Appoint a project manager	4	4	Digital SRO	
3.2	Workshop 1 – hold a workshop to collect the current state of building infrastructure (low relevance for new greenfield project).	5	5	Project Manager	**Current State Assessment (2)**
3.3	Workshop 2 – hold a workshop to collect the current state of active digital infrastructure and equipment.	5	5		
3.4	Workshop 3 – hold a workshop to collect the current state of software solutions locally and any regional or national initiatives.	5	5		
3.5	Workshop 4 – hold a workshop with business users to identify the fitness for purpose and / or any perceived gaps in digital capability. Note, alternatively this may be in the form of an online survey or questionnaire.	5	5		

ID	Key activities	Start	End	Completed by	Templates & tools
3.6	Document the outcomes of above by completing the digital current state assessment template.	5	5		
4	**Definition of the high-level digital sub-programme scope**				
4.1	Document the high-level scope of the digital sub-programme by completing the digital blueprint template.	6	6	Project Manager	**Digital Blueprint (3)** **Digital Components Guide (4)**
4.2	Hold a workshop to present and endorse the indicative digital blueprint.	6	6	Digital SRO	

Table 8 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Documents which define the scope of the proposed new health facility project including Models and Care, Clinical Services Plan and Site Master Plan.	New Health Facility Programme SRO	3
Current state information (“as built”, architectures, processes, etc) regarding the existing digital environment.	BaU local digital team	4
Māori health equity workstream	New Health Facility Programme (Mana Whenua Advisor)	3
National / regional strategies, architectures, and roadmaps.	National / regional digital teams	4

Table 9 Phase dependencies

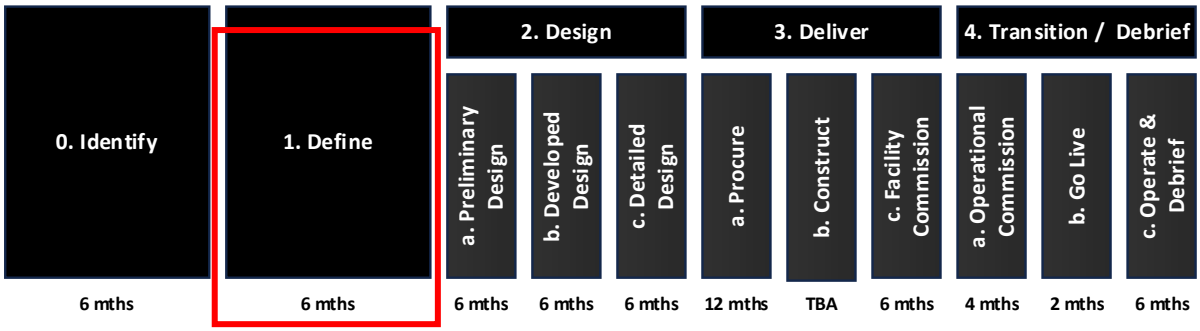
Resources and costs

The SRO has responsibly for the phase 0 digital activities however it likely they will require the assistance of a dedicated project manager (1 x FTE / contract resource for 3 months) to complete the digital current state assessment and develop the digital blueprint. In addition, the existing BaU digital resources must be available to provide information regarding the current digital environment and participate in workshops as required.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	3 months		
	Digital SPD			
	PMO Team			
	Change and Engagement Team			
	Group 1 Team			
	Group 2/3 Team	3 months		
	Group 4 Team			
	BAU digital team	3 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			
Phase total cost estimate range				

Table 10 Phase cost estimates

1. Define



Overview and objectives

The key objectives of the 'Define' phase are to define the details of the facility digital sub-programme including budget estimates and provide input to the new health facility programme business case.

Approach

DSPD appointment

At commencement of the phase the Digital SRO should appoint a Digital Sub-programme Director (DSPD) responsible for implementing the Digital Framework.

Programme and project planning

Once appointed the DSPD (with the assistance of the project manager previously appointed) must develop a Digital Sub-Programme Plan and high-level budget estimate by completing the **digital sub-programme plan template (6)** and **budget template (7)**, noting the budget will be further defined in later stages. This should include lessons learnt and risk workshops. Note, the assessments and blueprint will be key inputs to the plan and budget estimate.

The project manager should also complete initial drafts of **project plans (8)** for each workstream noting they also will be further developed in later stages once additional project managers are appointed.

The DSPD should also develop an **integrated schedule (9)** showing interdependencies between all digital projects and the new health facility programme.

At this stage the DSPD should review additional documents developed by the new health facility programme (functional design brief, schedule of accommodation) and update the **digital blueprint (3)** accordingly. Reviews and updates should continue to occur at each phase of the programme however the digital blueprint should now be brought under formal change control and updates only applied if digital sub-programme **change requests (66)** are approved by the digital sub-programme steering committee.

The documents and details developed by the facility digital sub-programme should be made available to the new health facility programme to include in the indicative and detailed business cases as appropriate.

Services design consultant specification

During this phase the new health facility programme will appoint a building services design consultant. It is important the responsibilities of the consultant align with the roles and responsibilities outlined in the digital blueprint. As such the DSPD should provide input into the **group 1 design consultant's specification (10)** ensuring responsibility for Group 1 digital infrastructure and alignment with the **digital blueprint (3)** along with any **group 1 digital integration requirements (11)**.

Change assessment

During this phase an initial assessment of the business change associated with implementing the digital business case, along with the organisation's readiness for change should be undertaken by the Project Manager by completing the **Organisational Readiness Assessment for Digital Change pre-programme baseline survey template (12)**. This assessment will provide input into the change strategy to be developed at a later stage.

Monitor Group 5

Through development of the digital blueprint any applicable regional / national programmes (Group 5) will have been identified. It is important that the dependencies to these national and regional projects are clearly articulated including confirmation that they are funded, the timing aligns and there is agreement of responsibility for delivery of core solution vs implementation of solution. During this phase the DSPD should commence monitoring these programmes, including reviewing any business cases or plans to ensure alignment with the digital blueprint.

Digital Health Check

At least 2 months prior to exiting the 'Define' phase a **digital health check 1 (13)** will be conducted. This health check will confirm the Digital Sub Programme *Define* phase activities has been completed and the Digital sub-programme is ready to enter the *Design* phase.

Key activities, deliverables, and timing

The approximate duration of the phase is 6 months. The key activities and deliverables of this phase are summarised below. "Start" and "End" indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**DSPD appointment**				
1.1	Appoint the Digital sub-programme Director (Digital SPD)	1	1	Digital SRO	
2	**Programme and project planning**				
2.1	Develop a digital sub-programme plan and budget estimate.	1	3	Digital SPD	**Digital Sub-Programme Plan (6)** **Digital Sub-Programme Budget (7)**
2.2	Develop an initial project plan for each workstream outlining a detailed approach, activities and milestones.	4	4	Project Manager	**Project plan (8)**
2.3	Develop an integrated digital schedule showing interdependencies between all digital projects and the new health facility programme.	3	5	Project Manager	**Digital Sub-Programme Schedule (9)**
2.4	Update the digital blueprint as required and bring under change control.	6	6	Digital SPD	**Digital Blueprint (3)** **Digital Components Guide (4)**
2.5	Provide input into the new health facility indicative / detailed business case as required.	1	6	Digital SPD	
3	**Services design consultant specification**				

ID	Key activities	Start	End	Completed by	Templates & tools
3.1	Provide input into the new facility services design consultants brief ensuring responsibility for Group 1 digital infrastructure.	1	6	Digital SPD	**Design Consultants' Specification (10)** **Digital Integration Requirements (11)**
4	**Change assessment**				
4.1	Perform an assessment of the organisations baseline 'readiness for change' associated with implementing the digital blueprint and completing the digital sub-programme.	1	6	Project Manager	**Change Assessment (12)**
4	**Monitor Group 5**				
4.1	Monitor and review any National / Regional business cases / programme plans ensuring dependencies are mapped.	1	6	Digital SPD	
5	**Digital Health Check**				
5.1	Conduct Digital Health check to confirm readiness to enter the Design phase	5	6	Digital SPD	**Define Phase Health Check 1 (13)**

Table 11 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Functional design brief	New Health Facility Programme SRO	3
Schedule of accommodation		3
Master works programme		4
Indicative business case		4
Detailed business case		6
Group 1 services design consultants' specification		6

Table 12 Phase dependencies

Resources and costs

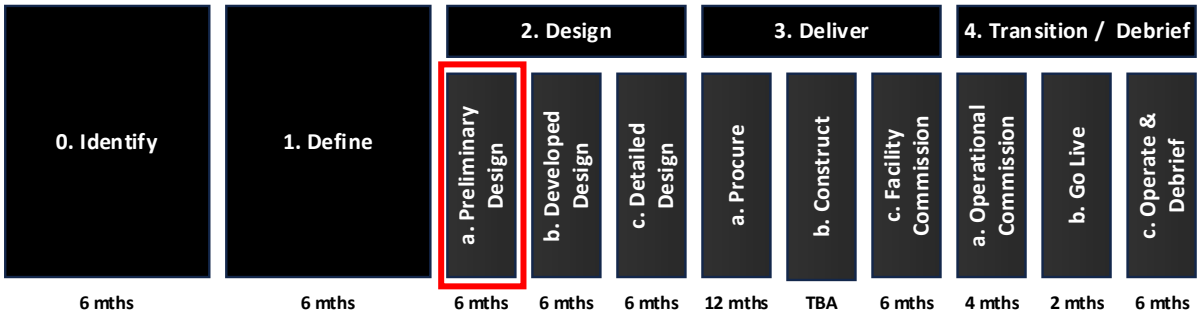
At the commencement of phase 1, in additional to the project manager, the DSPD should be appointed to develop the programme plan and provide input into the business case.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	6 months		
	Digital Sub-Programme Director (DSPD)	6 months		
	PMO Team			
	Change and Engagement Team			
	Group 1 Team			
	Group 2/3 Team	6 months		
	Group 4 Team			
	BAU digital team	6 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			
	Assurance / other			

Category	Details	Duration	Effort / FTE	Cost estimate
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			
			Phase total cost estimate range	

Table 13 Phase cost estimates

2.a Design – preliminary design



Overview and objectives

The key objectives of the Preliminary Design phase are to commence implementation of the digital sub-programme including recruitment of the digital sub-programme team and engagement of a Digital Infrastructure Design Consultant (DIDC). This is followed by the collection of digital requirements across each workstream and development of a digital preliminary design report.

Approach

Digital workforce recruitment

At commencement of the phase the Digital SPD should appoint a Recruitment Officer responsible for developing a digital **sub-programme resourcing plan (15)** and recruiting the digital sub-programme team.

Following approval of the Digital sub-programme plan by the Digital SRO, recruitment should commence ASAP starting with stream leads, clinical leads and key PMO functions. Another priority appointment is a senior procurement specialist noting that any procurement capacity provided prior to approval of the detailed business case is assumed to come from BaU.

Digital Sub-programme establishment

Following appointment of the PMO manager and other key resources, formal establishment of the digital sub-programme should commence. This includes:

- establishing all project control groups, advisory groups and the **digital sub-programme steering committee, including Terms of Reference (14)**.
- establishing a Digital sub-Programme **Quality Management Plan (16)** that includes:
  - establishing sub-programme reporting **highlight reporting (17)** & **project/stream checkpoint reporting (17a)**.
  - establishing centralised management of budget, **risks & issues register (18), decision register (18a)**, assumptions, and **dependency register (18c)**
  - Establishing a sub-programme document management system, including a **document Register (18b)** and a scheduling system, (e.g. JIRA/Confluence)
  - establishing a centralised process and tool for capturing **business requirements (19)** and **traceability of requirements (19a)**.
- establishing a digital architecture capability including a digital design authority.
- establishing a **Digital sub-programme induction guide (21)**.

Note: In mature programme environments it is recommended the digital sub–programme PMO resources are members of the broader new facility PMO workstream.

Change and engagement

Based on the change readiness assessment completed in the previous phase, once appointed the Change and Engagement (C&E) Manager should develop a **change, engagement and communications strategy (20)** outlining the strategy to manage the change associated with implementing the digital blueprint, successfully engage stakeholders and to communicate details of the digital sub-programme. Once the strategy is approved the C&E manager should plan out the communications using the **communication plan (20a)** and commence engagement and communications with key stakeholder groups. All formal engagements should be recorded in the **stakeholder engagement register (18d).** Note the change and communication components of the plan should continue to be elaborated as the transition requirements become clearer.

In parallel, and once appointed the Digital Service Design & Commissioning (DSDC) Manager/s should engage with the impacted business services and commence development of the digital service designs using the **digital departmental design template (23)** noting this will continue throughout all phases of design.

Note: In mature programme environments it is recommended the Digital Change & Engagement resources are members of the broader new facility Change & Engagement programme workstream.

Upon recruitment of the Training Manager, they should create a **Training Strategy (24)** to reflect the early known scope of the training required and how training will be managed.

Appoint digital design consultant/s

Dependent on the scope and complexity of the facility digital sub-programme, one or more digital design consultants will be required

A Digital Infrastructure Design Consultant (DIDC) must be engaged by the Digital Sub-programme Director (DSPD) responsible for design, specification, and assurance of the Group 2 / 3 infrastructure along with review and coordination of the Group 1 designs. For example, the DIDC must design and specify the active network (WAN, LAN, WLAN) and ensure the Group 1 structured cabling and communications rooms are coordinated to accommodate the active equipment (size, location, power, cooling, etc). Using an external design consultant is similar to the approach used for other trade packages. It reduces the dependency on the BaU digital team, provides skills and experience the BaU digital team is unlikely to have and ensures the consideration of innovation and industry trends from experience on other projects. Note consultant sourcing processes must be compliant with NZ Government procurement rules (**Government Procurement Rules | New Zealand Government Procurement and Property)**.

The DIDC should have skills and experience as outlined in the sample **Digital Design Consultant Specification (25)** including engineering (mechanical and electrical), digital infrastructure design and integration, health planning / clinical SME, business analysis and technical writing. Likely candidates include engineering consulting firms and / or ICT Integrators.

If the digital sub-programme includes a sizeable software solutions scope (Group 4) a design consultant may also be required to support the Group 4 workstream. In this case the consultant should have skills and experience including software requirements specification and implementation, business analysis and technical writing. Likely candidates include the “big 4” professional services consulting firms.

Options for the design and specification of Group 4 software solutions include:

- appoint a specific software solutions design consultant.
- extend the scope of the DIDC to cover Group 4 software solutions.
- perform the function within the digital sub-programme using business analysts and architects.

Once the quantity and scope of the design consultant is confirmed the Procurement Officer should develop and release one or more Requests for Proposal (RFPs) to appoint the design consultant/s.

Collect digital requirements

Once appointed the DIDC’s first deliverable should be a project plan outlining the activities and milestones associated with their engagement. Following approval of the project plan by the digital sub-programme steering committee, the DIDC should commence weekly workshops with the following:

- facility digital sub-programme and BaU digital teams – focused on understanding the current state, confirming the scope and resolving key design decisions.
- the new health facility programme services design consultants – focused on confirming scope and coordinating group 1 designs.

During this phase a similar activity should be undertaken regarding the Group 4 software solutions including the collection of **business requirements (19)**. The responsibilities and process will be dependent on the decision to use a design consultant or perform the activities within the facility digital sub-programme as determined at the previous phase.

All requirements collected during the above process and from this point in the sub-programme should be recorded in the **requirement traceability register (19a)** in accordance with the central requirement management processes.

Commence digital designs

Towards the end of the phase the DIDC should deliver a **digital preliminary design report (27)** which at a minimum includes:

- digital design principles
- key digital design decisions
- confirmation of scope across each of the procurement groups (1, 2/3 and 4)
- key responsibilities of the various parties
- any comments regarding the current Group 1 designs and high-level integration requirements
- design intent for each of the Group 2 / 3 components
- any comments regarding the current Group 4 designs and high-level integration requirements

At the same time an initial collection of group 4 software solutions requirements should be recorded in the requirements traceability tool by the design consultant / facility digital sub-programme business analysts.

Based on the work above, the design consultant/s should also review and validate the facility digital sub-programme budget based on their experience and comparison projects.

Also during this phase, the new health facility programme will commence preliminary design of the facility and services. Representatives from the facility digital sub-programme should participate in design workshops including Digital Service Design & Commissioning Managers, Project Managers, Business Analysts and the DIDC as required.

Monitor Group 5

During this phase the Group 4 Workstream Lead should continue monitoring any applicable Group 5 programmes to ensure alignment with the digital blueprint and coordination with the facility digital sub-programme.

Key activities, deliverables and timing

The approximate duration of the phase is 6 months. The key activities and deliverables of this phase are summarised below. “Start” and “End” indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**Digital workforce**				
1.1	Appoint a HR officer.	1	1	Digital SPD	
1.2	Develop a digital workforce plan.	1	2	Recruitment Officer	**Digital sub-Programme Resourcing Plan (15)** **Induction Guide (21)**
1.3	Recruit the core digital sub-programme team	2	6	Recruitment Officer	**Position Descriptions**
2	**Digital Sub-programme establishment**				
2.1	Establish programme control and reporting activities including centralised management of schedule, budget, risk and quality and a digital sub-programme induction guide.	1	6	PMO Manger	**Quality Management Plan (16)** **Highlight Report (17)** **Checkpoint Report (17a)** **Risks & Issues Register (18)** **Decision Register (18a)** **Document Register (18b)** **Dependency Register (18c)**

ID	Key activities	Start	End	Completed by	Templates & tools
2.2	Establish a programme control group and subgroups as required.	3	6	PMO Manger	**Digital sub-Programme Committee Terms of Reference (14)**
2.3	Establish centralised management of requirements gathering and traceability.	3	6	Business Analyst, Test Manager	**Business Requirements Specification (19)** **Requirements Traceability Tool (19a)**
2.4	Establish a digital architecture capability including digital design authority.	3	6	Digital Architect	
3	**Change and engagement**				
3.1	Develop a change and communications strategy.	4	6	C&E Manager	**Change, Engagement and Communications Strategy (20)**
3.2	Plan communications and commence stakeholder engagement and communications	6	6	C&E Manager	**Communications Plan (20a)** **Stakeholder Engagement Register (18d)**
3.3	Commence development of digital departmental designs.	1	6	DSDC Manager/s	**Digital Departmental Design Template (23)**
3.4	Draft a Training Strategy	3	6	Training Manager	**Training Strategy (24)**
4	**Appoint digital infrastructure design consultant**				

ID	Key activities	Start	End	Completed by	Templates & tools
4.1	Develop and release an RFP for one or more Digital Design Consultants	1	4	Procurement Officer	**Digital Design Consultant Specification (25)**
4.2	Appoint a Digital Infrastructure Design Consultant (DIDC)	4	4	Group 2/3 Stream Lead	
4.3	Appoint a Digital Software Solutions Design Consultant (if required)	34	4	Group 4 Stream Lead	
5	**Collect requirements**				
5.1	Weekly workshops with facility digital sub-programme and BaU digital teams – focused on understanding the current state, confirming the scope and resolving key design decisions. The information will be used in development of the Preliminary Digital Design Report.	4	6	DIDC	
5.2	Weekly workshops the new health facility programme services design consultants – focused on confirming scope and coordinating group 1 designs. The information will be used in development of the Preliminary Digital Design Report.	4	6	DIDC	
5.3	Commence user workshops to collect Group 4 software solutions requirements.	4	6	Software solutions design consultant /	**Business Requirements Specification (19)**

ID	Key activities	Start	End	Completed by	Templates & tools
				business analysts	
6	**Commence digital design**				
6.1	Develop the digital preliminary design report.	5	6	DIDC	**Digital preliminary design report (27)**
6.2	Review of Group 1 designs ensuring coordination.	1	6	DIDC	**Group 1 Design Consultant Specification (10)** **Group 1 Design Integration Requirements, (11)**
7	**Monitor Group 5**				
7.1	Monitor and review any National / Regional programmes to ensure alignment with the digital blueprint and coordination with the facility digital sub-programme.	1	6	Digital SPD	**Updated Dependency Register (18c)**

Table 14 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Preliminary Design Drawings	New Health Facility Programme SRO	3
Service Profiles		6
Models of Care		6
New health facility Change & Engagement Strategy		6
New Health facility PMO Quality Plan		6

Table 15 Phase dependencies

Resources and costs

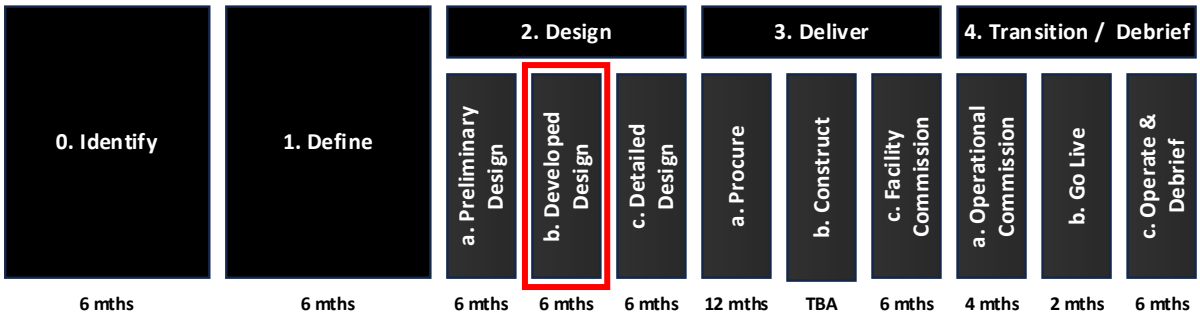
At the commencement of phase 2.a the “core” digital team should be recruited followed by the appointment of a DIDC.

In addition, the existing BaU digital resources must be available to provide information regarding the current digital environment and participate in workshops as required.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	6 months		
	Digital SPD	6 months		
	PMO Team	3 months		
	Change and Engagement Team	3 months		
	Group 1 Team	3 months		
	Group 2/3 Team	3 months		
	Group 4 Team	3 months		
	BAU digital team	6 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			
Phase total cost estimate range				

Table 16 Phase cost estimates

2.b Design – developed design



Overview and objectives

The key objective of the phase is to build upon the preliminary designs and develop the digital designs across each workstream.

Approach

Digital sub-programme control

During this phase the sub-programme should be controlled by the PMO and formal reporting using **highlight (17)** and **checkpoint reports (17a)** should occur, including management of **schedule (09)**, **budget (07)**, **risk & issues (18)**, **decisions (18a)**, **documents (18b)** and **dependencies (18c)**.

Change and engagement

During this phase the Change and Engagement (C&E) Manager should further develop the **change, engagement and communications strategy (20)** and continue with engagement and communications of key stakeholder groups. At this point in the sub-programme it is recommended to commence formally capturing the 'pulse' of each service areas engagement using the **change and engagement status report (69)**. Any blockers flagged in this report should have mitigations planned and the proposals shared with the change and training steering committee.

The Digital Service Design & Commissioning (DSDC) Manager/s should also continue engaging with the impacted business services and further develop the **digital departmental service designs (23)**.

Collect digital requirements

During this phase the DIDC workshops should extend to include clinical and business users (accessed via the change and engagement workstream) aimed at gaining more detailed **user requirements (19).**

The workshops will be spread across multiple iterations and repeated ***for each service group*** (as defined by the change and engagement workstream). This may result in a total of up to 40 + workshops (e.g., 4 x 10). A suggested format for the workshops is:

- **Workshop 1** – an overview presentation of the various Group 2 / 3 technologies including examples with Q&A.

- **Workshop 2** – mapping of high-level workflows and identification of technology enablers.
- **Workshop 3** – collection of functional requirements for each technology.
- **Workshop 4** – confirmation of the above presented back to the user groups.

Once the requirements have been gathered, a small, cross represented working group should be established to rationalise the requirements and assist in development of the designs.

During this phase the collection of Group 4 software solutions **business requirements (19)** should also continue with all requirements recorded in the **requirements traceability tool (19a)**.

Develop digital designs

At the end of the phase the DIDC must deliver a **Developed Digital Design Report (28**) which builds on the **preliminary digital design report (27)** from the previous stage and includes:

- a high-level design.
- functional, technical and integration requirements for each Group 2 / 3 digital component.
- an integration matrix outlining key interfaces between each component.

In addition, the DIDC must commerce drafting the **Systems Integrator (SI) Scope (29)** which defines the scope of works to be undertaken by the SI and includes:

- roles and responsibilities.
- documents and deliverables.
- timing and resource requirements.

At the same time, development of the Group 4 **Software Solution Specification (30)** should commence.

Also, during this phase, the new health facility programme will continue the design of the facility and services. Representatives from the facility digital sub-programme should continue to participate and the DIDC must review all Group 1 designs ensuring coordination with Group 2 / 3 (structured cabling and communications rooms size, location, power, cooling, etc.)

Representatives from the facility digital sub-programme should also commence working with the FF&E team to ensure digital requirements are included in any applicable specifications using the **Digital FFE Specification template (31)**.

Monitor Group 5

During this phase the Group 4 Workstream Lead should continue monitoring any applicable Group 5 programmes to ensure alignment with the digital blueprint and coordination with the facility digital sub-programme.

Key activities, deliverables and timing

The approximate duration of the phase is 6 months. The key activities and deliverables of this phase are summarised below. “Start” and “End” indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**Digital sub-programme control**				
1.1	Control and report on status of the programme including schedule, budget, risk and quantity.	1	6	PMO Manager	**Highlight Report (17)** **Checkpoint Report (17a)** **Schedule (09)** **Budget (07)** **Risk & Issues Register (18)** **Decisions Register (18a)** **Document Register (18b)**
2	**Change and engagement**				
2.1	Further develop the change plan and continue stakeholder engagement and communications.	1	6	C&E Manager	**Change, Engagement and Communications strategy template (20)** **Stakeholder Engagement Register (18d)** **Change & Engagement Status Report (69)**
2.2	Further develop the digital departmental service designs.	1	6	DSDC Manager/s	**Digital Departmental Service Designs (23)**
4	**Collect digital requirements**				

ID	Key activities	Start	End	Completed by	Templates & tools
5.1	Workshop 1 (repeated for each service group) – an overview presentation of the various Group 2 / 3 technologies including examples with Q&A.	1	4	DIDC	**Business Requirements (19)** **Requirements Traceability Tool (19a)** **Digital FF&E Specification (31)**
5.2	Workshop 2 (repeated for each service group) – mapping of high-level workflows and identification of technology enablers.	1	4	DIDC	
5.3	Workshop 3 (repeated for each service group) – collection of functional requirements for each technology.	1	4	DIDC	
5.4	Workshop 4 (repeated for each service group) – confirmation of the above presented back to the user groups.	1	4	DIDC	
5.5	User workshops to collect Group 4 software solutions requirements as required.	1	4	Software solutions design consultant / business analysts	
6	**Develop digital designs**				
6.1	Develop the digital developed design report.	4	6	DIDC	**Digital Developed Design Report (28)**

ID	Key activities	Start	End	Completed by	Templates & tools
6.2	Commence developing the Systems Integrator (SI) scope.	4	6	DIDC	**Systems integrator scope (29)**
6.3	Commence developing the functional system specifications.	4	6	Software solutions design consultant / business analysts	**Software Solution Specification (30)**
6.4	Review of Group 1 designs ensuring coordination.	1	6	DIDC	**Updated blueprint (3)**
	Monitor Group 5				
7.1	Monitor and review any National / Regional programmes to ensure alignment with the digital blueprint and coordination with the facility digital sub-programme.	1	6	Digital SPD	**Updated Dependency Register (18c)**

Table 17 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Developed Design Drawings	New Health Facility Programme SRO	4
Engineering Services Specification		4
Service Profiles		4
Models of Care		4

Table 18 Phase dependencies

Resources and costs

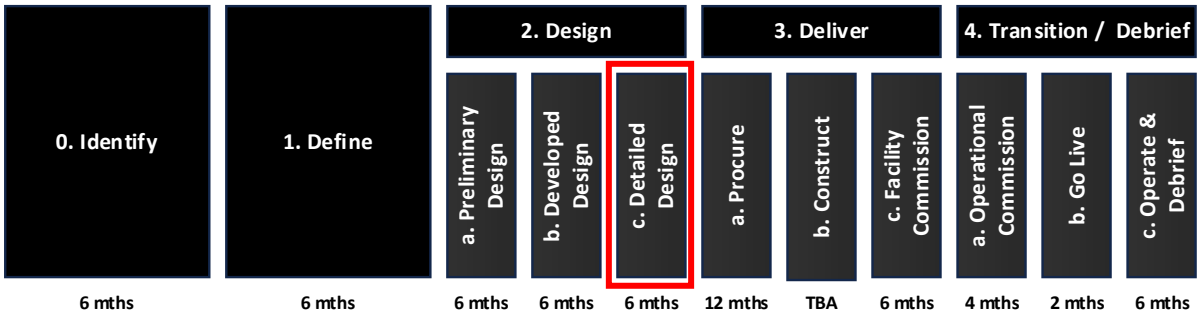
No additional resources are required during this phase.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	6 months		
	Digital SPD	6 months		
	PMO Team	6 months		
	Change and Engagement Team	6 months		
	Group 1 Team	6 months		
	Group 2/3 Team	6 months		
	Group 4 Team	6 months		
	BAU digital team	6 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			

Category	Details	Duration	Effort / FTE	Cost estimate
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			
			Phase total cost estimate	

Table 19 Phase cost estimates

2.c Design – detailed design



Overview and objectives

The key objectives of the phase are to complete the digital detailed designs across each workstream and plan for procurement.

Approach

Digital sub-programme control

During this phase the sub-programme should be controlled by the PMO and formal reporting should continue including schedule, budget, risk and quality.

In preparation of the next phase the Procurement Officer must now develop a **procurement plan (32)** defining the details of how the group 2 / 3 digital infrastructure (including the Systems Integrator) and the Group 4 software solutions will be procured.

Change and engagement

During this phase the Change and Engagement (C&E) Manager should finalise the **change and communications strategy (20)** and continue with engagement and communications of key stakeholder groups.

The Digital Service Design & Commissioning (DSDC) Manager/s should also finalise the **digital departmental service designs (23)**.

The Training Manager should commence drafting the **Training Needs Analysis (33)**, update the **Training Strategy (24)** and commence drafting the **Training Plan (37)**.

Digital designs

At the end of the phase the DIDC must deliver a **Digital Detailed Design Report (34)** which builds on the developed report from the previous stage and includes:

- detailed designs (where appropriate).
- definition of each interface defined in the integration matrix.

The DIDC must also finalise the **Systems Integrator (SI) Scope (29)**.

At the same time, development of the **Group 4 software solutions specifications (29)** and designs should be completed in preparation for the procurement stage.

Finally, representatives from the facility digital sub-programme should continue to participate in design of the facility and services and the DIDC must ensure final **Group 1 designs (10)** are coordinated with Group 2 / 3 infrastructure (structured cabling and communications rooms size, location, power, cooling, etc.)

Monitor Group 5

During this phase the Group 4 Workstream Lead should continue monitoring any applicable Group 5 programmes to ensure alignment with the digital blueprint and coordination with the facility digital sub-programme.

Digital Health Check 2

At least 3 months prior to exiting the 'Design' phase a **digital health check 2 (35)** will be conducted. This health check will confirm the Digital Sub Programme Design activities has been completed and the Digital sub-programme is ready to enter the Procurement phase.

Key activities, deliverables and timing

The approximate duration of the phase is 6 months. The key activities and deliverables of this phase are summarised below. "Start" and "End" indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Complete by	Templates & tools
1	**Digital sub-programme control**				
1.1	Control and report on status of the programme including	1	6	PMO Manager	**Highlight Report (17)**

ID	Key activities	Start	End	Complete by	Templates & tools
	schedule, budget, risk and quantity.				**Checkpoint Report (17a)** **Schedule (09)** **Budget (07)** **Risk & Issues Register (18)** **Decisions Register (18a)** **Document Register (18b)**
	Develop a procurement plan by completing the procurement plan template.	4	4	Procurement Officer	**Procurement Plan (32)**
2	**Change and engagement**				
2.1	Finalise the change plan and continue stakeholder engagement and communications.	1	6	C&E Manager	**Change, Engagement and Communications Strategy (20)**
2.2	Finalise the digital service designs.	1	6	DSDC Manager/s	**Digital Departmental Service Designs (23)**
2.3	Draft Training Needs Analysis	1	6	Training Manager	**Training Needs Analysis (33)**

ID	Key activities	Start	End	Complete by	Templates & tools
2.4	Update Training Strategy	3	6	Training Manager	**Training Strategy (24)**
2.5	Draft Training Plan	4	6	Training Manager	**Training Plan (37)**
3	**Finalise digital designs**				
3.1	Finalise the digital detailed design report.	1	6	DIDC	**Digital detailed design report (34)**
3.2	Finalise the Systems Integrator (SI) scope.	1	6	DIDC	**SI scope (29)**
3.3	Finalise the software solution specifications.	1	6	Software solutions design consultant / business analysts	**Software solutions specification (29)**
3.4	Final review of Group 1 designs ensuring coordination.	1	6	DIDC	**Group 1 Design Consultant Specification (10)**
4	**Monitor Group 5**				
4.1	Monitor and review any National / Regional programmes to ensure alignment	1	6	Digital SPD	**Updated Dependency Register (18c)**

ID	Key activities	Start	End	Complete by	Templates & tools
	with the digital blueprint and coordination with the facility digital sub-programme.				
5	**Digital health Check**				
5.1	Conduct Digital Health check to confirm readiness to exit the Design phase and enter the Procurement phase	4	6	Digital SPD	**Design Phase Health Check 2 (35)**

Table 20 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Detailed design drawings	New Health Facility Programme SRO	3
Finalised engineering services specification		3
Operational workflows		6
Facility reference data		6
Service plans		6
Models of Care		6

Table 21 Phase dependencies

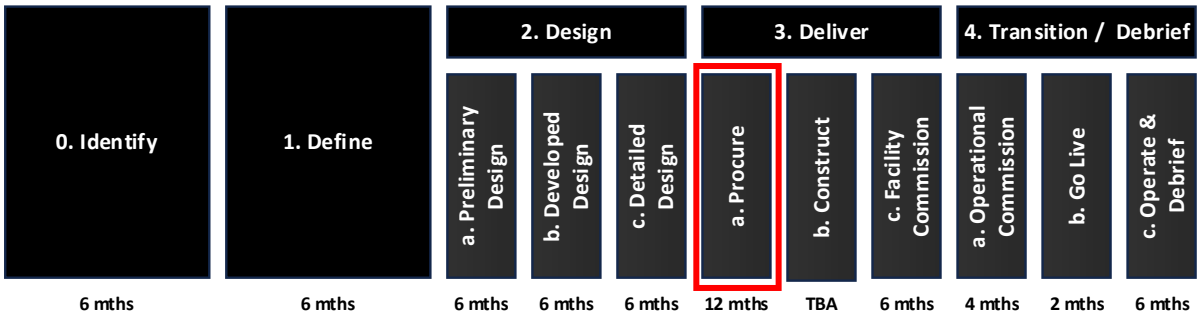
Resources and costs

No additional resources are required during this phase.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	6 months		
	Digital SPD	6 months		
	PMO Team	6 months		
	Change and Engagement Team	6 months		
	Group 1 Team	6 months		
	Group 2/3 Team	6 months		
	Group 4 Team	6 months		
	BAU digital team	6 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			
Phase total cost estimate				

Table 22 Phase cost estimates

3.a Deliver – procure



Overview and objectives

The key objectives of the phase are to appoint a systems integrator and complete the procurement of the hardware, software and professional services across each of the workstreams.

Approach

Digital sub-programme control

During this phase the sub-programme should be controlled by the PMO and formal reporting should continue to occur including schedule, budget, risk and quality.

At commencement of the phase the HR Officer should appointment any additional resources required at this stage, (e.g. Project Managers, Business Analysts, Project Officers Technical & Clinical SMEs) under each of the workstreams, as per the **resource plan (15)**. The resources will be required to complete the procurement, construction and commissioning activities within the Deliver phase. Note it is recommended to employ the managers/leads for each workstream first so as they can then recruit their teams. At this stage in the programme backfilling of skilled BAU resources should be considered to enable the planning of system extensions/reconfigurations and/or new systems.

The Procurement Officer should now oversee and coordinate the procurement (including liaising with MBIE and DIA) of the group 2 / 3 digital infrastructure (noting this will be minimal if the SI is contracted by the MC) and the Group 4 software solutions. Management of the procurement activities will be led by the Project Managers within each workstream. The Project Managers will update their draft **Project Plans (08)** as one of their first activities. It is not unusual for the full contingent of group 4 resources to not be required until approx. 18 months out from go-live as the group 4 stream generally have a shorter project duration than the Group 1, 2/3 teams.

During this phase the Test Manager should define a detailed **test strategy and test plan (36)** outlining the processes and tools under which all testing will be managed including the plan to establish a dedicated test lab.

Change and engagement

During this phase the Change and Engagement (C&E) Manager should continue with engagement and communications of key stakeholder groups.

The Training Manager should continue to refine the **training plan (37)** as the actual solutions become known. The training plan should be coordinated with the new health facility programme training plan such the digital activities are a subcomponent of a broader training and induction programme and consider what system will be used to schedule and manage the training. It is likely that 'training environments' as well as a 'learning management system' will be required and should be planned accordingly.

As the solutions are procured and the detailed designs completed with the vendors, the Digital Service Design & Commissioning (DSDC) Manager/s should commence development of the **digital workflows (38)** .

Procurement

Following approval of the procurement plan the Group 2 / 3 Stream Lead should progress the appointment of a Systems Integrator (SI) and the Group 2 / 3 infrastructure and equipment.

The recommend approach is to appoint the SI is as part of the procurement of the Main Contractor (MC) or to be subcontracted by the MC shortly after their appointment. Alternatively, if the Main Contractor does not have the capability or the contracting model does not allow, then the SI may be engaged directly by the facility digital sub-programme via a Request for Proposal (RFP) although this is not the recommended model.

The SI will be responsible for a fully integrated digital environment across all procurement groups including Group 1, Group 2/3, Group 4 and FF&E (MME and BME). The responsibility of the DIDP is to cover all areas of the digital environment with a focus on the successful coordination, integration, delivery, implementation and testing of the Group 2/3 infrastructure.

The SI will also act as a "prime contractor" and be responsible for procurement and delivery of all Group 2 / 3 infrastructure and equipment.

Finally, the SI will also be responsible for supporting the Main Contractor, their sub trades and FF&E vendors and coordinating the integration of all Group 1, Group 4 and FF&E equipment and systems into digital environment.

Selection of the SI should be made against the requirements outlined in the **Digital Detailed Design Report (34)** and the **Systems Integrator Scope (29)** (documents developed in the previous phase). The complete RFP pack should include:

- RFP – outlining overall scope, criteria, evaluation process.
- Systems Integrator Scope – professional services scope.
- Digital Detailed Design Report – technical scope.
- Bill of quantities – quantity estimates for technical components.
- Procurement instructions – details of the procurement process to be followed by the SI once appointed.
- Draft contract.
- Response document – for respondents to detail their technical response.
- Response pricing spreadsheet – for respondents to detail their pricing response.

The procurement should result in a Master Service Agreement (MSA) with the SI (preferably under the Main Contractor). The SI will create Statements of Work (SoWs) for each phase of the digital sub-programme (e.g. construction, commissioning, go live, etc).

The technology packages (as outlined in the Detailed Design Report) will initially be provided as a provisional sum with the product and costs only finalised after the appointment of the SI. This allows the SI to comment on the Detailed Design Report and finalise a Bill of Materials (BoM) before undertaking any final procurement activities and product selections, (progressing the detailed design from 80% to 100%). As part of the detailed design the SI will run a series of workshops to finalise the device types.

Once the **detailed design report (34)** has been approved will commence procurement of all Group 2 & 3 devices, infrastructure and solutions. The SI also needs to be preparing a staging environment in preparation for the devices arriving.

In parallel, procurement of any Group 4 software solutions should be undertaken by the facility digital sub-programme Group 4 Stream Lead. This may include:

- additional licencing for existing solutions.
- professions services by vendors or the local/regional technical SMEs to reconfigure / extend and existing solutions.
- software and professional services to implement any new local solutions.

Note: Group 4 may require multiple Project Managers and workstreams to deliver the many application solutions within group 4. One of the first activities will be to capture the existing critical requirements and 'as is' **workflows (38)** at a high level.

An analysis of the existing facilities reports against future facility report requirements will be completed resulting in a prioritised list of required reports.

During this phase the DIDC must:

- Monitor all Group 1 and 2/3 procurement ensuring all requirements have been addressed and the product selection is aligned with the detailed design.
- Provide input into **FF&E specifications (31)** as required.

Monitor Group 5

During this phase the Group 4 Workstream Lead should continue monitoring any applicable Group 5 programmes to ensure alignment with the digital blueprint and coordination with the facility digital sub-programme. Attention at this stage should focus on any procurement activities required to implement group 5 solutions at the new facility.

Key activities, deliverables and timing

The approximate duration of the phase is 12 months. The key activities and deliverables of this phase are summarised below. "Start" and "End" indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**Programme control**				

ID	Key activities	Start	End	Completed by	Templates & tools
1.1	Control and report on status of the programme including schedule, budget, risk and quantity.	1	12	PMO Manager	**Highlight Report (17)** **Checkpoint Report (17a)** **Schedule (09)** **Budget (07)** **Risk & Issues Register (18)** **Decisions Register (18a)** **Document Register (18b)**
1.2	Appointment of a Training Manager and additional resources (Project Managers, Business Analysts, Technical & Clinical SMEs) under each of the workstreams.	1	6	HR Officer	**Resourcing Plan (15)**
1.3	Coordination of procurement across each of the workstreams.	3	12	Procurement Officer	**Procurement Plan (32)**
1.4	Develop detailed test Strategy & plan inc procuring test lab.	9	12	Test Manager	**Test Strategy & Test Plan (36)**

ID	Key activities	Start	End	Completed by	Templates & tools
1.5	Draft Project Plans and capture critical 'as is' workflows as well as any other key plans such as data migration	1	12	Project Managers	**Project plan (8)**
2	**Change and engagement**				
2.1	Continue stakeholder engagement and communications.	1	12	C&E Manager	**Change & comms plan (20)**
2.2	Commence development of the digital workflows.	3	12	DSDC Manager/s	**Digital workflow (38)**
2.3	Draft Training Plan	6	12	Training Manager	**Training plan template (37)**
3	**Procurement**				
3.1	Appoint a SI preferably under the MC, alternatively via a RFP directly to the facility digital sub-programme.	3	9	Group 2/3 Stream Lead	RFP **Systems Integrator Scope (29),** Bill of quantities, Procurement instructions, Draft contract Facility designs, Response document, Response pricing spreadsheet.
3.2	Updates Detailed Design Report and develop BOMs.	9	9	SI	**Detailed Design Report (34)** Bill of Materials

ID	Key activities	Start	End	Completed by	Templates & tools
3.3	Run any addition procurement processes and finalise product selection.	9	12	SI	RFI, RFQ, RFP, contracts
3.4	Procure any Group 4 software and vendor professional services	3	12	Group 4 Stream Lead	RFI, RFQ, RFP, contracts
3.5	Monitor all Group 1 and 2/3 procurement ensuring all requirements have been addressed and the product selection is aligned with the detailed design.	3	12	DIDC	**Digital detailed design report (34)**
3.6	Provide input into FF&E specifications as required.	1	12	DIDC	**Digital FF&E Specification (31)**
	Monitor Group 5				
4.1	Monitor and review any National / Regional programmes to ensure alignment with the digital blueprint and coordination with the facility digital sub-programme.	1	12	Digital SPD	**Updated Dependency Register (18c)**

Table 23 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Main Contract		3

Dependency	Responsible	Timing
FF&E Procurement Scope and Plan	New Health Facility Programme SRO	3
Models of Care		3
Service profiles		3

Table 24 Phase dependencies

Resources and costs

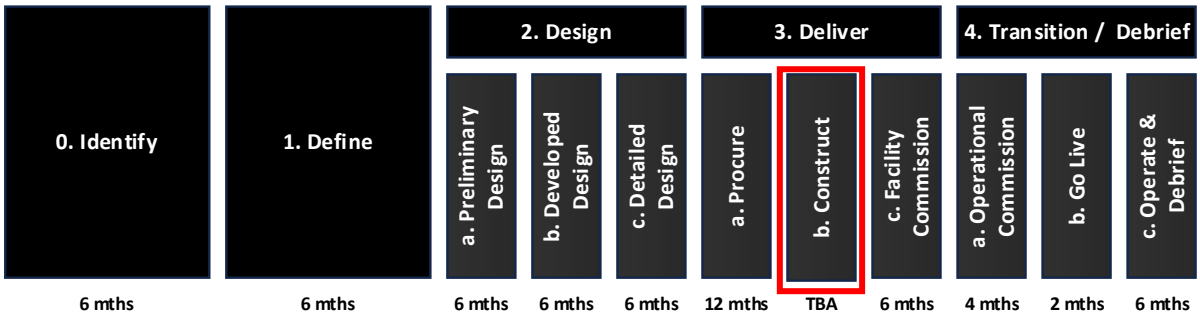
At the commencement of this phase a Training Manager and additional resources (Project Managers, Business Analysts, Technical SMEs) will be appointed under each workstream.

Also during this phase, the Systems Integrator will be appointed and commence activity. Note, although the infrastructure, equipment and software solutions will be procured during this phases costs equipment and vendor services should not be expected until the following phase.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	12 months		
	Digital SPD	12 months		
	PMO Team	12 months		
	Change and Engagement Team	12 months		
	Group 1 Team	12 months		
	Group 2/3 Team	12 months		
	Group 4 Team	12 months		
	BAU digital team	12 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			
Phase total cost estimate				

Table 25 Phase cost estimates

3.b Deliver – construct



Overview and objectives

The key objectives of the phase are to complete the installation and integration of all infrastructure and equipment in the prototype lab then commence onsite installation. At the same time commence the detailed planning, design build and configuration / reconfiguration and initial testing of all new and existing software solutions in a separate software test environment.

Approach

Programme & project control

During this phase the sub-programme should be controlled by the PMO and formal reporting should continue to occur including schedule, budget, risk and quality.

The project managers should work with the relevant vendors and team members to finalise all **project plans (08).** The project plans will inform if any additional resources are required to successfully deliver all infrastructure and applications for the new facility.

Change and engagement

During this phase the Change and Engagement (C&E) Manager should request the workstreams to draft **department / service area change & engagement plans, (20b).** These will be used to plan out how to best manage change & engagement for specific departments, services area and/or projects. In addition the **change, engagement & communication strategy (20)** should now be executed. This is likely to include building a large team of volunteer 'change champions' and leveraging these champions to prepare staff in their departments for the change. The **communication plan (20a)** should now be regularly used to communicate the changes that are coming so as the business areas can start preparing.

A Business Change Impact Assessment (BCIA) should be undertaken for all major software solutions using the **BCIA Register template (70)**. The BCIA highlights changes caused by digital that will impact people, processes or technology and enables meaningful actions to be documented regarding how to minimise the impact of the change, e.g. via training, communications, role reallocation etc. Mitigations should be planned for all identified changes that have a medium or high impact in the **transition activity register, (TAR) (55).** Once all BCIAs have been completed the results should be summarised at a high level in the **digital BCIA summary (70a)**. Note, once the people aspect of the change is known, union engagement should occur. The **BCIA TAR Guide (55a)** provides instructions for these activities.

As vendor specific solutions become known the Training Manager should finalise the **Training Needs Analysis (33)** and finalise the **Training Plan (37)**. As **business rules (53)** and **workflows (38)** are finalised the relevant **policies, procedures and work instructions (46)** should be drafted/updated. The project teams should also commence building the **training materials (43)** as the solution designs become approved. The plan to define the scenarios that will be used for **dress rehearsals (44)** needs to be drafted.

Also at this time, the Digital Service Design & Commissioning (DSDC) Manager/s should finalise development of the **digital workflows (38)**.

Detailed Design & Configuration

Once selected, vendors should run detailed design and configuration workshops for each technology component across each of the workstreams. All **workflows (38)** will be completed during this stage by the digital project workstreams. Configuration workshops will confirm **vendor specific design decisions (41)** / **configuration specifications (47)** including naming conventions, informed by a **reference data management plan (39)** and **tool (40)** managed by the PMO, screen layout, workflow (informed by the digital workflows), group memberships, business rules, etc to enable collection of the master data to build out the systems

For each technology component workshops should result in vendor specific design decisions (41), shop drawings, **configuration specifications (47)** as appropriate, and **software integration requirement specifications (26)**.

A 'reference data team' is recommended to be employed to ensure consistency of data standards across the programme.

As there will inevitably be more reports requested than budget allows. It is important to capture all report requirements and establish a **business reporting governance group (71)** that is empowered to agree on the prioritised list of reports to be developed by go-live. Design and configuration of new reports can then commence.

Prototype lab

Once procurement is complete the SI must establish a prototype lab in which all Group 1, 2/3 infrastructure will be installed, integrated and factory acceptance tested prior to the facility being available for access. Use of a prototype lab significantly de-risks the facility digital sub-programme by ensuring all based configuration and integration issues are resolved prior to accessing the facility. Along with sufficient space to house the digital infrastructure the prototype lab must have WAN connection to the facility ICT network.

Once the prototype lab has been established, and at least 12 months prior to Practical Completion (PC) all Group 1, 2/3 infrastructure should be installed by the relevant vendors including the base configuration and interfaces as described in the **digital detailed design report, (34)**. This is followed by Factory Acceptance Testing (FAT) witnessed by representatives of the facility digital sub-programme.

Onsite installation

At least 9 months prior to Practical Completion (PC) the communications rooms must be complete and the site available for early access to the SI and their vendors.

The SI will be responsible for reviewing the communications rooms and recommending acceptance to the facility digital sub-programme. To be considered "complete" communications rooms must be clean and dust free, have all cabling terminated, be cooled (airconditioned), be powered (including UPS) and be monitored.

Upon acceptance of the communications rooms and successful completion of all FAT in the prototype lab, the SI will commence onsite installation of the group 2 / 3 infrastructure. This will start with core infrastructure (network, telephony systems, etc) and be followed by deployment of lose equipment (PCs, printers, etc) as areas become progressively available.

In parallel the SI will also support integration of Group 1 and FF&E infrastructure and equipment.

Software Solutions Configuration

During this phase extension / reconfiguration of existing solutions and build / configuration or new software solutions will commence. These activities can occur offsite at the location of the facility digital sub-programme team.

Tools to enable the extract, transformation and load of data to new systems need to be built during this stage. A **data migration plan (50)** is recommended to be created to plan this activity.

System Testing

The test Manager should oversee and coordinate testing across all Digital workstreams. At this point in time the Test Manager should be finalising the **Master Test Strategy and Plan (36)** and supporting the project workstreams to develop their individual test plans. Once the SI has completed factory acceptance testing the prototype lab will be handed over to the Test Manager and reconfigured as a Test Lab. **Test scripts (42)** and test data will be prepared for Group 4 applications and loaded into Test Lab and then Unit, System and Functional testing will be completed.

Digital Health Check

A formal **third digital health check (51)** will be conducted to confirm the digital sub-programme is ready to successfully enter testing.

Group 5

At this time any applicable Group 5 programmes should commence configuration of the new National / Regional software solution for the new facility site. This will be managed by the National / Regional team and monitored by the Group 4 Stream Lead.

Key activities, deliverables and timing

The duration of the phase is dependent on the construction scope and will vary significantly from programme to programme however for the purpose of this guide the duration is assumed to be 24 months.

Key activities and deliverables of this phase are summarised below. “Start” and “End” indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**Programme control**				

ID	Key activities	Start	End	Completed by	Templates & tools
1.1	Control and report on status of the programme including schedule, budget, risk and quantity.	1	24	PMO Manager	**Highlight Report (17)** **Checkpoint Report (17a)** **Schedule (09)** **Budget (07)** **Risk & Issues Register (18)** **Decisions Register (18a)** **Document Register (18b)**
1.2	Complete and approve all Project Plans	1	12	Project managers	**Project plan (8)**
1.3	Finalise Test Strategy & Plan	1	24	Test Manager	**Test strategy & plan (36)**
1.4	Develop Test Scripts	12	24	SMEs	**Test scripts (42)**
2	**Change and engagement**				
2.1	Continue stakeholder engagement and communications.	1	24	C&E Manager	**Change, Engagement & Communication Strategy (20)** **Communication Plan (20a)** **Departmental and Service Area Change and Engagement Plans (20b)**

ID	Key activities	Start	End	Completed by	Templates & tools
2.2	Finalise the digital workflows and draft business rules	1	24	DSDC Manager/s	**Digital workflow (38)** **Business Rules (53)**
2.3	Complete Business Change Impact Assessments	6	24	Business Analysts	**BCIA Register (70)** **Digital BCIA Summary (70a)** **Transition Activity Register (55)** **BCIA TAR Guide (55a)**
2.4	Commence development of end user training material & dress rehearsal plan	12	24	Training team	**Training Needs Analysis (33)** **Training Plan (37)** **Training materials (43)** **Dress rehearsal plan (44)**
2.5	Draft updates to policies, procedures and work instructions	12	24	SMEs	**Policies, procedures and work instructions (46)**
3	**Configuration**				
3.1	Run configuration workshops for each technology component across each of the workstreams	1	3	SI / vendors	

ID	Key activities	Start	End	Completed by	Templates & tools
3.2	Document site specific designs, shop drawings or configuration guides as appropriate	3	6	SI / vendors	**Software Integration Requirement Specification (26)** **Vendor Specific Design Decisions (41)** **Configuration Specification (47)**
3.3	Document all Master and Reference data	1	12	Data Quality Manager	**Reference Data Management Plan (39)** **Reference data tool (40)**
4	**Prototype lab**				
4.1	Establish a prototype and staging lab	1	6	SI	
4.2	Apply base configuration and integration as detailed in the Integration Matrix.	12	16	SI / MC / Vendors	
4.3	Perform Factory Acceptance Testing (FAT).	16	17	SI / MC / Vendors	**Test plans (36)**, **test scripts (42)**,
5	**Onsite installation**				
5.1	Communications rooms ready.	18	18	MC	

ID	Key activities	Start	End	Completed by	Templates & tools
5.2	SI confirmed comms rooms meet completion criteria.	18	18	SI	
5.3	SI to commence onsite installation of the group 2 / 3 infrastructure.	18	22	SI	
5.4	SI support integration of Group 1 and FF&E infrastructure and equipment.	18	24	SI	
6	**Software solutions**				
6.1	Commence the documentation, build and configuration / reconfiguration of all new and existing software solutions.	7	24	Vendors	**Vendor Specific Design Decisions (41)** **Configuration Specification (47)**
6.2	Execute Data Migration Plan	12	24	SMEs	**Data migration plan (50)**
7	**Group 5**				
7.1	Commence configuration of the new National / Regional software solution for the new facility site	12	24	National / Regional Team	**Updated Dependency Register (18c)**
8	**Digital Health Check**				

ID	Key activities	Start	End	Completed by	Templates & tools
8.1	Conduct Digital Health check to confirm readiness to formally enter testing	12	18	Digital SPD	**Construct Phase Digital Health Check 3 (51)**

Table 26 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Communications rooms complete	MC	Minimum of 9 months prior to PC
Early access to the facility		

Table 27 Phase dependencies

Resources and costs

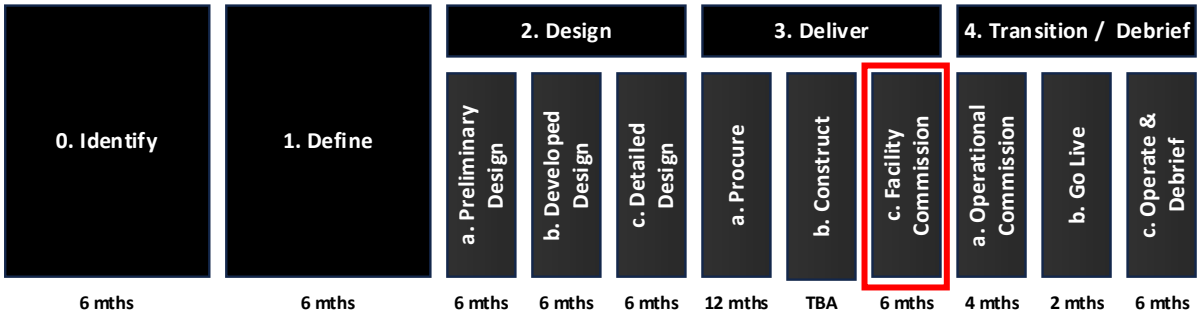
Additional training resources will be required at this phase to develop training material and commence delivery.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	24 months		
	Digital SPD	24 months		
	PMO Team	24 months		
	Change and Engagement Team	24 months		
	Group 1 Team	24 months		
	Group 2/3 Team	24 months		
	Group 4 Team	24 months		
	BAU digital team	24 months		
Consultants	Digital Infrastructure Design Consultant			

Category	Details	Duration	Effort / FTE	Cost estimate
	Systems Integrator			
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			
			Phase total cost estimate	

Table 28 Phase cost estimates

3.c Deliver – facility commission



Overview and objectives

The key objectives of the phase are to complete the onsite installation, base configuration and sitewide integration of all digital infrastructure, equipment and software solutions to enable the facility to achieve Practical Completion (PC). Practical completion is defined by the facility being technically completed to the point where the facility is built and cleaned and equipment can commence to be moved in and initial 'in-situ' testing can occur.

Approach

Programme control

During this phase the sub-programme should be controlled by the PMO, and formal reporting should continue to occur including schedule, budget, risk and quality.

Change and engagement

During this phase the change champions should be actively preparing their departments for the change. Super Users for the more complex systems such as the EMR also need to be nominated. At least two super users should be identified to ensure succession planning.

All **training material (43)** needs to be in a final draft state and ready to pilot.

The training team should undertake “train the trainer” sessions with each of the technology vendors to pilot the training and draft end user training materials and quick reference guides. Post pilot, all training materials need to be finalised during this stage.

The system that will be used to manage training logistics to be agreed and tested using the ‘train the trainer’ courses.

Final Build

All software solutions should complete final build post resolution of issues identified during the previous phase of testing. All **‘As Built’ documentation (49)**, **Standard Operating Procedures, Technical Operating Procedures (46)**, **Quick Reference Guides (43a)** and Knowledge Base Articles, **Business Continuity processes (45)** etc should be nearing completion. **Workflows (38)** and associated **business rules (53)** need to be approved.

The Digital Commissioning Managers need to ensure packaging of apps have been completed, (it is recommended to group packages by profiles, e.g. nursing, allied health etc) so as end to end environment testing can be completed.

A first draft of the **Transition Readiness Plan (54)** and **Transition Activity Register (55)** should be created to document all the activities that will need to occur to smoothly transition each application to the new environment.

The first draft of the **Go-Live plan (56)** should be created. This plan dictates which services are transitioned in which order. It also captures the support components such as the command centre logistics, support rostering requirements etc.

The first draft of the Operational Support and Handover Plan (57) should be created which specifies which parts of the operational organisation which look after the different technologies and how they will be transitioned as well as any changes to the service management tool, service catalogues etc.

Onsite installation and testing

During this phase the SI must complete onsite installation, base configuration and systems testing of all Group 2 / 3 infrastructure.

In parallel the SI must also complete integration of Group 1 and FF&E infrastructure and equipment.

Once Group 4 software solutions have completed system, unit and functional and smoke testing they should now be moved into the integration test environment and tested for compatibility with all other relevant applications.

End to end testing of the applications also needs to occur in the environment together with performance testing, capacity testing and penetration testing.

Upon successful completion of integration testing User Acceptance Testing needs to be completed. All defects need to be resolved to meet the testing exit criteria and the Summary Test Report approved.

A release management plan needs to be developed that enables the approval for all systems to move from testing into production. It is recommended a dedicated Release Manager is employed to create the release management plan and to manage the execution of the plan.

Once onsite installation has been completed the MC will co-ordinate a series of site-wide integration tests which representatives from the facility digital sub-programme, DIDC and SI must participate in and witness.

Finally, prior to PC, the SI and facility digital sub-programme team should ensure that all technology components have been tested by users and completed UAT. The data migration processes need to be validated.

Key activities, deliverables and timing

The approximate duration of the phase is 6 months. The key activities and deliverables of this phase are summarised below. “Start” and “End” indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**Programme control**				
1.1	Control and report on status of the programme including schedule, budget, risk and quantity.	1	6	PMO Manager	**Highlight Report (17)** **Checkpoint Report (17a)** **Schedule (09)** **Budget (07)** **Risk & Issues Register (18)** **Decisions Register (18a)** **Document Register (18b)**
1.2	Manage testing across the workstreams.	1	6	Test Manager	Testing Strategy & Plan (32)
1.3	First draft Operational Support and Handover Plan	1	6	Transition Manager	Ops Supt & Handover Plan (52)
2	**Change and engagement**				

ID	Key activities	Start	End	Completed by	Templates & tools
2.1	Continue stakeholder engagement and communications.	1	6	C&E Manager	
2.2	Pilot End User Training, dress rehearsals and training logistics system	1	6	Training team	**Training Materials (43)** **Quick Reference Guides (43a)** Learning Management System, Dress Rehearsals (40)
2.3	First draft of Transition Activities, (TAR)	1	6	Project Managers	**Transition Readiness Plan (54)** **Transition activity register (55)**
2.4	First draft of Go-Live Plan	1	6	C&E Manager	**Go Live Plan (56)**
2.5	Finalise updates to workflows, business rules, Policies, procedures and work instructions	1	6	SMEs	**Workflows (38)** **Business Rules (53)** **Policies, procedures, work instructions (46)**
3	**Onsite installation and testing**				

ID	Key activities	Start	End	Completed by	Templates & tools
3.1	Complete onsite installation, base configuration of all Group 2 / 3 infrastructure.	1	2	SI	**As Built Documentation (49)** SOPs/TOPs, KBAs
3.2	Complete systems testing of all Group 2 / 3 infrastructure.	2	3	SI	Test Plans, Test scripts Test Reports
3.3	Complete integration of Group 1 and FF&E infrastructure and equipment.	1	4	SI	As Built Documentation SOPs/TOPs, KBAs
3.4	Deploy Group 4 and Group 5 software solutions onsite including desktop packages.	3	4	Group 4 Project Managers	As Bulit Documentation SOPs/TOPs, KBAs
3.5	Complete systems testing of all 4 and Group 5 software solutions.	5	5	Group 4 Project Managers	Test Plans, Test scripts (32,38) Test Reports (53)
3.6	Manage site-wide integration tests, performance and capacity tests + penetration testing	5	6	MC	Test Plans, Test scripts (32,38) Test Reports (53)
3.7	Complete UAT on all technology component across all workstreams.	6	6	MC / SI / Group 4 Project Managers	Test Plans, Test scripts (32,38) Test Reports (53)

ID	Key activities	Start	End	Completed by	Templates & tools
3.8	Exit testing	6	6	Test Manager	Test Summary Report (53)
3.8	Draft Release Management Plan	1	6	Release Manager	Release Management Plan (54)
3.9	Draft Business Continuity Plan (BCP)	1	6	C&E Manager	**Business continuity plan (45)**

Table 29 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Early access to the facility	MC	1
Workforce appointed	New Health Facility Programme SRO	3
Completion of Group 5 programmes and readiness for onsite deployment	National / regional programme teams	3
Learning Management System available	Service Planning / Ops Commissioning Sub Programme Manager	3

Table 30 Phase dependencies

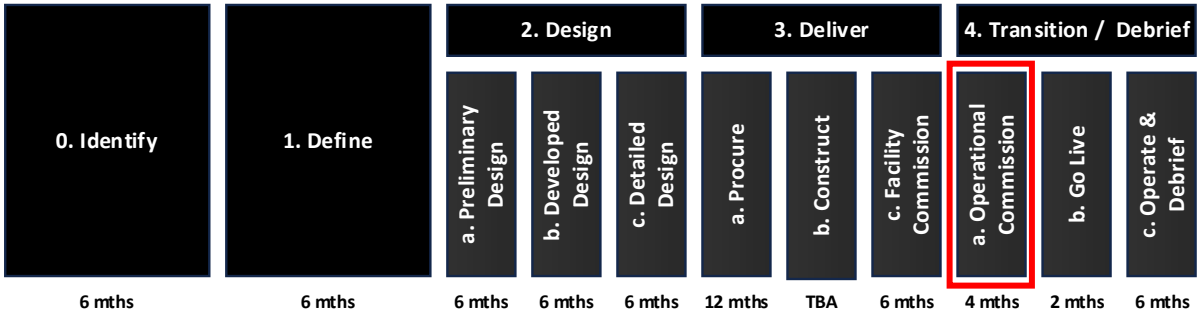
Resources and costs

No additional resources required during this phase.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	6 months		
	Digital SPD	6 months		
	PMO Team	6 months		
	Change and Engagement Team	6 months		
	Group 1 Team	6 months		
	Group 2/3 Team	6 months		
	Group 4 Team	6 months		
	BAU digital team	6 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			
Phase total cost estimate				

Table 31 Phase cost estimates

4.a Transition / Debrief – operational commission



Overview and objectives

The key objectives of the phase are to complete the final configuration of all digital infrastructure, equipment and software solutions, complete scenario testing / dress rehearsals and prepare for “go live”.

Approach

Programme control

During this phase the sub-programme should be controlled by the PMO and formal reporting should continue to occur including schedule, budget, risk and quality.

As the facility prepares to “go live” the PMO must execute a 16 week go-live readiness checklist (55) and participate in the boarder “Go/No Go” framework, providing evidence of digital readiness across all workstreams including:

- testing results – all technology components complete FAT, system, integration and UAT with no outstanding priority defects
- training results – all staff have received the training associated with their roles
- digital service designs implemented – all technology components and configuration has been deployed as defined in the digital service designs and they have accepted by the service managers
- clinical risk assessment associated with the introduction of any new digital solutions.

The Release Manager will execute the Release Management Plan to manage all applications via the relevant Change Advisory Boards, (CABs) to move them from the non-production environment into production. Once in production the Test Manager will execute the Production Validation Test Plan (56) to confirm all applications are working as expected in the production environment.

Change and engagement

During this phase the Change and Engagement (C&E) Manager should support the Change Champions to execute their Business Readiness Checklists. This will consist of a series of

activities each department needs to complete from T-12 weeks to go-live to confirm their department is ready.

The C&E should execute the Digital pre-Go-Live readiness Assessment which will help to inform fine tuning of the engagement and support plans.

All End User Training sessions need to be scheduled in the learning management system, attendance recorded, and requisite capability assessed to ensure safe understanding of how to use the new systems.

Release Folder directory with Quick Sheets and Service Desk Help Desk document for access, and basic navigation of the tools.

Digital dress rehearsals and simulation training should also be scheduled and executed with multiple repeat sessions offered to enable staff to gain confidence. Note: The increased complexity of digital systems such as Electronic Medical Record Systems benefits significantly from the ability to provide simulation training. As such, consideration should be given to keeping some or all of the simulation rooms post project.

The Training Report must be approved to confirm enough Users have been trained.

Final marketing and go live communications disseminated including how to get support.

Commissioning

As operational commissioning occurs, and staff commence populating the facility all digital workstreams must apply final configuration to their technology components in the form of adds / moves / changes based on requests from user and co-ordinated by the Digital Service Design and Commissioning Managers. This is most likely to also include population of the workforce into the relevant systems and migration of any data to new systems.

During this phase a broader series of integrated scenario tests / dress rehearsals will also be coordinated by the C&E Stream confirming digital readiness of the facility. Business continuity plans must also be tested to confirm they are fit for purpose and to ensure the new staff know what to do in the event of a downtime.

The Release Manager must ensure all changes to enable the technology to go into production are approved and all run sheets are executed to transition the technology into production.

All ‘As Built’ documentation (49), Standard Operating Procedures, Technical Operating Procedures, Quick Reference Guides and Knowledge Base Articles, Business Continuity processes etc should by now be completed.

The Digital sub-Programme Manager must ensure that all critical, high and medium transition activities have been completed or have an agreed workaround in place.

The data needs to be extracted transformed and loaded into the new systems.

Finally, towards the end of this phase the Digital Service Design and Commissioning Managers must work with each of the service managers to achieve “sign off” and confirm that all digital service designs have been implemented and all technology components have been supplied and configured as designed.

Prepare for Go Live

As the facility prepares to “go live” the Support and Transition Manager must:

- finalise and gain approval of the digital go live support plan.

- establish a digital command centre including physical location, telephony systems, PCs, printers, catering etc.
- finalise and ensure approval of all existing support processes and services, (including updating the Service Management Tool) to enable the new facility to be supported during the go-live hypercare period.
- publish policies, procedures, training materials, user guides, Quick Reference Guides, Knowledge Base Articles and support guides.
- organise packs for support staff and schedule floor walkers.
- ensure all consumables have been deployed, (labels, ink etc) and reordering process communicated.

Digital Health Check

At least 1 months prior to go-live a final digital health check 4 (57) will be conducted. This health check will confirm all Digital Sub Programme activities has been completed to enable a successful go-live.

Key activities, deliverables and timing

The approximate duration of the phase is 6 months. The key activities and deliverables of this phase are summarised below. “Start” and “End” indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**Programme control**				
1.1	Control and report on status of the programme including schedule, budget, risk and quantity.	1	6	PMO Manager	Highlight Report (16) RAID (17)
1.1	Provide evidence of digital readiness to the “Go/No Go” framework.	1	6	PMO Manager	Go/No Go checklist (58)
2	**Change and engagement**				
2.1	Disseminate final go-live marketing and communications	1	6	C&E Manager	
2.2	Complete user training sessions and dress rehearsals	1	6	Training team	
2.3	Develop Exemption Reports that identifies	1	6	C&E Manager	

ID	Key activities	Start	End	Completed by	Templates & tools
	faults and data quality issues.				
2.4	Business readiness confirmed	4	6	C&E Manager	Business Readiness Checklist (55)
2.5	Training report approved	4	6	C&E Manager	Training report (59)
3	**Commissioning**				
3.1	Apply adds / moves / changes based on requests from user and co-ordinated by the Digital Service Design and Commissioning Managers.	1	6	All workstreams	Change Request Template (60)
3.2	Coordinate scenario tests / dress rehearsals and business continuity testing	3	6	C&E Manager	Business continuity plan (41) Dress rehearsal (40)
3.3	Release Management Plan & Run Sheets executed, and all changes approved to enable system to transition to production	5	6	C&E Manager	Release management plan (54)
3.4	Achieve “sign off” of all digital service designs	5	6	Digital Service Design and Commissioning Managers	Digital service designs (21)
3.5	Production Validation Testing completed	4	6	Test Manager	Production Validation Test Plan (56)
4	**Prepare for Go Live**				

ID	Key activities	Start	End	Completed by	Templates & tools
4.1	Finalise and approve go live support plan.	3	6	Support and Transition Manager	Go live support plan template (51)
4.2	Establish a digital command centre.	3	6		
4.3	Update all existing support processes and services to recognise the new facility.	3	6		Operational Support & Handover Plan (52)
4.4	Publish policies, procedures user guides, training material, KBAs, QRGs and support guides.	3	6		Procedures, QRGs, KBAs, training material and support templates
4.5	Organise and schedule floor walkers	6	6		Go live roster and support pack (51)
5	**Digital health Check**				
5.1	Conduct Digital Health check to confirm readiness for go-live	3	6	Digital SPD	Health Check 4 (57)

Table 32 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Operational commissioning of the facility	New Health Facility Programme SRO	1
Transition plan / Go Live sequence available		3
Staff on-boarded and available for training		1
Go Live Transition Plan approved		2
Go Live Governance established		3

Table 33 Phase dependencies

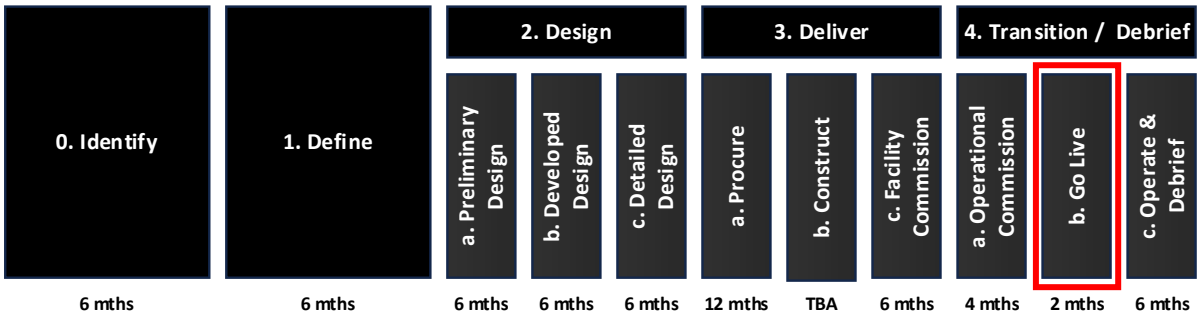
Resources and costs

No additional resources required during this phase.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	4 months		
	Digital SPD	4 months		
	PMO Team	4 months		
	Change and Engagement Team	4 months		
	Group 1 Team	4 months		
	Group 2/3 Team	4 months		
	Group 4 Team	4 months		
	BAU digital team	4 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			
Phase total cost estimate				

Table 34 Phase cost estimates

4.b Transition / Debrief – go live



Overview and objectives

The key objectives of the Go Live phase are to support all users and manage all digital infrastructure, equipment and software solutions as the facility “goes live”.

Approach

Programme control

During this phase the sub-programme should be controlled by the PMO and formal reporting should continue to occur including schedule, budget, risk and quality.

Change and engagement

During this phase the Change and Engagement (C&E) Manager should switch focus to go-live support including focusing on support trends and providing daily top issues/tips and tricks. The training team should provide additional training as required.

Go live support

During go live the Transition Manager must:

- Manage the command centre ensuring all priority incident are resolved.
- Coordinate stand up meetings with floor walkers and stream leads to ensure timely resolution of all incidences.
- Coordinate Go-Live Governance meetings.
- Recommend the appropriate time to “stand down” and cease the hypercare support period.
- Ensure once production data is available all operational reports are validated before being released to the business.

Key activities, deliverables and timing

The approximate duration of the phase is 2 months. The key activities and deliverables of this phase are summarised below. “Start” and “End” indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**Programme control**				
1.1	Control and report on status of the programme including schedule, budget, risk and quantity.	1	2	PMO Manager	Highlight Report (16) RAID (17)
2	**Change and engagement**				
2.1	Continue stakeholder engagement and communications.	1	2	C&E Manager	Go Live Daily Reports
2.2	Provide additional training as required	1	2	Training team	
3	**Go live support**				
3.1	Manage the command centre ensuring all priority incident are resolved.	1	2	Support and Transition Manager	Command Centre Plan (51) Support Roster
3.2	Coordinate stand up meetings with floor walkers and stream leads to ensure timely resolution of all incidences.	1	2		Go Liver Governance TORs and meeting agendas
3.3	Determine the appropriate time to “stand down” and cease escalated support.	1	2		

Table 35 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
Facility goes live	New Health Facility Programme SRO	1

Table 36 Phase dependencies

Resources and costs

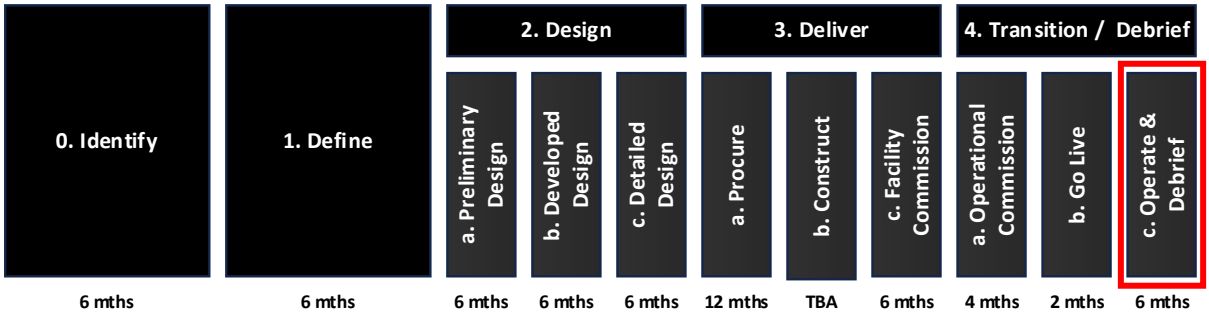
Additional floor walkers and support staff will be required during this phase.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	2 months		
	Digital SPD	2 months		
	PMO Team	2 months		
	Change and Engagement Team	2 months		
	Group 1 Team	2 months		
	Group 2/3 Team	2 months		
	Group 4 Team	2 months		
	BAU digital team	2 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			
Digital Software Solutions	Software			
	Vendor services			

Category	Details	Duration	Effort / FTE	Cost estimate
			Phase total cost estimate	

Table 37 Phase cost estimates

4.c Transition / Debrief – operate and debrief



Overview and objectives

The key objectives of the phase are to transition all digital infrastructure, equipment and software solutions to operations, perform programme debrief and programme closure.

Approach

Transition to operations

During this phase the Support and Transition Manager must work with all workstreams to ensure that the operational support and handover document has been approved, service catalogues/agreements updated, and the service management tools updated. For complex transition activities a 'knowledge transfer plan' may be of benefit.

The Project Managers must ensure the BaU staff taking over systems support have had sufficient knowledge handover sessions and are capable.

The Training Manager must also ensure the BaU support staff have been sufficiently trained and are capable of taking over the support and maintenance of the various technology components by completing knowledge handover sessions.

Once the above has been completed the Support and Transition Manager should work with the facility digital sub-programme team and the BaU support staff to "hand over" the digital environment and ensure a smooth transition.

Sub-programme closure

During this phase the PMO Manager must complete a sub-programme debrief, capturing lessons learnt and completing all sub-programme closure activities.

Note: the implementation of digital technology into new facilities is a complex and major undertaking. The follow-on actions identified in the project closure report may be significant

enough to warrant a follow on ‘optimisation project’. It is also recommended to run a staff survey three to six months post go-live to identify additional pain points that could further inform the need for an optimisation project.

Key activities, deliverables and timing

The approximate duration of the phase is 6 months. The key activities and deliverables of this phase are summarised below. “Start” and “End” indicate the months when the activities should start and end based on month 1 being when the phase commences.

ID	Key activities	Start	End	Completed by	Templates & tools
1	**Transition to operations**				
1.1	Ensure all document is complete.	1	3	PMO Manager	
1.2	Ensure BaU staff have been sufficiently trained, ensure hand over documentation to Service Desk of adding new users, basic navigation to the tool.	1	3	Training Manager	
1.3	Ensure a coordinated “hand over” from the facility digital sub-programme team to BaU support staff.	3	6	Support and Transition Manager	
2	**Sub-programme closure**				
2.1	Complete sub-programme debrief.	1	3	Digital SPD	
2.2	Capture lessons learnt.	1	3		Lesson learnt (61)
2.3	Complete all sub-programme closure activities, draft and gain approval of the Digital sub-programme closure report	3	6		Programme Closure Report (62)

Table 38 Phase activities and deliverables

Dependencies

To complete the digital activities defined in this phase the digital sub-programme is dependent on the following items outlined below. Timing indicates the month when they are required based on month 1 being when the phase commences.

Dependency	Responsible	Timing
New health facility programme closure occurs	New Health Facility Programme SRO	6

Table 39 Phase dependencies

Resources and costs

A number of resources will be off boarded at the commencement of this phase.

Category	Details	Duration	Effort / FTE	Cost estimate
Internal resource	Senior Responsible Officer (SRO)	6 months		
	Digital SPD	6 months		
	PMO Team	6 months		
	Change and Engagement Team	6 months		
	Group 1 Team	6 months		
	Group 2/3 Team	6 months		
	Group 4 Team	6 months		
	BAU digital team	6 months		
Consultants	Digital Infrastructure Design Consultant			
	Systems Integrator			
	Assurance / other			
Digital Infrastructure	Equipment (hardware / software)			
	Vendor services			

Category	Details	Duration	Effort / FTE	Cost estimate
Digital Software Solutions	Software			
	Vendor services			
			Phase total cost estimate	

Table 40 Phase cost estimates

Appendix A - templates, tools, guides and standards register

ID	Document	Type	Format	Workstream	Phase	By	Purpose
1	**Digital Programme Assessment**	Tool	Excel	PMO	0	FDSP	Assesses the project scope, scale and complexity to determine the digital scope
2	**Current State Assessment**	Tool	Excel	PMO	0	FDSP	Defines the current state of technology components
3	**Digital Blueprint**	Template	Word	PMO	0	FDSP	Defines the target state of the new facility and scope of the digital workstream
4	**Digital Components Guide**	Guide	Word	N/A	0	N/A	A register of recommended digital products or solutions for each digital component
5	**Kick off Meeting**	Template	Word	PMO	0	FDSP	An agenda template for the initial kick off meeting
6	**Digital sub-Programme Plan**	Template	Word	PMO	1	FDSP	Defines the plan to guide the digital workstream
7	**Digital sub-Programme Budget**	Template	Excel	PMO	1	FDSP	Defines the budget for the digital workstream
8	**Project Plan**	Template	Word	1, 2/3, 4	1	FDSP	Defines the plan to guide the digital workstreams
9	**Digital sub-Programme Schedule**	Template	Project	PMO	1	FDSP	Gantt chart schedule of activities and milestones
10	**Group 1 Design Consultant Brief**	Sample	Word	1	1	FDSP	Sample of the digital scope to be included in the Group 1 consultants brief
11	**Group 1 Digital Integration Requirements**	Standard	Word	1	1	DWST	Standard which outlines the minimum criteria for passive group 1 integration
12	**Organisational Readiness Assessment for Digital Change Survey – pre programme**	Template	Word	C&E	1	FDSP	Assess the business change and readiness associated with implementing the digital blueprint
13	**Digital Define Phase Health Check 1**	Tool	Excel	PMO	1	FDSP	A tool for assessing readiness to enter the design stage

ID	Document	Type	Format	Workstream	Phase	By	Purpose
14	**Terms of Reference**	Templates	Word	PMO	2.a	FDSP	Templates used to define the terms of reference for the various Digital sub-programme committees, authorities and working groups
15	**Digital Sub Programme Resourcing Plan**	Template	Word	PMO	2.a	FDSP	Defines the Digital sub-programme workforce required to deliver the digital workstream and strategy to recruit the sub-programme team
16	**Digital sub-Programme Quality Management Plan**	Template	Word	PMO	2.a	FDSP	Document advising how quality will be built into the sub-program including management of issues, risks, assumptions, dependencies, documents, budget, decisions, programme reports etc
17	**Highlight Report**	Tools	Word	PMO	2.a	FDSP	Monthly highlight project & programme status reports
17a	**Checkpoint Report**						Weekly workstream and project status reporting
18	**Risk & Issue Register**	Tool	Excel	PMO	2.a	FDSP	Tool used to record issues and risks
18a	**Decision Register**	Tool	Excel	PMO	2.a	FDSP	Tool used to record key decisions
18b	**Document Register**	Tool	Excel	PMO	2.a	FDSP	Tool used to record all formal documents and their key attributes
18c	**Dependency Register (18c)**	Tool	Excel	PMO	2.a	FDSP	Tool used to record dependencies
18d	**Stakeholder Engagement Register**	Tool	Excel	PMO	2.a	FDSP	Tool to record all formal stakeholder engagements
19	**Business Requirement Specification**	Template	Word	PMO	2.a	FDSP	Defines how requirements are managed across the digital workstream
19a	**Requirements Traceability**	Tool	Excel	PMO	2.a	FDSP	A tool which can be used to manage digital requirements
20	**Change, Engagement & Communications Strategy**	Template	Word	C&E	2.a	FDSP	Defines how the strategy to manage the change including engagement and communications
20a	**Communications Plan**	Template	Word	C&E	2.a	FDSP	Plans out the communications
20b	**Departmental / Service Area Change & Engagement Plans**	Template	Word	C&E	3.a	FDSP	Template used to create the detailed change and engagement plan for specific departments, service areas and/or projects.
21	**Induction Guide**	Template	PPT	PMO	2.a	DWST	Template used to on-board new digital sub-programme members to the team
22	**Functional Requirement Specification**	Template	PPT	2/3 & 4	2.b	FDSP	Defines the functional specification for digital requirements
23	**Digital Departmental Design**	Template	Word	2/3, 4	2.a	FDSP	Defines the digital requirements by service line / department

ID	Document	Type	Format	Workstream	Phase	By	Purpose
24	**Training Strategy**	Template	Word	C&E	2.a	FDSP	Defines the strategies and plan that will be used to ensure the workforce is trained to confidently perform their roles using the new technology.
25	**Digital Design Consultant Specification**	Sample	Word	2/3	2.a	FDSP	Sample specification used to engage a Digital Design Consultant
26	**Software Integration Requirement Specification**	Template	Word	4	3.b	FDSP	Defines the software integration/interface requirements for Group 4
27	**Digital Preliminary Design Report**	Template	Word	2/3, 4	2.a	DIDC	Defines the scope and high level design along with functional, technical and integration requirements for Group 2/3.
28	**Digital Developed Design Report**	Template	Word	2/3, 4	2.b	DIDC	Defines the scope and high level design along with functional, technical and integration requirements for Group 2/3.
29	**Systems Integrator Scope**	Template	Word	2/3	2.b	DIDC	Defines the professional services scope of work to be undertaken by a Systems Integrator
30	**Software Solution Specification**	Template	Word	4	2.b	FDSP	Defines the scope and high-level design along with functional, technical and integration requirements for Group 4
31	**Digital FFE Specification**	Sample	Excel	2/3	2.b	DIDC	A sample of digital requirements to be included in all FFE specifications
32	**Procurement Plan**	Template	Word	PMO	2.c	FDSP	Defines the procurement scope and approach for the digital workstream
33	**Training Needs Analysis**	Template	Word	C&E	2.c	FDSP	Template to assist in understanding the future training requirements so as training material can be built
34	**Digital Detailed Design Report**	Template	Word	2/3, 4	2.c		Defines the scope and high level design along with functional, technical and integration requirements for Group 2/3.
35	**Digital Design phase health check 2 tool**	Tool	Excel	PMO	2.c	FDSP	A tool for assessing readiness to exit the Design phase and commence procurement
36	**Testing Strategy & Plan**	Template	Word	PMO	3.a	FDSP	Defines the strategy that will be used for testing and enables planning of the required activities
37	**Training Plan**	Template	Word	C&E	3.a	FDSP	Template used to plan all required training including creation of training materials, training environments, training logistics system etc.
38	**Digital Workflows**	Template	Visio	2/3, 4	3.a	FDSP	Defines clinical workflow in relation to new digital infrastructure and solutions

ID	Document	Type	Format	Workstream	Phase	By	Purpose
39	**Reference Data Management Plan**	Template	Word	C&E	3.a	FDSP	Defines how reference data will be managed across the digital workstream
40	**Reference Data Tool**	Tool	Excel	C&E	3.a	FDSP	A tool which can be used to manage reference data
41	**Vendor Specific Design Decisions**	Template	Word	2/3, 4	3.b	FDSP	A sample site specific design and configuration guide
42	**Test Scripts**	Template	Word	2/3, 4	3.b	FDSP	Scripts used to articulate the scenarios to be tested, test steps and actual results
43	**Training Materials**	Template	Word	C&E	3.b	FDSP	Templates used to develop training materials and quick reference guides.
43a	**Quick Reference Guides**	Template	Word	C&E	3.c, 4.a	FDSP	Template used to create Quick Reference Guides
44	**Dress Rehearsal Plan**	Template	Word	C&E	3.b	FDSP	Template used to define the steps and logistics for each scenario that is going to be rehearsed.
45	**Business Continuity Plan**	Template	Word	C&E	3.c	FDSP	Template used to document how the facility continues to operate from a digital perspective in the event of a downtime.
46	**Policies, procedures, work instructions**	Template	Word	1, 2/3, 4	3.b	FDSP	New/updated policies, processes and work instructions
47	**Configuration Specification**	Sample	Word	2/3, 4	3.b	FDSP	A sample site specific design and configuration guide
48	Report Specification & Designs	Template	Word	4	3.a, 3.b, 3.c, 4.a	FDSP	Designs specifications for new operational reports
49	**As Built Documentation**	Sample	Word	2/3, 4	4.a	SI	A sample "as built" document and operating manual
50	**Data Migration Plan**	Template	Word	4	3.a, 3.b, 3.c, 4.a	FDSP	Plan(s) to migrate data from legacy systems to new systems
51	**Digital Construct phase health check 3**	Tool	Excel	PMO	3.b	FDSP	A tool for assessing readiness to exit construct phase and commence testing
52	Current & Future state workflows	Template	Word	2/3, 4	3.a, 3.b, 3.c	FDSP	Capture ‘As Is’ and future ‘To Be’ workflows
53	**Business Rules**	Template	Word	2/3, 4	3.a, 3.b, 3.c	FDSP	Capture the future state agreed business rules
54	**Transition Readiness Plan**	Template	Word	C&E	4.b	FDSP	Defines the approach used to confirm readiness to transition

ID	Document	Type	Format	Workstream	Phase	By	Purpose
55	**Transition Activity Register**	Tool	Excel	2/3, 4	3.c, 4.a	FDSP	Provides a list of all digital program transition activities that must be completed prior to go-live
55a	**BCIA TAR Guide**	Guide	PPT	2/3, 4	3, 4	FDSP	Guide on how to complete the business change impact assessments and transition activities
56	**Go Live Plan**	Template	Word	C&E	3.c,4.a	FDSP	Defines the process to manage go live support
57	Operational Support and Handover Plan	Template	Word	C&E	4.a	FDSP	Defines the process to transition to operations
58	Test reports	Template	Word	PMO	4.a	FDSP	Defines the results of testing
59	Release Management Plan	Template	Word	PMO	3.c, 4.a	FDSP	Defines the process to release new digital infrastructure and solutions into the environment
60	Business Readiness Checklist	Tool	Word	C&E	4a	FDSP	Provides a list of change readiness activities each department needs to complete and enables confirmation of business readiness
61	Production Validation Testing	Template	Word	PMO	4.a	FDSP	Plan to test all systems in the production environment
62	Digital Operational Commissioning health check 4	Tool	Excel	PMO	4.a	FDSP	A tool for assessing readiness to exit operational commissioning and go-live
63	Business Readiness for Digital Change Survey – pre-go-live	Tool	Word	C&E	4.a	FDSP	A tool for assessing the organisations readiness for digital change pre-go-live which will be used to inform fine tuning of the final go-live change engagement and support preparations
64	Go/No Go checklist	Template	Excel	PMO	4.a	FDSP	Checklist confirming digital readiness
65	Training report	Template	Word	C&E	4.a	FDSP	Defines the outcome and status of training
66	Change request template	Template	Excel	PMO	4.a	FDSP	Template used to capture change requests
67	Lessons Learnt	Template	Word	DSPD	4.c	FDSP	Template for capturing lessons learnt
68	Programme Closure Report	Template	Word	DSPD	4.c	FDSP	Closure report comparing actual vs planned delivery as well as summarised lessons learnt and follow-on actions
69	**Change & Engagement Status Report**	Template	Excel	C&E	2.b	FDSP	Report for capturing the level of engagement and any engagement issues with the business units impacted by the change
70	**Business Change Impact Assessment Register**	Tool	Excel	C&E	3.b	FDSP	Enables a gap analysis by comparing the ‘as is’ state to the ‘to be’ state so as the level of change can be assessed and ‘transition activities’ planned to ease the change

ID	Document	Type	Format	Workstream	Phase	By	Purpose
70a	**Digital BCIA Summary Template**	Template	Word	C&E	3.b	FDSP	Summarises the results of the BCIA to enable a high level overview of the major areas of change and associated impacts that the programme will need to account for.
71	**Business Reporting Committee Terms of Reference**	Example	Word	4	3.b	FDSP	Terms of reference to enable steering the creation/migration of operational reports