NHS Shetland

Meeting:	**NHS Shetland**
Meeting date:	**25th June 2024**
Title:	**Digital Strategy & Delivery Plan 2024-2029**
Agenda reference:	**Board Paper 2024/25/21**
Responsible Executive/Non-Executive:	**Lorraine Hall, Director of Human Resources and Support Services**
Report Authors:	**Craig Chapman, Head of Information and Digital Technology**
	Katie McMillan, PMO Projects Support Officer
	Digital Strategy Delivery Group

1. Purpose

This is presented to the Board/Committee for:

- Approval

This report relates to:

- Digital Strategy 2024-29
- Digital Delivery Plan 2024-29

This aligns to the following NHSScotland quality ambition(s):

- Safe
- Effective
- Person-centred

2. Report summary

2.1. Situation

This report introduces a final version of the Digital Strategy and Delivery Plan for NHS Shetland covering the next five years.

2.2. Background

A draft Digital Strategy was developed and presented to the NHS Shetland Board in December 2023. At this time the board was advised that the strategy would be taken through a period of stakeholder engagement through existing governance structures.

This has now been completed and a final strategy developed. The strategy will be fully reviewed in three years time.

An accompanying Delivery Plan has been developed with a focus on the first 2 years of planned activities. This plan will be reviewed annually

For both the Strategy and the Delivery plan the approval route shall be through the Digital Governance Group and the Finance and Performance Committee.

2.3. Assessment

2.3.1. Communication, involvement, engagement and consultation

Stakeholder engagement was undertaken between January and May 2024. A large number of groups were consulted including:

Executive Management Team

Community Health and Social Care Management Team

Hospital Management Team

Medical Consultants

Digital Governance Group

Information Governance Group

Senior Leadership Team

Area Partnership Forum

GP Cluster

Themes were collated and analysed to ensure the goals of the strategy aligned to these.

2.3.2. Equality and Diversity, including health inequalities

Not applicable

2.3.3. Route to the meeting

The final Digital Strategy has been considered by the following groups listed in paragraph 2.3.1

2.4. Recommendation

- **Approve** – Board members are asked to approve the Digital Strategy and Digital Delivery Plan.

3. List of appendices

- Appendix 1 – Digital Strategy
- Appendix 2 – Digital Delivery Plan

Digital Strategy: A Digital Vision for Healthcare in Shetland

2024-2029

Approval date:	
Version number:	**Version 1.2**
Author:	**Craig Chapman and Katie McMillan**
Review date:	**1st July 2027**
Security classification:	**Not Protected**

If you would like this document in an alternative language or format, please contact Corporate Services on 01595 743069.

Document reference number:4

NHS Shetland Document Development Coversheet*

Name of document	Digital Strategy: A Digital Vision for Healthcare in Shetland 2024-2029		
Document reference number	HRSTR004	**New or Review?**	New
Author	Craig Chapman		
Information Asset Owner			
Executive lead	Lorraine Hall		
Review date	01/07/2025		
Security classification			

Proposed groups to present document to:		
Digital Governance Group	Community Health & Social Care Ops Management	NHS Board
Information Governance Group	Executive Management Team	
Hospital Management Team	Finance & Performance Committee	

Date	Version	Group	Reason	Outcome
12/12/2023	1.0	NHS Board	Final Approval (FA)	Approved (A)
15/12/2023	1.0	IJB Seminar	For information only (FIO)	Recommend proceeding to next stage (PRO)
08/05/2024	1.1	Executive Management Team	For information only (FIO)	Recommend proceeding to next stage (PRO)
14/05/2024	1.1	Information Governance Group	For information only (FIO)	Recommend proceeding to next stage (PRO)
14/05/2024	1.1	Digital Governance Group	For information only (FIO)	Recommend proceeding to next stage (PRO)
21/05/2024	1.1	Community Health and	For information only (FIO)	Recommend proceeding to next stage (PRO)

		Social Care Ops Management		
22/05/2024	1.1	Hospital Management Team	For information only (FIO)	Recommend proceeding to next stage (PRO)
23/05/2042	1.1	Finance and Performance Committee	Final Approval (FA)	Approved (A)
25/06/2024	1.2	NHS Board	Final Approval (FA)	

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*To be attached to the document under development/review and presented to the relevant group

Please record details of any changes made to the document in the table below

Date	Record of changes made to document
04/12/2023	Version 1 – Draft Document.
01/04/2024	Version 1.1 – Re-Draft with addition of staff engagement summary and update of priorities/goals to reflect engagement.
17/06/2024	Version 1.2 – Reformatting.

Contents

1. Digital Vision for Healthcare in Shetland

The digital vision for NHS Shetland:

"Empower people to participate in their own health and care through thoughtful implementation and adoption of digital ways of working together.

Focus our collective efforts on technologies which improve health outcomes, enhance staff experience and empowerment, and promote operational efficiency and sustainability"

2. Introduction

Digital technology is increasingly becoming part of people's everyday lives, including in health and care. Technology that is used in this way is referred to as digital health. Digital health is ever evolving but includes technologies that are currently being used in the clinical setting, such as: electronic patient records, appointment booking and reminder systems, medical consultations via video link, clinician and patient portals and more complex systems which use algorithms from large clinical datasets to support clinical decision making. Digital health is not restricted to a clinical setting and is often used within the home by patients themselves with the aim of prevention, self-management or reducing the need for the patient to interact with services in the traditional way. This is of particular benefit to patients who live remotely or have reduced mobility and find it difficult to attend appointments. Examples of digital health used by patients outside the clinical setting include blood pressure monitors and blood glucose monitors, information from which can be reported back to the clinician via online patient portals.

Digital technologies like those mentioned can empower patients to be more involved in their health and the management of their conditions and provide the opportunity to support staff with transformational change to ensure we are providing a safe and sustainable service.

In Shetland, as nationally, health and care services are experiencing increasing demand due to an ageing population, and challenges to service delivery due to workforce and financial constraints. Digital development will play a significant role in meeting these challenges. This strategy will build on the national vision and aims for digital health and care in Scotland by setting out the local vision and goals for digital technology in NHS Shetland over the next 5 years.

This strategy provides the direction for an ***ambitious but realistic*** programme of work that will focus on making better use of the technology already available and embrace opportunities for innovation that are fit for Shetland and our services.

3. Scene Setting

This local digital strategy has been developed within the framework of "Scotland's Digital Health and Care Strategy: Enabling, Connecting, Empowering"[1] and the local NHS Shetland Strategic Delivery Plan, of which digital is identified a key enabler in realising the strategic intent to *"Provide easy access to high quality, sustainable and person-centred care as close to home as*

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[1] Scotland's Digital Health and Care Strategy: Enabling, Connecting, Empowering. (2021). Scottish Government and COSLA. Found at: Enabling, Connecting and Empowering: Care in the Digital Age (www.gov.scot)

possible and make a meaningful difference to the building blocks of good health in our communities".

3.1 Current Digital Landscape

Nationally

In October 2021 Scottish Government published its latest Digital Health and Care Strategy[1] which has strong focus on digital inclusion, addressing inequalities and ensuring that health and care workforce have the knowledge and technical skills to not only work digitally but to engage with service users via digital means as well. The strategy's six priorities are: digital access, digital services, digital foundations, digital skills and leadership, digital futures and data-driven services and insight. All of them are aimed to be delivered via the national delivery plan, Care in the Digital Age - Delivery Plan 2023- 2024[2], which informs work we carry out locally in Shetland.

Regionally

NHS Shetland has been part of the NHS Scotland North Regional Team delivering collaboratively various digital programmes of work across the six northern boards. In 2023 the first Artificial Intelligence Strategy for Health & Social Care[3] has been published by the region highlighting the need for adoption of the AI technologies via increased partnership and targeted investment.

Locally

The NHS Shetland Clinical and Care strategy[4] set out a strategic aim to improve access, promote person-centred care and reduce inefficiencies by making best use of new technologies. Across clinical services this is to be achieved by:

- Increasing use of remote/digital appointments
- Increasing use of digital therapy options (primarily in Mental Health)
- Give patients the options to manage their health and access online
- Improving information sharing via joined up systems to
- Using the data and information we have to improve outcomes
- Developing our workforce, to optimise opportunities and use of existing systems
- Explore and promote digital technology solutions as they emerge

Additionally, our partners at Shetland Islands Council are also in the process of developing their own digital strategy (in progress) which will include priority areas within the health and social care partnership.

3.2 Evaluation of Current Technological Infrastructure, Workflows and Challenges

Core Digital Infrastructure

NHS Shetland has a single Digital Team that oversees the digital infrastructure for all sites and services. This has brought key advantages, for example:

[2] Care in the Digital Age - Delivery Plan 2023- 2024. (2023). Scottish Government and COSLA. Found at: Care in the Digital Age: Delivery Plan 2023-24 - gov.scot (www.gov.scot)

[3] Spending time where it counts An Artificial Intelligence Strategy for Health & Social Care in the North of Scotland 2023-2027. (2023). NHS Scotland North Regional Team. Found at: Spending Time Where it Counts- An AI Strategy for the North of Scotland.pdf (nhsscotlandnorth.scot)

[4] Clinical and Care Strategy 2021-2031. (2021). NHS Shetland. Found at: Microsoft Word - Clinical and Care Strategy Draft v3 (nhsshetland.scot)

- A system-wide approach to the network and server infrastructure in place resulting in a unified approach to implementation, maintenance and modernisation of technology
- A standard suite of equipment available to NHS Staff including desktops, laptops, tablets, mobile devices and peripherals such as printers, pagers and dictation devices. This standardisation delivers efficiency through increased reliability and compatibility, and reduced complexity
- A standardised approach to the software tools and applications in use

NHS Shetland has sites with small numbers of staff with many in remote areas. This creates challenges in delivering network connections with the capacity and reliability required for the services we deliver. Furthermore, it reduces confidence in the viability of embracing newer technology or making technology more critical to safe healthcare delivery.

A dynamic approach to network challenges that meets the needs of NHS Shetland has been adopted. This has been achieved by engaging with local partners and commercial telecommunications providers to implement network communications beyond the 'catalogue' approach that fits the needs of populous, mainland regions.

Access to reliable 4G mobile network services and home broadband/fibre is a continual challenge across Shetland, making remote and home working often difficult for staff.

Clinical Systems

NHS Shetland utilises national systems across all its services where these are available, and procures other systems where required. National and regional procurement and shared hosting is now the first approach taken to fulfilling any digital technology need.

This provides support with the procurement and implementation of complex systems in small boards from the larger boards and National Services, but it does lead to challenges where the timescales and scale of adoption of new technology are out of sync with local priorities and resource capacity.

NHS Shetland has in place many of the core healthcare systems that form part of the national Digital Healthcare Strategies and Workplans. Digital systems supporting clinical services are widely used in all clinical areas, however there remains areas where technology gaps exist, and addressing these must be a key priority of the Digital Strategy.

Some of the areas where NHS Shetland has core digital functionality in place are:

- GP Patient Management and Medical Records
- Hospital Patient Management
- Hospital Electronic Prescribing and Medicines Administration (HEPMA)
- Labs and Diagnostics
- Medical Imaging and Scanning
- Clinical Correspondence
- Referrals and Patient Vetting

Areas where NHS Shetland has gaps for core digital functionality that will be a priority within the Digital Strategy:
- Electronic ordering of tests (Order Comms)
- Community Patient Management (e.g. Community Nursing)

3.3 Areas for Improvement and Growth

Digital Access

Patients and their families are increasingly looking to engage with health and care providers digitally, in a way that suits them, at a time that suits them. For this to happen, we are investing in technology to enable this, for example:
- Making it easier to book appointments, seek advice, or order medications online
- Providing reminders and cancellation options for patient appointments
- Online secure access to patients' own records

Integration

Healthcare is provided by many different services, in many locations. An overarching priority for a Digital Strategy is to ensure healthcare providers have access to the right information, at the right time, in the right location. Integrating the many systems in place is key to achieving this. This will be achieved through:
- Developing the systems we currently use to fully integrate with all the other systems they need to, including those in use by other providers.
- Embracing standardisation of clinical systems across Scotland and ensuring we leverage national technology as it becomes available.

Having patient information held across multiple systems; each with its own specialised functions is necessary, and not an issue provided a consolidated view of all the information can be accessed where and when needed. This is essentially what an electronic patient record is, rather than a single system.

Ensuring information can be captured, processed and stored digitally without the need for paper processes is essential to realising a fully electronic patient record. Ideally this will be achieved without the use of digital tools designed to replicate paper processes, but by integrating the systems that are part of delivering healthcare.

Optimisation vs Implementation

Many of the existing systems in place have functionality beyond what has been implemented up until now. It is important to make use of existing digital capability, as well as embracing new technology. Striking a balance between digital optimisation and new project implementation is crucial for sustainable growth and innovation.

Digital optimisation involves refining and enhancing our existing digital assets and processes. This approach ensures that we maximise the efficiency, user experience, and value of our current digital ecosystem, which is fundamental for maintaining staff efficiency in the services they deliver and demonstrating best value.

On the other hand, new project implementation is about embracing emerging technologies and ideas to expand our capabilities and explore new innovative ways of working. While this requires investment and entails risk, it is essential for long-term growth and staying ahead in a rapidly evolving digital landscape.

Our strategy will therefore allocate resources and attention to both areas: continuously improving and optimising our current digital offerings for immediate benefits, and judiciously investing in new projects that align with our Board vision and strategic intent.

3.4 Our Impact on the Environment

Digital technology has a major role in addressing some issues around climate change and healthcare provision - reducing travel through virtual appointments and remote monitoring; reducing the size of buildings by removing paper record stores and using electronic patient records; reducing our reliance on large data warehouses by using cloud infrastructure. We must embed a culture which considers how we positively impact on climate change through procurement, projects and equipment, and adopt a leadership role in embedding the circular economy.

3.5 Digital Maturity Assessment of Services in Shetland

The Scottish Government/COSLA Digital Maturity Assessment was conducted as a self-assessment amongst organisations within the Scottish health and social care landscape in Q2 2023. NHS Shetland and Shetland Islands Council submitted a joint assessment, covering both an organisational response and a staff survey. Overall results were published in December 2023[5]

Through the staff self-assessment arm, with **over 109 responses,** it has provided essential insight to experience of our people working in our services, and how their roles interact with digital on a day-to-day basis. Through further analysis, understanding across our workforce varies significantly, with limited understanding of truly digital ways of working.

Theme from feedback	Summary of Responses
Infrastructure and Equipment Concerns	Outdated or inefficient infrastructure in place, issues with new system implementations, and intermittent Wi-Fi across our sites.
Need For Training and Skill Development	Lack of training reported, with reliance on self-learning digital tools or receiving short notice for training sessions.
Workload And Efficiency Concerns	Increased workload from paper records potentially duplicating and driving inefficiency, along with a rise in the expectation to attend more online meetings and more meetings in general.
Positive Remarks and Acknowledgments	Positive feedback and commendation for the eHealth and infrastructure team's support.
System Integration and Compatibility	Challenges for staff navigating multiple systems and the limited updates to the slow and outdated GP IT systems.
Other Systems	Ensuring we acknowledge our non-clinical staff through gathering experience on use of digital workforce systems and administrative systems.

4.   Staff Engagement

Developing this strategy has been guided by the Digital Strategy Delivery Group, comprising of clinical, corporate and digital stakeholders. To develop this strategy we have engaged with many stakeholders from across NHS Shetland and the Shetland Health & Social Care Partnership, over a three month period from January-March 2024. Over 60 individuals have

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[5] Scottish Government/COSLA Digital Maturity Assessment for Health and Social Care: Summary of Findings. (2023). Scottish Government/COSLA. Found at: Digital-Maturity-Assessment-for-Health-and-Social-Care-2023.pdf (digihealthcare.scot)

contributed, including 30 people attending online focus groups. Highlights of our engagement with staff include:

Theme	Summary of Responses
Systems & Infrastructure	• Optimisation of the systems already in place • Improved interoperability of systems • Improved implementation of current or new digital systems, including better training and facilitation for staff who will be using them
Less Paper	• Automation of business processes where possible, less paper-based workarounds • Consistency in processes between services and directorates
Communications	• Increased transparency between the Digital team and the rest of NHS Shetland around digital projects, plans and the teams capacity to support staff • A new, clear process for the prioritisation of digital projects and implementation of new technology at an organisational level to enable whole system working
Data	• Easy access to the right data, when it is needed • Data presented in a useful and meaningful way

5.   Strategic Themes

These strategic themes represent the different aspects of our strategic intent and will support decision making by providing context around improvement, risk and resource management.
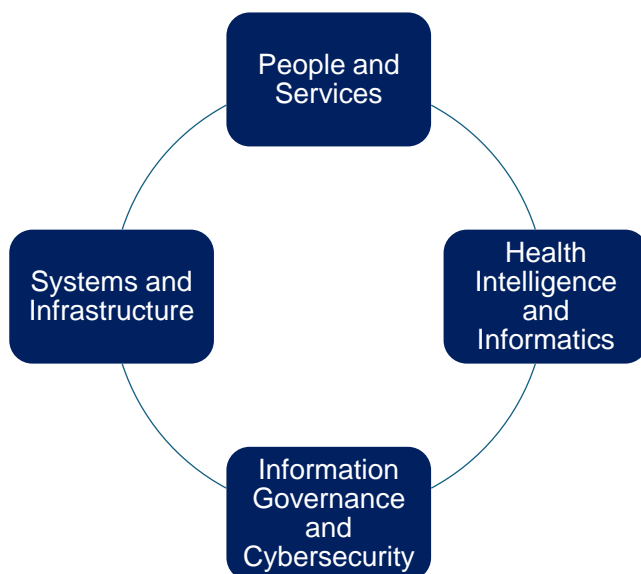
6.   Strategic Priorities

Person-Centered	Data Informed	Automated & Intelligent
Interoperable	Resilient & Sustainable	Effective Information Governance
Capable & Engaged Workforce	Business Systems	Partnership Working

6.1. Person-Centred

Person-centred care supports people to develop the knowledge, skills and confidence they need to more effectively manage and make informed decisions about their own health and health care. It is coordinated and tailored to the needs of the individual. Some examples of patient-centredness in relation to digital technology in particular are:

- Increased personal choice
- Access to your own health data
- Accessing services in that reflect your needs – when you need it, wherever you are

6.2. Data Informed

As an organisation, and as service providers, we use the data and information we have to provide better care, to understand where we are having an impact, and to make sure we are doing the right things by:

- Targeting resources by understanding population needs
- Targeting support by understanding individual needs
- Planning improvement by understanding change and impact

6.3. Artificial Intelligence (AI)

Scotland's National Artificial Intelligence strategy defines AI as:

Technologies used to allow computers to perform tasks that would otherwise require human intelligence.

The North of Scotland AI strategy[3] has subdivided AI into 4 interconnected disciplines:

i. **Robotics.** A robot is a device that senses its environment, processes that information and data to be able to perform tasks in the physical world. Examples in a health and care context would be Surgical or pharmacy robots or Unmanned Aerial Vehicles that deliver samples and medication.

ii. **Software process automation**. This refers to the use of software technology to carry out and manage repetitive tasks and processes without human intervention. Its primary goal is to streamline and optimise workflows, reduce manual errors, increase efficiency, and save time. This is often achieved through the use of tools like bots, and algorithms that can handle tasks such as data entry, processing transactions and managing emails. Examples in a health and care context would be automation of appointment scheduling, managing annual leave requests or recognising speech and turning it into text.

iii. **Machine Learning.** This is a method where computer algorithms improve automatically through experience and by using data. It enables systems to learn and make predictions or decisions without being explicitly programmed for specific tasks. This learning process typically involves recognizing patterns in data and adjusting program actions accordingly. Examples in a health and care context would be learning what makes a chest x-ray normal or using radiographs to diagnose dental caries in a tooth.

iv. **Predictive Analytics** This is the use of data to predict the future. Historical data and those obtained from other sources, such as the environment, can be used to construct a software model. The model is then compared against the unfolding reality and the model is refined as needed. As more data feeds are added, the model becomes more capable and better at predicting the probability of certain outcomes. Examples in a health and care context would be predicting bed occupancy or predicting which patients are at risk of deterioration.

As we carefully move into a new era in healthcare, the integration of AI into systems is no longer a beyond reach concept, instead a tangible reality. Currently, healthcare systems are trialling the initial steps of AI implementation, marked by the adoption of machine learning algorithms for diagnostic assistance, patient data management, and predictive analytics for disease trends. However, to fully realise our vision of a seamlessly integrated AI-driven healthcare system, we must focus on several key areas:

Firstly, the development and refinement of AI algorithms tailored to diverse healthcare needs is crucial. This involves extensive data collection and analysis, ensuring both accuracy and ethical considerations are prioritised.

Secondly, we need to invest in robust training for healthcare professionals, enabling them to effectively utilise AI tools. This will bridge the gap between technological innovation and practical application. Additionally, prioritising patient privacy and data security in AI systems is essential to maintain trust and compliance.

Lastly, health systems must work in collaboration with technology developers, healthcare providers, academic and research institutions and policy makers to ensure a cohesive approach towards integrating AI in healthcare, ultimately enhancing patient outcomes and operational efficiency. Embracing these steps will propel us towards a future where AI is an integral, trusted, and effective component of healthcare delivery.

6.4. Interoperability

Digital technologies can help information and communication to flow across an organisation, people and places – when successful can bring benefits for both staff and patients by reducing variation of care, improved patient safety, and a more efficient and sustainable service. However, often digital technology is used as a solution to individual/siloed problems without consideration made to the system as a whole. To achieve interoperable digital health, the King's Fund report[6] on interoperability in healthcare highlights three key aspects:

Technology: Challenges include fragmented systems and inconsistent standards across different organizations, hindering effective information sharing.

Relationships: Key factors involve navigating risk-averse information governance, addressing the shortage of analytical skills, and ensuring consistent interpretation of patient information across various staff and organizations.

Enabling Environment: This includes ensuring sufficient capacity for transformation, adapting workflows to new technologies, implementing supportive national policies, securing long-term funding, and establishing outcome-focused metrics.

Overall, successful interoperability requires a holistic approach that integrates technology, relationships, and a supportive environment.

6.5. Resillient and Sustainable

As services become more digitally enabled, they will be able to overcome disruptive incidents and threats to provide a continuity in patient care. This will be delivered via resilient telecommunications infrastructure and embedded business continuity systems that reduce return time objectives and periods of disruption. Furthermore, a resilience-orientated culture relating to cybersecurity awareness, planning and response will be embedded. There is an

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[6] Interoperability is more than technology: The role of culture and leadership in joined-up care. (2022) The Kings Fund. Found at: https://www.kingsfund.org.uk/publications/digital-interoperability-technology

opportunity for business continuity systems used across partnerships to align by utilising digital platforms, allowing a greater degree of interoperability.

6.6. Effective Information Governance

As data controller we will implement appropriate technical and organisation measures to ensure data security through best practice and compliance with GDPR and other regulatory frameworks, and appropriate use of data and systems. A proactive approach to data protection and privacy will be taken by identifying risks before they happen using Data Protection Impact Assessments and implementing technical and policy controls to mitigate risks where possible.

6.7. Capable and Engaged Workforce

Supporting staff to be digitally literate and confident using digital systems and solutions will develop an engaged and capable workforce. Digital literacy is described as "*those capabilities that fit someone for living, working, participating, and thriving in a digital society*". Being digitally literate includes understanding and being able to use specific business and clinical systems for day-to-day, but also more transferrable and conceptual skills that promote innovative thinking and an understanding of which tools to use, and when, so that the best quality person-centred care can be provided.

By improving digital literacy capabilities of health and social care colleagues, the optimisation of current systems and the uptake and adoption of new digital tools and technologies can be improved, and the provision of care transformed.

- Upskilling – effective training to ensure the workforce has the right digital knowledge and skills to enable them to do their jobs as effectively and efficiently as possible.
- Digital Facilitation – particularly when new systems or solutions are being introduced offering facilitation as part of the project management to ensure full implementation of the system through an engaged and knowledgeable workforce.
- Digital Champions – the role of a digital champion is to encourage confidence, understanding and motivation by empowering staff to use digital tools more effectively themselves and encouraging staff to pass that knowledge onto colleagues. Digital champions play an important role in empowering and supporting the workforce to be digitally literate and should work in departments across the organisation.

6.8. Partnership Working

Working closely with national, regional and local partners is imperative if the strategic goals and vision are to be achieved. This enables horizon scanning, effective planning and prioritisation of workload and avoidance of duplication of work.

6.9. Business Systems

There are a wide range of business systems and processes that support the day-to-day running and provision of healthcare services. These include, but are not limited to: HR, Payroll, staff training and appraisal, Office365.

Our strategy will aim to modernise our core business systems to support our workforce and develop simplified systems that enable staff to work to the best of their ability; provide training and support in using these systems efficiently, effectively and to their full functionality; procure digital solutions that meet the needs of staff, patients and third parties and remove paper from the process wherever possible.

7.   NHS Shetland's Digital Goals

Seven goals have been identified to enable the strategic vision to be realised and outcomes achieved, these goals are described here:

Digital Goal	Description
Digital Access & Inclusion	Ensuring equitable access to digital health and care services for all, addressing digital exclusion.
Person-Centred Digital Services	Developing digital services with a focus on user engagement and ease of use.
Resilient Digital Foundations	Building robust and secure digital infrastructure, with modern devices and network connections, underpinning all health and care services.
Empowered Digital Skills and Leadership	Investing in comprehensive training, digital literacy, and upskilling for the workforce, especially for clinicians and healthcare leaders.
Innovation & Digital Futures	Embracing innovation and a flexible approach to continuously enhance Shetland's digital capabilities.
Integrated Data-Informed Insights	Using data to provide actionable insights, support decision-making, and improve service quality, while ensuring integration with social care and other services.
Climate-Aware Digital Strategy	Incorporating sustainability into digital infrastructure and services, aiming for an environmentally responsible healthcare system.

8. Governance and Oversight

Figure 1 illustrates the current digital governance structure in NHS Shetland for decision making and reporting.
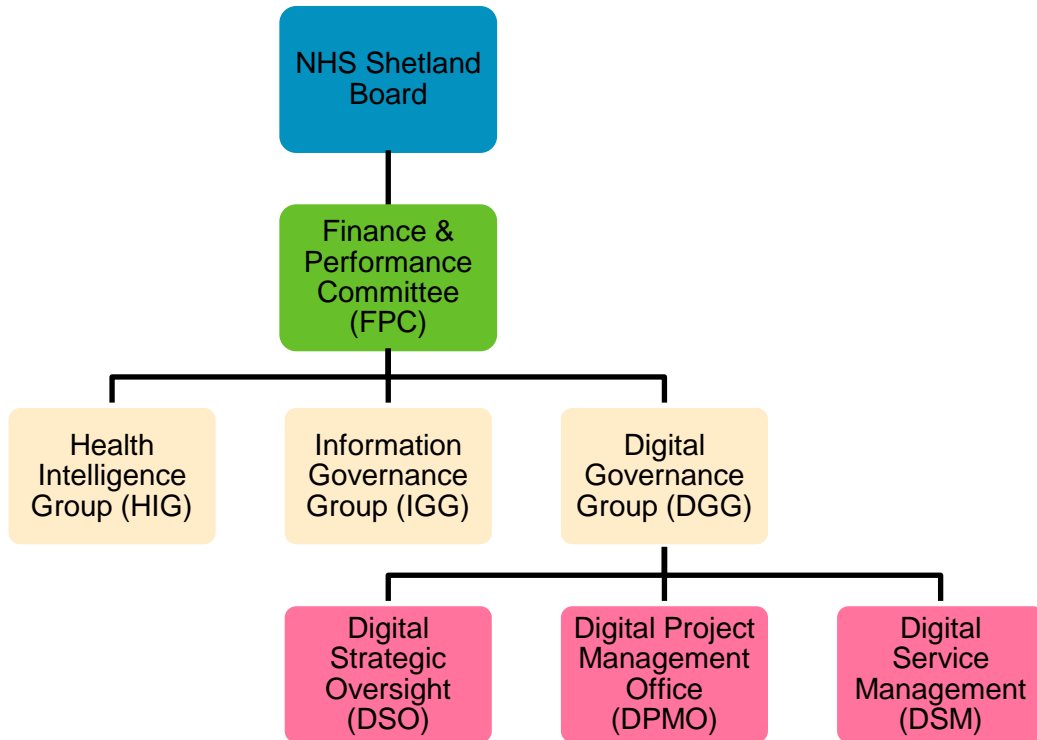

Figure 1 Current Digital Governance structure in NHS Shetland

From 2024 Digital and IT will test an annual "call for projects", which will give services an opportunity to submit proposals for review and prioritisation. This will form the basis of the annual digital delivery plan from 2025 onwards, alongside regional and national projects that have been identified and approved for local implementation.

Additionally, a process to enable staff to submit requests for digital projects to be considered outside of the aforementioned "call for projects" timeframe is being developed and is described in further detail within the Digital Delivery Plan.

9. Digital Delivery Plan

Following the strategy, a 3-year Digital Delivery Plan has been developed which will be kept under review and updated at least annually under the governance of the Digital Strategic Oversight Group (DSO), the Digital Governance Group (DGG) and the Finance & Performance Committee (FPC).

Appendix 1 Summary of Staff Engagement

A full summary of the staff engagement sessions can be found [here](#)

Digital Delivery Plan

2024-2029

Approval date:	
Version number:	**Version 0.4**
Author:	**Craig Chapman and Katie McMillan**
Review date:	**1st July 2025**
Security classification:	**Not Protected**

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Name of document	Digital Delivery Plan 2024-2029		
Document reference number	HRPLN004	**New or Review?**	New
Author	Craig Chapman		
Information Asset Owner			
Executive lead	Lorraine Hall		
Review date	01/07/2025		
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Date	Record of changes made to document
01/05/2024	Version 0.1 Draft Document.
21/05/2024	Version 0.2 Addition of detailed delivery plan tables and descriptors of projects.
17/06/2024	Version 0.3 Refinement of delivery plan tables and addition of digital skills section.
18/06/2024	Version 0.4 Reformatting.

Contents

1.   Introduction

The recently developed *Digital Strategy: A Digital Vision for Healthcare in Shetland*, provides the direction for an **ambitious but realistic** programme of work that will focus on making better use of the technology already available and embrace opportunities for innovation that are fit for Shetland and our services. In order to realise the strategic vision for digital within NHS Shetland, the Digital Delivery Plan has been developed.

The purpose of this Digital Delivery Plan is to detail the scope of work planned between 2024-2029, including timelines and key deliverables, with particular focus and detail placed on a rolling two year delivery plan that will be revised annually. This plan encompasses local, regional and national projects and includes business as usual projects through to the new innovative pieces of work.

The Digital Delivery Plan is a live document and will be reviewed and updated at least annually under the oversight of the Digital Strategic Oversight Group, the Digital Governance Group and the Finance & Performance Committee.

2.   Staff Engagement and Communication

Developing the Digital Strategy and this Digital Delivery Plan has been guided by the Digital Strategy Delivery Group, comprising clinical, corporate and digital stakeholders. The group have engaged with many stakeholders from across NHS Shetland and the Shetland Health & Social Care Partnership over a three month period from January-March 2024. Over 60 individuals contributed, including 30 people attending online focus groups. Highlights of our engagement with staff include:

Theme	Summary of Responses
Systems & Infrastructure	• Optimisation of the systems already in place • Improved interoperability of systems • Improved implementation of current or new digital systems, including better training and facilitation for staff who will be using them
Less Paper	• Automation of business processes where possible, less paper-based workarounds • Consistency in processes between services and directorates
Communications	• Increased transparency between the Digital team and the rest of NHS Shetland around digital projects, plans and the teams capacity to support staff • A new, clear process for the prioritisation of digital projects and implementation of new technology at an organisational level to enable whole system working
Data	• Easy access to the right data, when it is needed • Data presented in a useful and meaningful way

3.   Strategic Themes and Goals

The Digital Strategy identified four strategic themes which represent the different aspects of our strategic intent and will support decision making by providing context around improvement, risk and resource management.
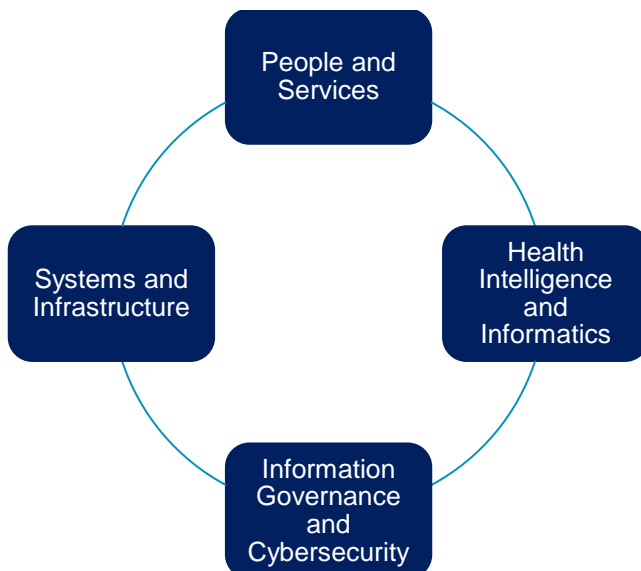
Additionally, seven goals were identified to enable the strategic vision to be realised and outcomes achieved, these goals are described here:

Digital Goal	Description
Digital Access & Inclusion	Ensuring equitable access to digital health and care services for all, addressing digital exclusion.
Person-Centred Digital Services	Developing digital services with a focus on user engagement and ease of use.
Resilient Digital Foundations	Building robust and secure digital infrastructure, with modern devices and network connections, underpinning all health and care services.
Empowered Digital Skills and Leadership	Investing in comprehensive training, digital literacy, and upskilling for the workforce, especially for clinicians and healthcare leaders.
Innovation & Digital Futures	Embracing innovation and a flexible approach to continuously enhance Shetland's digital capabilities.
Integrated Data-Informed Insights	Using data to provide actionable insights, support decision-making, and improve service quality, while ensuring integration with social care and other services.
Climate-Aware Digital Strategy	Incorporating sustainability into digital infrastructure and services, aiming for an environmentally responsible healthcare system.

4.   Projects

National

GPIT & DOCMAN

A new GP IT system, under the new national framework contract, will be implemented across Scotland in 2024-2026, with NHS Shetland's implementation likely to be within 2025-26, however this is not yet confirmed.

As part of the scope of work, the current Document Management System, DOCMAN, will be replaced with its cloud-hosted version to enhance workflow. This is expected to start in the latter half of 2024 as it is a dependency of the GP IT system implementation.

Endoscopy Reporting System

A new National Endoscopy Reporting System will be implemented to standardise endoscopy reporting and will provide accurate activity data, prospective endoscopy quality data and will

provide support for endoscopy and urology training. The reporting system will also optimise scheduling and booking efficiency through planned integrations with Board's clinical systems.

Child Health Programme

Originally part of the CHI programme, work is proceeding to update & modernise Child Health systems which sit on the legacy CHI infrastructure. By modernising the Child Health systems, a national and consistent approach will be delivered for managing Scotland's Child Health services. Underlying changes to database architecture will deliver improved data quality ensuring the safe and effective scheduling of children's health reviews, immunisations, screening programmes and health promotion.

Remote Health Pathways: Digital Dermatology

This service lets people upload images of their skin and report on their condition from a convenient place and at a time that suits them. The service allows two-way messaging between the patient and clinician and the information can be shared with people supporting the patient. It stops unnecessary travel to appointments and saves time for patients and staff.

PACs Replacement

The Picture Archiving and Communication System (PACS) is a key clinical component in the delivery of care and diagnosis. A new cloud-based PACs solution which will cover all acute radiology, orthopaedic and breast screening services was procured in 2023 with a 10-year programme of work to see the implementation and upscale of the new system currently in development by Scottish Government. Phase I of this programme will focus on ensuring the readiness locally for the implementation of a new system.

Agile Transformation – ANIA

It is intended to enable some capacity to take advantage of opportunities that arise as part of NHS Scotland's Accelerated National Innovation Adoption (ANIA) Pathway. This will require capacity within the organisation to work with national colleagues to deliver digital transformation opportunities.

Community Glaucoma Service

A national approach is being adopted to implementing digital systems to support the delivery of glaucoma services to patients.

Regional

Radiology Information System (RIS) Replacement

A new national approach to RIS will result in better co-ordination and management of radiology services, including tracking and issuing results to patients. An options appraisal is being developed in collaboration with all NHS Scotland Boards and is due to be published in December 2024.

Local

Hospital Electronic Prescribing & Medicines Administration (HEPMA)

HEPMA is a single digital solution for prescribing and managing medicines within hospital environments which will replace paper prescribing and administration systems within the hospital. The HEPMA software is a web-based application, meaning it is accessible to medical professionals from any device (PC, Laptop, Tablet) which is connected to the secure NHS network. Improvement in patient safety was the key driver for the HEPMA implementation.

Joint implementation is taking place across Boards within the North of Scotland region with Phase 1 having already been completed, the next phase will involve the complete rollout of HEPMA across all acute wards.

Order Communications Systems (Order Comms)

Order Comms is a digital system that allows diagnostic tests (pathology and radiology) to be ordered electronically, eliminating delays, bottlenecks and risks associated with paper-based systems. The first phase of Order Comms implementation will focus on requests for Medical Imaging from acute services.

Microsoft Office 365 Optimisation

Extension of M365 tools will transform the way our staff work and continue to maximise the opportunities from this investment. This optimisation will encompass several projects, the first two focusing on the creation of a new NHS Shetland intranet on the M365 SharePoint platform, and the migration of fileserver data to the cloud.

Morse

Morse supports interoperability with many NHS and Social Care platforms, including SCI Store, SCI Gateway, EDT, Orion Portal, TrakCare, M365 etc. Morse transforms the working practices of community healthcare professionals and improves patient safety through better visibility of patient information and increased communication between services and the ability to work offline in the Community. The first phase of the implementation of Morse will be in Community Nursing.

Electronic Patient Record (EPR)

EPRs enable digital communication, data input and image and data sharing and transferring and support the removal of paper-based processes and records from the system. This local process will involve a gap analysis to understand where digital records are not already in place or without plans in place to: 1. Replace paper with a digital application or; 2. Replace paper with eForms functionality.

Opera Theatre Management System Upgrade

Opera is a perioperative Theatre Management Solution that addresses the intelligent scheduling, planning, materials management, resource management and real time visibility of the entire Theatres function. Locally, the system needs upgraded to the latest version.

Patient Digital Communications

This programme encompasses roll-out of SMS (text) appointment reminder services and the ability for patients to accept, cancel and reschedule appoints. The programme then moves on to introduce the use of digital replacements for traditional paper-based letters for communication with patients.

Digital Dictation and Speech Recognition

Replacement of the current digital dictation system with a cloud-based version allowing clinicians and administrators to seamlessly work together to create and workflow clinical documentation. Speech Recognition will allow for faster and simpler flow of dictation through to final documents.

AI Proof of Concept Patient Signposting

Investigation of AI technology to provide first line signposting to appropriate services.

AI Proof of Concept Support Services

Investigation of AI technology for support services such as Digital Service Desk, Queries re Policy, and Procedure.

TrakCare – Maternity

NHS Shetland uses NHS Grampian's instance of Maternity Information Management system Badgernet. We will work with Grampian to ensure this system meets all our requirements, supports flow of patients, and integrates with other clinical services.

Security Improvement Programme

NHS Shetland continuously works to ensure its systems and data are held safely and securely. This includes making use of nationally available licences to deploy security tools.

Shetland Health Intelligence Platform (SHIP)

The purpose of the Shetland Health Intelligence Platform (SHIP) is to support improvement of healthcare delivery in Shetland by harnessing the rich data set and analytic capability available, to provide personalised, effective, and efficient care. One of the primary focus areas of SHIP is the management of long-term health conditions such as diabetes and hypertension. By leveraging real-time data, the platform will enable healthcare professionals to offer targeted interventions, thereby improving patient outcomes and quality of life. The platform aims to see reductions in indicators of morbidity, signifying better disease control, and an expanded reach of long-term condition care.

5. Digital Skills

There is not currently any formal structure or plan around one of our key goals - building empowered digital skills and leadership. In line with national thinking this is currently approached with a "Champions" model. However, there are significant challenges associated with this. A number of areas for improvement and risks have been identified that will be mitigated by *optimising* use of our current systems through making processes clear and

consistent and building confidence in use of systems. Currently these instances are addressed individually within projects or pieces of work, and there is a consideration around how to both strengthen the champion's model and ensure this is built into project work, or creating capacity within the system to upskill our workforce and build digital literacy. The needs in this area, as a follow-on from previous digital literacy work, will be scoped in 2024/25, with two test cases for optimising use of systems - Mental Health team use of TrakCare, and streamlining use of EMIS in Primary Care, in preparation for GPIT changes.

6.   Budget and Resources

As part of developing a business case for any digital project, where funding is required, this will need to be identified. This may be from several sources including regional or nationally funded programmes or local funding within NHS Shetland's core allocation.

Resourcing to deliver any digital initiative, for example project management, technical resource, stakeholder resource will need to be identified prior to a programme, project or smaller piece of work being undertaken.

7.   Governance and Oversight

Figure 1 illustrates the current digital governance structure in NHS Shetland for decision making and reporting. To enable short-, medium- and long-term outcome-based planning to take place for all digital projects and programmes a streamlined decision-making and prioritisation process is being developed. The new process will provide a whole system overview of all digital projects and programmes that are in progress and on the horizon. The aim is to ensure that projects are only resourced and prioritised if they can be shown to be strategically appropriate, funded and based on real patient's or staff's needs.
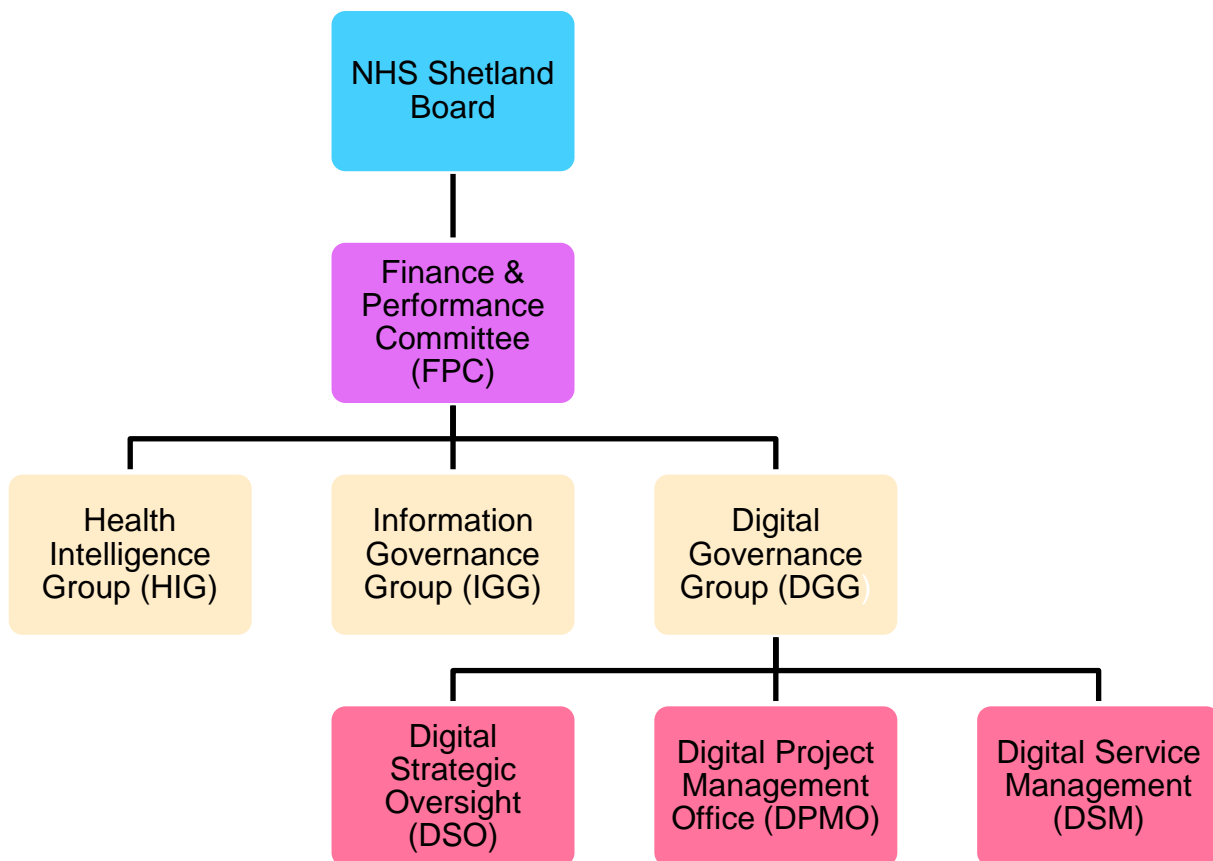
Figure 1 Current Digital Governance structure in NHS Shetland

From this year (2024) Digital and IT will test an annual "call for projects", which will give services an opportunity to submit proposals for review and prioritisation. This will form the basis of the 1-year digital delivery plan from 2025 onwards, alongside regional and national projects that have been identified.

Additionally, a process to enable staff to submit requests for digital projects to be considered outside of the aforementioned "call for projects" timeframe is being developed. Appendix illustrates the first version of this process, which has been developed in consultation with other Boards who are multiple versions into an iterative process. We acknowledge that this is something new and will need refined over time, this will be a collaborative approach between NHS Shetland staff and the Digital & IT teams.

This process is linked to both the National Digital Health and Care Strategy and the local Strategic Delivery Plan and will involve input from the following:

Digital, IT & IG Teams	Digital GP Lead
Digital Acute Lead	Director of Nursing
NMAHP Digital Lead	Finance
Strategic Planning	Laboratories
HSCP	Mental Health

8.   Conclusion

The purpose of this Digital Delivery Plan is to detail the scope of work planned between 2024-2029, including timelines and key deliverables, with particular focus and detail placed on a

rolling two year delivery plan. This plan encompasses local, regional and national projects and includes business as usual projects through to the new innovative pieces of work.

The Digital Delivery Plan is a live document and will be reviewed and updated at least annually under the oversight of the Digital Strategic Oversight Group, the Digital Governance Group and the Finance & Performance Committee.

Appendix 1 Detailed Delivery Plan

Projects for the next 2 years 2024-2026							
Project Size	**Title**	**Summary**	**Local / Regional / National**	**External Input Required**	**Area**	**Funding Status**	**SRO**
Medium	Order Comms: Medical Images	Implement Order Comms for Medical Imaging services in Trak	Local	NHS Grampian	Acute	Y	KC
Medium	Endoscopy Reporting System Phase I	Implement national endoscopy system and decommission Shetland system	National	NSS DaS	Acute	Y	KC
Medium	HEPMA – IDL	Implement discharge letters in CMM HEPMA system	Local	NoS HEPMA team	Acute	Y	KC
Small	EPR Scoping	*Scoping* of 'gaps' where digital records are not in place with plans developed to: 1. Replace paper with digital applications or; 2. Replace paper with eForms functionality	Local		All	N	KB
Medium	Patient Digital Comms Phase I	Implement SMS appointment reminders where possible	Local	Regional Collaboration	All	N	LH
Small	Child Health	Deliver local scope of the national modernisation of Child Health systems	National	NSS DaS	All	Y	KC
Medium	Digital Dictation & Speech Recognition	Replace current DD system with cloud-based version and implement Speech Recognition functionality	Local		All	TBA	KB

Project	Digital Dermatology	National Digital Dermatology	National	NHS CsFD	Acute	Y	JR
Small	OPERA upgrade	Upgrade version of OPERA Theatres Management System	Local		Acute	Y	KC
Small	M365 Data Platform Phase I Pilot Migration of shared data to cloud	Migration of fileserver data to M365 SharePoint. Includes business classification and records management obligations. Pilot site in Year 1	Local	NSS DaS	All	Y	LH
Large	MORSE Phase I Platform for Community & Disability Nursing	Implement Community Patient Management system firstly in Community and Learning Disability Nursing.	Local		Community	TBA	JR
Small	GPIT Phase I: Local pre-work	Replacement of EMIS with Vision GPIT platform.	National	NSS DaS	Community	Y	JR
Medium	Docman Replacement	Upgrade to latest DOCMAN document management platform.	National	NSS DaS	Community	Y	JR
Small	Community Glaucoma Service	National Programme	National	NSS DaS	Community	Y	JR
Large	RIS replacement	Replacement of NHS Grampian Radiology Information System	Regional	NHS Grampian	Acute	TBA	KC
Large	Security Improvement Programme	Acceleration project to align existing cybersecurity reporting to NIS Regulations	Local	NHS CCoE	Corporate	Y	CM
Medium	Shetland Health Information Platform (SHIP)	Health Intelligence platform to assist clinicians to support patients with Long Term Conditions	Local		Community	Y	AMcD

| Medium | Support Services Service Desk | Replacement platform for Digital, HR, OH, and Information service desks. | Local | | Support Services | N | LH |

Projects commencing from 2025 onwards

Project Size	Title	Summary	Local / Regional / National	External Input Required	Area	SRO
Large	MORSE Phase II	Roll-out to Phase II cohorts. To be confirmed from AHP and Mental Health	Local		Community	JR
Large	GPIT Phase II	Full roll-out of GPIT across all sites	National	Local implementation	Community	JR
Large	M365 Data Platform full rollout	Migration of data from local servers to M365	Local		All	LH
Large	M365 Intranet	Creation of new intranet on M365 platform	Local		All	BC
Medium	PACs Phase II	Migration of PACs to new supplier in a private cloud model	National	Local implementation	Acute	KC
Medium	Datix Replacement	Replacement of Risk Management System	National	Local implementation	Corporate	KB
Small	Scan For Safety	Implementation of national recording system for implanted devices	National	Local implementation	Acute	KB
Medium	Maternity – Trak	Implement use of Trak for Maternity for patient management, triage etc.	Local	NHS Grampian	Acute	KC
Medium	AI Proof of Concept Support Services	Investigation of AI technology for support services such as Digital	Local		Corporate	BC

		Service Desk, Queries re Policy and Procedure				
Small	AI Proof of Concept Patient Signposting	Investigation of AI technology to provide first line signposting to appropriate services	Local		Corporate	BC

Appendix 2 Digital Roadmap 2024-26

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Digital Roadmap 20:

Appendix 3 Proposed Decision-Making Process for New Digital Projects
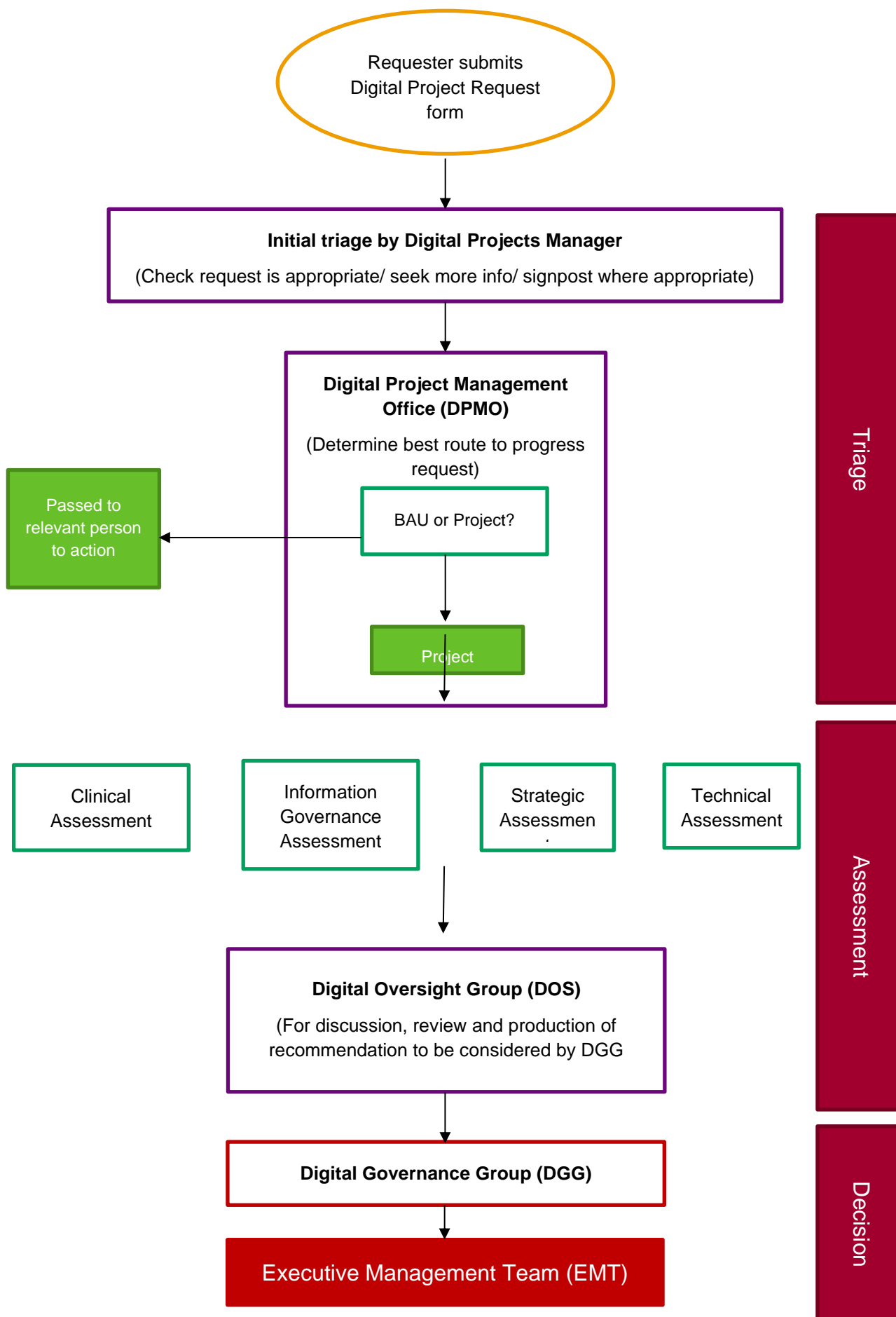
Area	Project	2024-2025				2025-2026			
		Q1 Apr	Q2 Jun	Q3 Oct	Q4 Jan	Q1 Apr	Q2 Jun	Q3 Oct	Q4 Jan
Acute	Order Comms - Acute Medical Imaging	Configuration	Implementation	Implementation	Implementation				
Corporate	Cybersecurity Improvement Programme	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation	Implementation
Acute	PACS replacement	Procurement or Agreement	Procurement or Agreement	Procurement or Agreement	Procurement or Agreement	Configuration	Implementation		
CH&SC	GPIT Replacement	Procurement or Agreement	Procurement or Agreement	Procurement or Agreement	Procurement or Agreement	Configuration	Implementation	Implementation	
Acute	HEPMA IDL		Analysis of Options	Implementation					
All	Digital Dictation & Speech Recognition		Analysis of Options	Procurement or Agreement	Configuration	Implementation			
CH&SC	MORSE Phase I			Analysis of Options	Procurement or Agreement	Configuration	Implementation		
CH&SC	GP Document Management Replacement				Analysis of Options	Implementation	Implementation	Implementation	
Acute	OPERA (Theatres)		Configuration	Implementation					
Acute	Child Health Systems		Configuration	Configuration	Implementation				
Acute	RIS Grampian Replacement		Configuration	Implementation					
Acute	National Endoscopy Reporting System		Procurement or Agreement	Implementation					
Acute	Maternity - Trak					Procurement or Agreement	Procurement or Agreement	Implementation	
Acute	Scan For Safety					Procurement or Agreement	Configuration	Configuration	Implementation
All	Electronic Patient Record			Analysis of Options	Analysis of Options	Configuration	Configuration	Implementation	Implementation
All	Patient Digital Comms Phase I				Analysis of Options	Configuration	Implementation	Implementation	Implementation
CH&SC	Digital Dermatology					Analysis of Options	Procurement or Agreement	Configuration	Implementation
CH&SC	MORSE Phase II						Configuration	Implementation	
CH&SC	Community Glaucoma					Procurement or Agreement	Configuration	Configuration	Implementation
Corporate	AI - Patient Signposting					Analysis of Options	Procurement or Agreement		
Corporate	AI - Support Services					Analysis of Options	Procurement or Agreement		
Corporate	M365 - Intranet					Analysis of Options	Procurement or Agreement	Configuration	Implementation
Corporate	M365 - Data Migration			Analysis of Options	Configuration	Configuration	Implementation	Implementation	Implementation
Corporate	Support Services Service Desks			Analysis of Options	Procurement or Agreement	Configuration	Implementation		
Corporate	Risk Management System Replacement					Analysis of Options	Procurement or Agreement	Configuration	Implementation