

### **Digital Strategy**

2021 to 2026







### **Foreword**

"I am delighted to welcome you to our Digital Strategy which is a bold and dynamic statement of our ambition to deliver digitally enabled Best Care for Everyone.

There has been a clear shift in our approach to digital transformation because we have realised that in order to deliver outstanding care for our patients, our focus must be directed towards the needs of our patients and staff rather than the traditional model of being technology and IT driven. Therefore, this strategy has been developed by asking our clinical teams how IT can help them to deliver their clinical service strategy priorities through innovations and also by asking our patients to tell us about their experiences in accessing healthcare services using technology and how we can best support them to do so in the future.

It is important that we remember delivering improvements to benefit our patients and staff is all of our responsibility and IT forms only part of any transformation. Therefore, we must work together to take our Digital Strategy forward"

Dr Nicola Stevenson, Medical Director and Deputy Chief Executive



### **Opening Words**

"Our Digital Strategy is our commitment to digital transformation over the next 5 years and will support the delivery of Our Strategy 2021-2026 objectives and vision. This document clearly sets out our intensions that IT will no longer be directing the future of digital innovations. Instead our digital vision is that IT acts as the enabler for our clinical teams, with technological advancements being driven by our clinicians who understand our patient and service needs, so together we **deliver digitally enabled Best Care for Everyone**.

Our Digital Strategy evidences how we will build on our impressive foundations, using a set of underpinning principles to drive operational efficiency and clinical excellence by equipping the organisation with the latest digital tools and adoption of industry best practice. Working with our healthcare partners at both a local and regional level we will strive to provide seamless care to all of our patients through the use of appropriate technologies.

Due to the level of engagement with our clinicians, nurses, AHPs, operational management, support functions and patients during development, Our Digital Strategy is owned by all and key priorities identified by our staff and patients will be delivered through a **digitally enabled and clinically led** approach. I would like to take the opportunity to thank all of those who attended our strategy development workshops and engagement sessions because there is clearly a positive drive within the organisation for digital transformation".

Chris Mason,
Interim Director for IT and Information

### **Contents**



| Contents                                  | Page | Contents  | Page |
|---|------|---|------|
| Introduction                              | 5    | Engagement with our Patients and Staff                              | 18   |
| Background                                | 6    | Patient Engagement  | 19   |
| Our 2021-2026 Objectives and Priorities   | 7    | Medical Engagement  | 20   |
| Strategic Framework                       | 8    | Digital Strategy Key Priorities                                     | 21   |
| Developing Our Digital Strategy           | 9    | Key Priorities  | 22   |
| Our Digital Journey Over the Past 5 Years | 10   | Digital Foundations Priorities                                      | 23   |
| Key Achievements Over the Past 5 Years    | 11   | Digital Innovations Priorities                                      | 24   |
| The 4 Domains of Our Digital Strategy     | 12   | Digital Education Priorities  | 25   |
| Digital Foundations                       | 13   | Digital Intelligence Priorities                                     | 26   |
| Digital Innovations                       | 14   | Next Steps  | 27   |
| Digital Education                         | 15   | Appendix 1: Patient Questionnaire and Results                       | 29   |
| Digital Intelligence                      | 16   | Appendix 2: Outputs from our Digital Strategy Development Workshops | 30   |
| Strategic Alignment                       | 17   |   |      |

### Introduction



#### Our journey to deliver the best quality and safest care to the communities we serve

Our Digital Strategy forms 1 of 7 enabling strategies, through which Our 2021-2026 Strategy will be delivered. Our Digital Strategy sets out our commitment to creating a culture that embraces digital technology to enable us to provide the best acute hospital services to the communities we serve.

Our Digital Strategy is user centred to address the most important needs of patients, service users and staff. The aim of our Digital Strategy for our patients is to deliver outstanding care through our staff having the best tools and the necessary knowledge and skills to use them. The aim of the Digital Strategy for our workforce is to provide simplified and efficient work processes within our digitised organisation.

Our Digital Strategy is broken down into 4 domains aligned to Our Strategy 2021-2026, Digital Future strategic objective: Digital Foundations, Digital Innovations, Digital Education and Digital Intelligence. During a series of Digital Strategy development workshops, engagement sessions and through utilising a patient questionnaire, priorities were identified for each of the 4 Digital Strategy domains and mapped out over the next 5 years.

In the past our Informatics and Information teams have tried to support all requests received from end users. However, the volume of requests led to a lack of strategic focus and direction for our Informatics colleagues and demand outstretched resources. Therefore, moving forward our Informatics and Information teams will instead focus their efforts upon the key priorities put forward by our patients and staff outlined within this document that will provide maximum benefits across our organisation. Through this approach we will also adopt best practice solutions and stop building WUTH bespoke solutions which impact integration and our ability to keep up with the national IT agenda. This is of particular importance when considering our alignment to national and regional integrated care system digital priorities.

This document outlines how the Digital Strategy was developed, sets out our current position, identifies key priorities and areas for improvement over the next 5 years, includes a development plan for implementation and details how progress in delivering our priorities will be monitored.

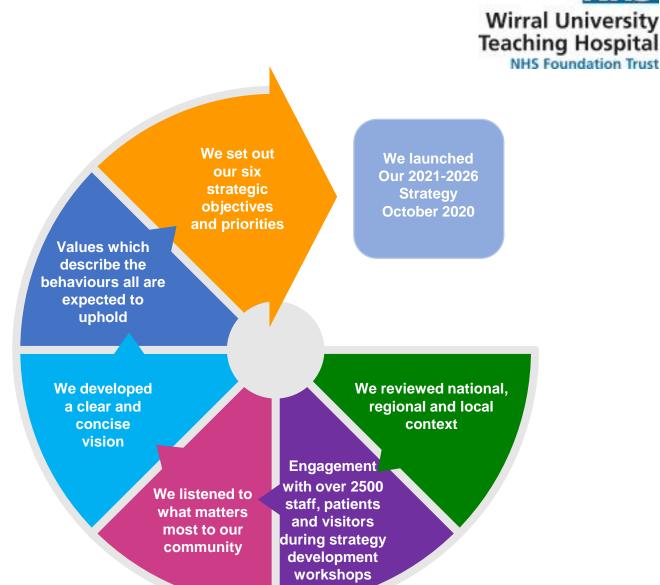
### **Background**

#### Developing Our 2021-2026 Strategy

Our previous strategic focus was upon our top three priorities: patient flow, outpatients and perioperative medicine. Our Clinical Divisions aligned their operational plans to support improvements in each of these three areas. However, clear strategic objectives for all to work towards, aimed to ultimately deliver our vision were not defined. Therefore, our Trust Board decided further work was needed to create a new, clear and meaningful strategic direction.

Our journey to develop our new strategic direction began early 2020, through a robust process of research and engagement as described.

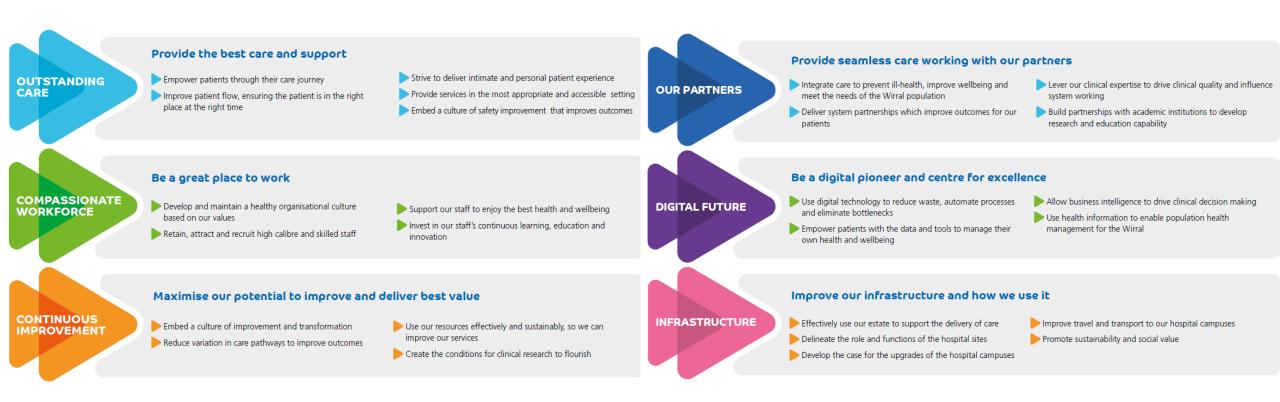
Our 2021-2026 Strategy launched October 2020 outlining our intensions and setting out our specific strategic objectives to focus progress over the next five years.



### Our 2021-2026 Objectives and Priorities



Our six strategic objectives and priorities demonstrate our intension to provide outstanding care across the Wirral through our hospital sites and units, as a lead provider within the Wirral system. We will be a Hospital Trust that patients, families and carers recommend and staff are proud to be part of.



### **Strategic Framework**

#### Our Enabling Strategies



Our 2021-2026 Strategy will be delivered through seven enabling strategies as shown.

This Digital Strategy details our IT and information priorities for the next five years aligned to our Digital Future strategic objective, to ensure we are all working towards the same goal in delivering Our 2021-2026 Strategy.

The Digital Strategy is integrated with the other enabling strategies, as an enabler to wider transformation. Digital Future strategic objective priorities developed by our clinical teams have also been drawn out of our Clinical Service Strategy 2021-2026 to inform our Digital Strategy.





# Developing Our Digital Strategy

2021 to 2026







### Our Digital Journey Over the Past 5 Years

Where we are now and where we want to be?

Our digital strategic intension over the past 5 years was to be a digital exemplar. Now we have some of the best technology available to us within our digitised organisation, our strategic focus is shifting towards a new patient focused digital vision;

#### **Delivering digitally enabled Best Care for Everyone**

In order to achieve our digital vision we need to firstly understand our starting point by reflecting upon our digital journey over the past 5 years and recognising the key milestones achieved, following financial investment received through programmes such as Global Digital Exemplar, Safer Hospital and Safer Ward. We also recognise through acknowledging our lessons learnt over the past 5 years that there is a requirement for a strategic priority within this Digital Strategy to demonstrate how we will support our staff to best use our technology, to aid clinical decision making and provide safe, outstanding care for our patients.

The 4 domains of our Digital Strategy which are introduced within this section of the document, encompass all required elements to enable us to progress from where we are now to where we want to be over the next 5 years, through alignment to our Digital Future strategic objective priorities and our Clinical Service Strategy 2021-2026.

### **Key Digital Achievements Over the Past 5 Years**

Reflection to shape the Development of Our Digital Strategy 2021-2026



Historically our organisation has always been at the forefront from a technology perspective, being one of the first UK Trusts to deploy elements of Cerner Millennium back in 2010.

Over the past 5 years our digital journey has gained momentum, with significant investments having been made into our infrastructure and software solutions - aided greatly by central funding from the Global Digital Exemplar Programme. In 2018 the College of Healthcare Information Management Executives (CHIME) named Wirral University Teaching Hospital as one of the "most wired" hospitals in the world.

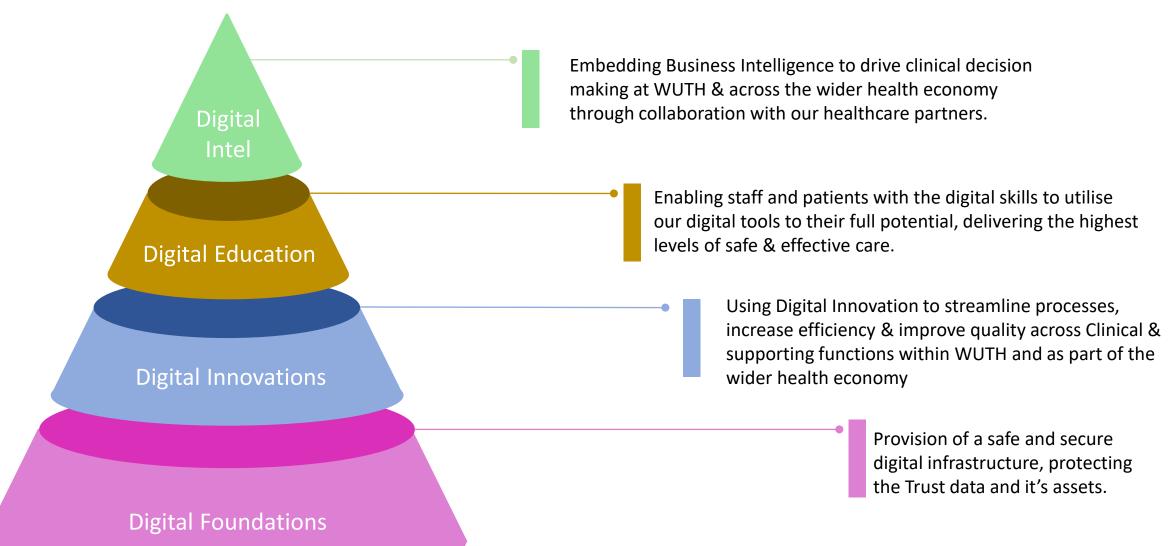
We are now in the enviable position where we have a high level of digital maturity and our organisation is functionality rich. Our latest technologies help us to deliver safe, high quality care and we need to ensure our staff and patients have the knowledge to utilise those tools to their full potential. Here are some of our key digital achievements over the past 5 years:

- Medical Device Integration with SECA scales, digital ECG and Vitalslink observation monitors all feeding information real-time into our electronic patient record (EPR)
- Our real-time bed management system gives a minute by minute account of the patient flow situation within our hospitals
- Patient Portal is proving invaluable in caring for our cancer patients
- Business Intelligence portal provides access to Divisional and specialty level clinical and operational data
- Wirral Care Record draws information from our local healthcare partners and allows care providers and commissioners in Wirral to know our population, identify risks and apply clinical recommendations to keep our community and patients healthy
- Electronic documentation can be sent directly to GPs to enhance communication and support continued patient, care

### The 4 Domains of Our Digital Strategy

Developing Our Digital Strategy 2021-2026





### **Digital Foundations**



Digital foundations focusses upon the necessary technical elements required to ensure safe, secure and continued clinical and operational service delivery. Digital foundations is broken down into the following 5 elements:

#### **End user computing**

Devices and associated peripherals delivering capability to clinical and operational services

#### **IT Service Continuity and Recovery**

Data back-up, storage, archive, recovery and critical systems testing to minimise operational disruption due to loss of service. Environmental risk assessments of data centres and equipment maintenance to protect assets and ensure continued service provision.

#### **Networking and Communications**

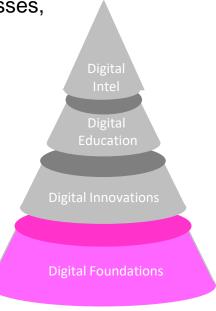
Focus on providing WUTH with telecommunications capability, infrastructure and services which enable the safe, secure and efficient operation of the organisation and increasingly focuses on the growing importance to deliver better patient and integrated health economy connectivity.

#### Security

Cyber security controls to protect infrastructure across WUTH and partners, including data within the system and assets. Capture of security incidents and monitoring of trends to identify learning, responsibilities and improvements.

**Governance and Risk Management** 

Structured policies across WUTH and partners, review of existing processes, risk identification and stratification and assurance reporting. Identity management and associated access control at infrastructure level.



### **Digital Innovations**



Digital innovation opportunities are continuously evolving as are our patient, service user and staff needs. Therefore, we recognise that our Digital Innovations Strategy needs to provide the future direction for our digital transformation projects but also allow us flexibility to take advantage of new opportunities.

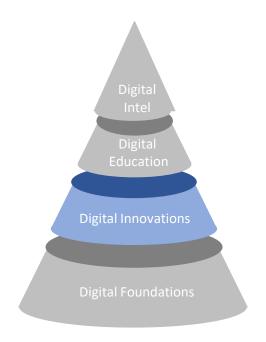
Our aim through engaging with our Clinical Divisions and service teams was to develop a set of digital innovations priorities we will follow to guide all of our digital, technology and data transformation work over the next 5 years.

Our priorities will be the foundations to delivering our digital innovations intention; to use digital innovation to streamline processes, increase efficiency & improve quality across clinical & supporting functions within WUTH and as part of the wider health economy.

A pre-existing established digital innovations priority is to deliver one electronic patient record across our organisation which will remain at the forefront of our enabling objectives over the next 5 years.

In addition to our major innovations programme we will also be embarking on an optimisation journey.

Re-examining and re-designing workflows, horizon scanning the technology landscape and identifying further opportunities for the deployment of the latest Cerner tools to drive efficiencies in a structured and strategic approach.



### **Digital Education**



Reflecting upon our digital journey over the past 5 years highlighted that digital education is an area which has previously been lacking. Therefore, digital education focusses upon supporting our workforce to have the required digital skills and knowledge to provide high quality and safe care, within our digitally enabled organisation. Digital education also encompasses how we provide information to our patients to enable them to access digital healthcare services across the Wirral system. Digital education is broken down into 3 elements:

#### **Digital Workforce**

How digital training is delivered to meet the needs of our staff to enable them to have the knowledge and skills to best use our digital tools to deliver quality and safe care. Core and supplementary training for new staff to the Trust, staff moving to a new role, staff who are in developing roles and refresher training. How we measure the success of digital training and monitor competencies.

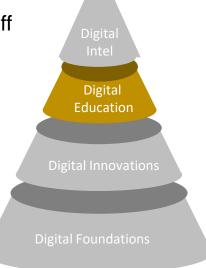
#### **Digital Patient**

Working collaboratively with other NHS organisations in Wirral to enable our patients to access digital health information and use digital healthcare services.

#### **Implementation of New Digital Technologies**

The process in which new digital technology is introduced to enable technology adoption, manage priorities, ensure sustainability and cost efficiency.

During engagement sessions our staff showed clear interest and drive to focus efforts upon improving digital education and subsequently digital literacy within our digitised organisation, to benefit our patients and clinical services.



### **Digital Intelligence**



Our Digital Intelligence Strategy forms part of the overall Digital Strategy. The importance of Business Intelligence to support our staff to aid clinical and business decision making was recognised within our Clinical Service Strategy 2021-2026, with a clear priority being to "develop business intelligence dashboards with real time data, for each specialty, to drive clinical decision making and improve the care we provide".

Using the Clinical Service Strategy to inform our Digital Intelligence Strategy, digital intelligence has been broken down into the following elements and focusses upon embedding Business Intelligence to drive clinical decision making at WUTH and across the wider health economy through collaboration with our healthcare partners:

#### **Operational**

Real time command and control intel that is needed to run our services for patients and aid clinical decision making.

#### **Performance**

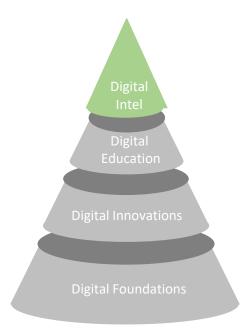
Data analysis to enable us to review how we did.

#### **Benchmarking**

Data analysis that enables us to review how we performed compared to our peers.

#### **Predictive Analytics**

The ability to model future demand and the impact upon operational requirements and performance, to aid future planning.



### **Strategic Alignment**

The 4 Domains of Our Digital Strategy Aligned to Our Digital Future Strategic Objective



### Digital Future Be a digital pioneer and centre for excellence

|                      | Use digital technology to reduce waste, automate processes and eliminate bottlenecks | Empower patients with the data and tools to manage their own health and wellbeing | Allow business<br>intelligence to<br>drive clinical<br>decision making | Use health information to enable population health management for the Wirral |
|----------------------|--|---|--|--|
| Digital Intelligence | <b>✓</b>   |   | <b>✓</b>   | <b>✓</b>   |
| Digital Education    | <b>✓</b>   | <b>✓</b>  | <b>✓</b>   | <b>✓</b>   |
| Digital Innovations  | <b>✓</b>   | <b>✓</b>  | <b>✓</b>   | <b>✓</b>   |
| Digital Foundations  | <b>✓</b>   |   |  |  |

### **Engagement with our Patients and Staff**



Our Digital Strategy is broken down into 4 domains aligned to our Digital Future strategic objective: Digital Foundations, Digital Education, Digital Intelligence and Digital Innovations

IT is an enabler and thus recognise the importance of clinical teams leading digital innovations as they understand their patient and service requirements

Our Digital Strategy will shape the IT and Information operational and strategic plans over the next five years and guide our innovation journey to benefit our patients

Kick off meeting to define the approach to developing our Digital Strategy A workshop
with a wide
range of
stakeholders
has taken place
for each of the
4 Digital
Strategy
domains

With support from our Medical Director to maximise clinical engagement, 2 Digital Strategy clinical engagement sessions took place utilising our Clinical Leads Sessions

To gain a patient voice we asked our patients to tell us about their experiences accessing healthcare services digitally and how we can best support them

Outputs from all 6
workshops, our
patient questionnaire
responses and digital
future priorities
drawn out of our
Clinical Service
Strategies were used
to formulate our
Digital Strategy

During the workshops a SWOT analysis was completed to assess our current position. Our strategic foundations model of getting the basics right, better and best was then used to map out our priorities over the next 5 years. Outputs were circulated with the wider stakeholders prior to sign off by the Interim Director for IT & Information

A questionnaire was developed, approved and utilised to gain feedback from our patients

### **Patient Engagement**

"There are 12.6 million people in the UK who don't have basic digital skills and these people are those who are most likely to be suffering from poor health" (NHSE, 2016)

To help us shape our future healthcare services, we asked our patients to tell us about their experiences accessing healthcare services using technology and how we can best support them to do so in the future, to promote patient convenience, aid the reduction of digital exclusion and health inequalities. A questionnaire was developed, approved and utilised to gain patient feedback. We received a return rate of 42% (patient questionnaire, results and report can be found in appendix 1).

The patient questionnaire results have confirmed that patients find accessing healthcare services using technology convenient but our patients wish to be given the choice to opt out and offered a face to face if they prefer or if it is more clinically appropriate. Further work is required to roll out technology innovations across our organisation to benefit our patients as there was a clear interest from our patients in accessing video appointments in the future.

Recommendations have been made following feedback from our patients; we will provide digital education to support our patients in accessing and using our digitally enabled healthcare services, during every patient contact we will advise patients about the digitally enabled services available and signpost them to available support and registration. However, our staff firstly require education to ensure they are aware of the digitally enabled services available within our organisation and across Wirral. Patient feedback was used to inform our digital education and innovation strategy domains.

Wirral University
Teaching Hospital

77.27% of patients reported they would like to be able to access the patient portal, 72.73% of patients would like to be able to access online healthcare information and advice, 50% of patients would like to have access to telephone appointments and 40.91% would like to have access to video appointments in the future.

Patients reported a ppointme a clear advantage to accessing healthcare services using technology to be convenience; "no travelling to the hospital, minimal effect on my

day to day life".

"It's great that all the relevant information regarding appointments, test results and ongoing health report is available via the portal. Also the video conference workshop via Microsoft teams was very useful-especially as we couldn't meet face to face".

Online information and videos detailing how to use digitally enabled healthcare services would be a clear way to support our patients as indicated by our patients, 55.56% and 44.44% respectively.

### **Clinical Staff Engagement**

During the stakeholder workshops all staff groups were well represented, including: medical, nursing, AHPs, operational and support functions. However, as this Digital Strategy is focussed upon the clinical agenda and prioritising what is best for our patients by supporting our clinicians to provide outstanding care, it was felt important to reach the wider medical audience. With the support of our Medical Director, during two Clinical Lead sessions the following questions aligned to the 4 domains of the Digital Strategy were asked:

- 1. How can IT help you deliver your clinical service strategy priorities through innovations?
- 2. How can IT support our staff to have the required digital skills?
- 3. How can Business Intelligence further support you in delivering patient care?
- 4. What should IT be focussing on as our priorities for the next five years?

A strong appreciation of the benefits of CERNER Millennium came across, with praise for our digital capabilities and functionalities. However, the following key areas were identified for further development and improvement over the next 5 years, which cumulatively will support the **delivery of digitally enabled Best Care for Everyone.** 





### Digital Strategy Key Priorities

2021 to 2026



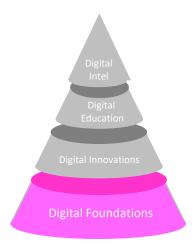


### **Key Priorities**

The 4 domains of our Digital Strategy 2021-2026

Here we reveal our key priorities of focus for the next 5 years to achieve maximum benefits across our organisation, to benefit our patients and staff. The priorities are broken down into the 4 domains of our Digital Strategy which are aligned to deliver our Digital Future strategic objective priorities and our Clinical Service Strategy 2021-2026.

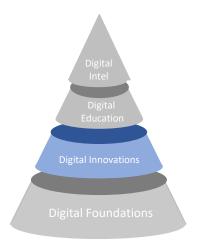
The detailed outputs from each of the Digital Foundations, Digital Innovations, Digital Education and Digital Intelligence strategy development workshops which include a SWOT analysis to assess our current position and a comprehensive list of priorities put forward from a wide range of stakeholders can be found in Appendix 2.





### **Digital Foundations Priorities**

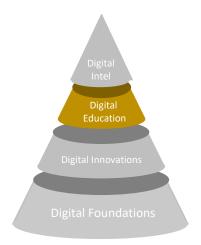
- Deliver a technical refresh programme of our end user computing estate on a 3-5 year life cycle, ensuring all equipment is fit for purpose across our organisation.
- We will migrate in-house developments/data warehouse to cloud based solutions.
- Refresh both the wired and wi-fi estate across our organisation ensuring its ability to support all of our applications and communication tools.
- Re-design our network and provide segmentation for medical devices, improving security and network access to provide a robust Cyber defense.
- We will deliver business efficiencies following implemented Telephony and Office 365 solutions.
- Strengthen our support offering through the deployment of self-service portals, allowing users to resolve their basic issues in a timely manner, without the need for human interaction.





### **Digital Innovations Priorities**

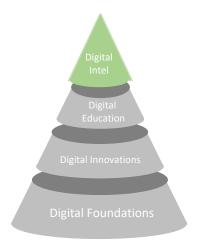
- Provide one Electronic Patient Record (EPR) including extensive device integration, delivering complete and accurate clinical information at the point of care, enabling better clinical decision making to provide outstanding care for our patients.
- Embark on a system-wide optimisation of our EPR, deploying the latest technologies to innovate and standardise our processes and systems in line with industry standards and adopting best practice to drive effectiveness and efficiency through the organisation.
- Expand our patient portal offering with the latest technologies to provide our patients with access to patient centred digitised healthcare advice and services to support our patients to optimise their healthcare.
- Work with our Health and Social Care partners to develop:
  - Integrated care systems delivering extended access to healthcare information across the region, providing a rich clinical picture to improve care for our patients
  - Analytical capabilities improving access to information and appropriate information sharing to further enable population health management.





### **Digital Education Priorities**

- Improve our training delivery model through the implementation of a learning management system and virtual learning environment, giving flexibility for staff to access a full suite of learning modules at their convenience.
- Introduce a competency framework for all roles, keeping knowledge current and relevant by ensuring compliance against competency-based assessments for all staff on a regular cycle.
- Create an in-context training platform to offer support to clinical and operational staff, providing targeted support as and when they need it in their daily working lives.
- Support our clinical teams in the delivery of bespoke knowledge transfer, helping empower our patients through increased usage of our patient facing applications.





### **Digital Intelligence Priorities**

- Provision of a new Trust Data solution to produce a holistic data model, by including clinical and non-clinical data.
- Develop a single offering for Business Intelligence platforms, providing near real-time operational information to drive clinical and operational decision-making.
- Embed benchmarking analysis into the Business Intelligence portal, providing analysis against external comparators, identifying potential clinical and operational opportunities.
- Deliver the ability to model future demand predicting impact upon operations and performance, to assist in business planning. Working with our healthcare partners to provide a consistent source of information across Wirral and the Cheshire and Merseyside region.

### **Next Steps**

#### Implementation, Monitoring and Review





Our Informatics and Information teams are the enablers to wider organisational transformation. The Digital Future strategic objectives will apply innovative, digital technologies to support the delivery of our Clinical Divisions and corporate services 2021-22 operational and strategic priorities.

Moving forward our Digital Future strategic priorities will be carefully selected through robust governance processes involving all key stakeholders across the organisation as part of an annual planning cycle. This will ensure our Digital Future priorities remain relevant to the evolving needs of our patients, support the development of clinical services and apply the latest technologies in an ever-changing digital landscape.

Our Informatics and Information teams will then translate the Clinical Divisions annual Digital Future strategic priorities into their annual operational and strategic priorities, to provide a clear work plan for the subsequent 12 months and deliver our 2021-2026 Digital Strategy.

Delivery of the operational and strategic priorities will be driven and monitored through existing comprehensive governance structures, providing organisational transparency whilst ensuring the delivery of quality digital transformation, within agreed timescales and cost constraints.



**Appendix 1: Patient Questionnaire and Results** 

**Appendix 2: Outputs from our Digital Strategy** 

**Development Workshops** 



## **Appendix 1: Patient Questionnaire and Results**







