

FOI REF: 23/711

16<sup>th</sup> November 2023

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Website: [www.esht.nhs.uk](http://www.esht.nhs.uk)

## FREEDOM OF INFORMATION ACT

I am responding to your request for information under the Freedom of Information Act. The answers to your specific questions are as follows:

- 1) What IT systems and applications are you planning to replace or upgrade over the next year?**

[We are currently planning to upgrade our NerveCentre system in the next 12 months.](#)

- 2) Are you looking to complete a HIMSS INFRAM assessment in the next twelve months?**

[Yes, currently in progress.](#)

- 3) When are you planning to review your Digital Strategy?**

[The Trust's Digital Strategy has just been reviewed in 2023 through external audit.](#)

- 4) Please supply a copy of the Trust's most recent Digital Strategy.**

[Please see attached.](#)

If I can be of any further assistance, please do not hesitate to contact me.

Should you be dissatisfied with the Trust's response to your request, you have the right to request an internal review. Please write to the Freedom of Information Department ([esh-tr.foi@nhs.net](mailto:esh-tr.foi@nhs.net)), quoting the above reference, within 40 working days. The Trust is not obliged to accept an internal review after this date.

Should you still be dissatisfied with your FOI request, you have the right of complaint to the Information Commissioner at the following address:

The Information Commissioner's Office  
Wycliffe House  
Water Lane  
Wilmslow  
Cheshire SK9 5AF

Telephone: 0303 123 1113

Yours sincerely

Linda Thornhill (Mrs)  
Corporate Governance Manager  
[esh-tr.foi@nhs.net](mailto:esh-tr.foi@nhs.net)



# DIGITAL STRATEGY 2021 - 2026

Outstanding care through digital  
transformation, innovation and data

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Joe Chadwick-Bell  
Chief Executive



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# FOREWORD

Welcome to “Outstanding care through digital transformation, innovation and data,” our Digital Strategy for East Sussex Healthcare NHS Trust. This document describes our digital ambitions for the next five years, how we intend to achieve those ambitions and the difference it will make for our patients and staff. It sets out how we will radically change and improve the digital infrastructure and systems we provide to support the delivery of modern, digitally enabled healthcare (digital transformation), using new and emerging technologies (innovation) and the wealth of patient information we have available to us (data) to provide outstanding care.

This strategy is one of four enabling strategies that underpin and support “Better Care Together For East Sussex”, the Trust’s five year strategic plan which sets the overall direction for our services; enabling our residents to access the best care in the most appropriate place – at home, in the community or when they need to come into hospital.

These are exciting times at ESHT: in recent years we’ve made significant improvements to the services that we provide and now, as part of the Government’s New Hospital Programme, we have the opportunity to improve our hospital infrastructure.

One of the most important components of our success and continued journey of improvement will be how we take full advantage to use digital to support our changing infrastructure. Although we have introduced a number of new innovations in the last few years, we want to go much further, embarking on a programme of digital transformation until we reach our ultimate ambition, which is to become a digitally mature Trust.

We must ensure that we continue to deliver outstanding integrated acute and community services. This will only be possible if we have the digital infrastructure and solutions in place. We want to ensure that our digital systems enable our staff to work more efficiently and that they have the skills and confidence to use them to their full advantage. We also want to give patients the chance to engage more in their care, reducing unnecessary appointments and giving them easy and safe access to information to help them and others to be more involved.

Whilst this strategy is an important step forward, we recognise that it is just the start of our journey - delivering its ambitious vision will require a combined effort from us all, working closely with our staff, patients and partner organisations to realise the benefits of a digital future.

## 1

# INTRODUCTION



**In recent years, the way we use technology to deliver healthcare has evolved.** We developed ESHT's first Digital Strategy in 2018 and have made good progress on the aims we set out to achieve. We've already introduced a number of new innovations which have changed the way we work and the way we provide care to our patients (more information about some of these is available on page 8).

The pace of change continues to accelerate as we respond to the demands of how we deliver healthcare and so we're taking the opportunity to refresh our Digital Strategy. We want to be more ambitious with what we set out to achieve, maximising the opportunities that are now available to us to digitally transform over the next five years.

Whilst developing this document, we sought the views of our colleagues and patients and have used their feedback to develop four pledges that will underpin everything we do digitally. These are the key things that our colleagues and patients have told us are important and that we must get right if we want to achieve our digital ambitions:

- We will get the basics right
- We will ensure our colleagues have the knowledge and skills to use the technology available to them
- We will never digitally exclude our patients
- We will continue to engage with our colleagues and patients

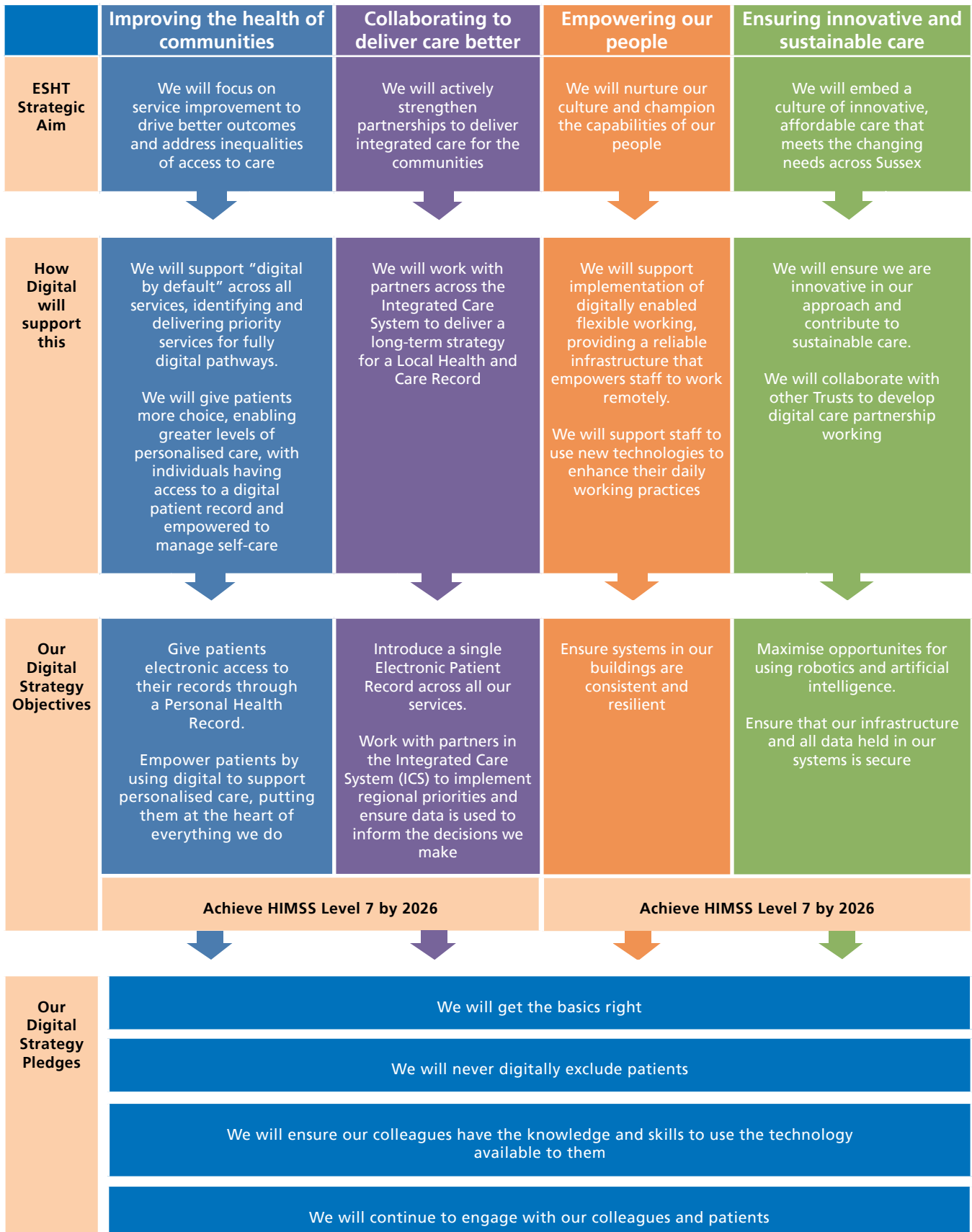
We have also identified eight key objectives which will help us to deliver our overarching ambition to become a truly digital organisation. These aims have been developed to align and support the Trust's four key strategic aims, as outlined in Better Care Together for East Sussex:

- **Give patients electronic access to their records through a Personal Health Record**
- **Introduce a single Electronic Patient Record across all our services**
- **Empower patients by using digital to support personalised care, putting them at the heart of everything we do**
- **Work with partners in the Integrated Care System (ICS) to implement regional priorities and ensure data is used to inform the decisions we make**
- **Maximise opportunities for using Robotic Process Automation, Artificial Intelligence and Machine Learning**
- **Ensure that our infrastructure and all data held in our systems is protected**
- **Ensure the digital infrastructure in our buildings is consistent and resilient**
- **Achieve HIMSS (Healthcare Information and Management Systems Society) Level 7 by 2026**

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The table on the next page shows how our pledges and objectives will support the Trust to achieve its key strategic aims. More detail on our pledges and objectives is given from page 12 onwards.







# ABOUT ESHT DIGITAL

Our work in ESHT Digital is far more than just Information Technology, it is about the people and the processes. We have a team of over 100 people and we deliver digital services and systems to all our Trust colleagues, at sites across the county.

We want to provide a friendly and responsive service that works in line with the Trust's values, tailored to meet individual/team/division requirements. We will offer expert advice, dealing with queries quickly and efficiently, supporting colleagues with digital transformation.

A key part of our work is influencing the move towards a digital culture, encouraging colleagues across the Trust to think digital first. We recognise the significant role that digital has in the future of healthcare and it is imperative we get this right if we are to support the Trust in achieving its overall aim to be rated as "outstanding".

In the last ten years, the way we use digital technology to provide care to our patients has changed massively. On the next page are some of the key changes we've already made:



Introduced a digital system across our inpatient wards to monitor patients' observations at the bedside and provide real time data to manage our bed and patient flow



Recruited our first dedicated Cyber Security team

Introduced a digital system in our community services, giving teams more time to focus on patient care and reducing duplication of data entry



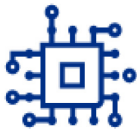
Brought the Digital Service Desk in-house, giving a local first point of contact for help and support for colleagues



Started to introduce a Personal Health Record, giving patients access to appointment letters and information online

**We also have some exciting developments planned for 2021/22:**

Introducing an electronic patient record system to our maternity department, removing the need for pregnant women to carry paper notes



Improving the use of digital technology in our community services through the Digital Aspirant programme, for which we've been awarded £2,450,000 over the next two years

Introducing a new digital patient safety system to ensure robust communication and handover between our clinical teams at night



Implementing an Electronic Prescribing and Medicines Administration (ePMA) system, to improve patient safety and reduce time taken to prescribe, administer and check medicines

# OUR ROADMAP

Below is our roadmap which sets out what we plan to achieve and will support delivery of our eight objectives.

- In progress
- Not started
- Business Case
- Complete

	2021	2022	2023	2024	2025	2026+
HIMSS level	2	3	4	5	6	7
Clinical Systems	<ul style="list-style-type: none"> <li><span style="color: green;">●</span> Nervecentre Rollout</li> <li><span style="color: grey;">●</span> PHR (Phase 1)</li> <li><span style="color: grey;">●</span> Maternity System Implementation (Phase 1)</li> <li><span style="color: green;">●</span> ePMA Pilot</li> <li><span style="color: green;">●</span> ePMA rapid rollout</li> <li><span style="color: green;">●</span> Digital Aspirant for CHIC</li> <li><span style="color: green;">●</span> ICE Upgrade</li> <li><span style="color: red;">●</span> ICE for Radiology</li> <li><span style="color: green;">●</span> CRIS Upgrade</li> <li><span style="color: green;">●</span> Private Patients Hastings</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Medical Photography</li> <li><span style="color: red;">●</span> eConsult/eTriage</li> <li><span style="color: yellow;">●</span> Lab Information Management System</li> <li><span style="color: red;">●</span> PHR (Phase 2)</li> <li><span style="color: red;">●</span> PHR (Phase 3, Appointments, Results, Pathways)</li> <li><span style="color: green;">●</span> Maternity System Implementation (Phase 2)</li> <li><span style="color: yellow;">●</span> Remote/Virtual Care/At home monitoring</li> <li><span style="color: red;">●</span> Maximisation of functionality</li> <li><span style="color: red;">●</span> PACS, Radiology Imaging Replacement Implementation</li> <li><span style="color: red;">●</span> VNA Cardiology</li> <li><span style="color: red;">●</span> VNA Endoscopy</li> </ul>				
Electronic Patient Record		<ul style="list-style-type: none"> <li><span style="color: grey;">●</span> Options paper</li> <li><span style="color: yellow;">●</span> Spec &amp; OBC</li> <li><span style="color: yellow;">●</span> FBC</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> ITT and Tender</li> <li><span style="color: red;">●</span> Award of contract</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Phase 1</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Phase 2</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Phase 3</li> <li><span style="color: red;">●</span> Phase 4</li> </ul>
Smart Tech/Automation		<ul style="list-style-type: none"> <li><span style="color: green;">●</span> Robotic Automation/AI</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Phase 1</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Phase 2</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Phase 3</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Phase 4</li> </ul>
Service Redesign		<ul style="list-style-type: none"> <li><span style="color: green;">●</span> Relocation of acute/off-site Community Paeds hub</li> <li><span style="color: green;">●</span> Community Diagnostics Centre</li> <li><span style="color: green;">●</span> Agile working</li> <li><span style="color: green;">●</span> Ophthalmology</li> <li><span style="color: green;">●</span> Cardiology</li> </ul>				
Infrastructure	<ul style="list-style-type: none"> <li><span style="color: grey;">●</span> Orchestration Layer/Platform</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: green;">●</span> Legacy OS Retirement</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: green;">●</span> Migration of Data Centre</li> <li><span style="color: yellow;">●</span> LAN</li> <li><span style="color: yellow;">●</span> WiFi upgrade</li> <li><span style="color: yellow;">●</span> VDI</li> </ul>			
Cyber			<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Continuous improvement</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Credential Accreditation</li> </ul>		
Building Systems		<ul style="list-style-type: none"> <li><span style="color: green;">●</span> Fire Compartmentation</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: yellow;">●</span> Building Information System (BIM)</li> </ul>			
ICS	<ul style="list-style-type: none"> <li><span style="color: grey;">●</span> SID</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: green;">●</span> Plexus/eSearcher integration</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> Virtual consultation</li> <li><span style="color: red;">●</span> Plexus/Nervecentre integration</li> </ul>			

# WORKING IN PARTNERSHIP

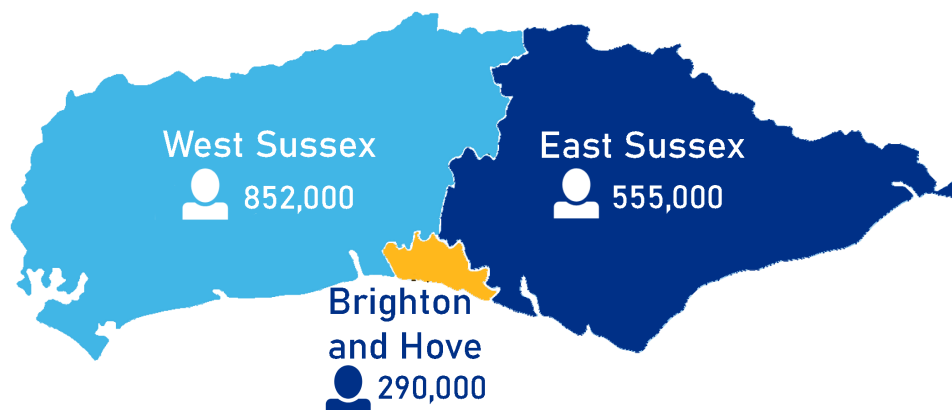
ESHT is part of the Sussex Health and Care Partnership (SHCP) which brings together 13 organisations into what is known as an Integrated Care System (ICS). The SHCP is sub-divided into three smaller regional zones, of which we are part of the East Sussex partnership.

Across the SHCP, we work collectively to improve the health of local people, ensuring that health and care services are high-quality and make the most efficient use of resources. This should enable local people to stay healthy for longer, to receive more support and treatment at home or in the community and, if they do get ill, to ensure they get the right care in the right place at the right time.

One of the ambitions of the ICS is to improve digital health and care services. The SHCP recognises that there are amazing opportunities to use technology and data to design better ways for services and patients to support each other. For example, population health data is now being shared to inform system wide pathway redesigns and to measure outcomes for patients.

However, it's also recognised that the opportunities technology and data can bring will also bring challenges. Privacy will need to be respected and steps taken to ensure that no one becomes digitally excluded so that inequalities are reduced, not made worse.

## The Sussex Health and Care Partnership (SHCP)



Improving population health is one of the key aims within the NHS Long Term Plan. To achieve this, we need higher quality, structured data to understand our patients and population. This links to work across the ICS on the Sussex Integrated Dataset (SID), which features in our objective to implement regional priorities (see page 22 for more information).

As part of the Digital Aspirant Programme, we're working closely with Sussex Community Foundation NHS Trust, to deliver a number of collaborative projects, using data and the latest innovations and technology to transform our community services. We're also benefitting hugely from the shared learning that this collaborative approach brings.

We also recognise that our patients are partners in their own care and want to give them more control over how they interact with our services. We also want to engage with them when we are introducing new digital solutions. As a first step, we will develop a virtual Digital Engagement Group, where ideas can be discussed and feedback given. Over 100 of our Trust members have expressed an interest in being part of this, and we will look to widen the membership and develop this group over time.



“  
**We're already seeing great benefits in our collaboration through the Digital Aspirant programme. Sharing our work on key digital projects is helping us to move faster and lead the way in community digital healthcare, building a blueprint for community digital development which can be applied to other Trusts nationally.**  
”

**Diarmaid Crean**  
**Chief Digital and Technology Officer,**  
**Sussex Community Foundation NHS Trust**

## ● 2

# OUR PLEDGES

From the feedback we received from our colleagues and patients, we have developed the four following pledges, which will underpin everything we do:

## ○ Pledge 1: We will get the basics right

When we spoke to colleagues, it was clear that things such as wifi, lack of digital storage space and hardware failures cause them the most frustration. That's why our first step will be a programme of work to ensure that our digital infrastructure can fully support the ever increasing demands being placed on it and that our colleagues can have more confidence in the reliability of the equipment and systems they use.

## ○ Pledge 2: We will never digitally exclude our patients

We believe the use of digital tools can enhance the care experience, allowing us to connect with our patients in a flexible and responsive way. We understand though that not everyone wants to use the technology that's now available. Healthcare must be accessible to all and so we will always offer alternative ways to communicate with patients who choose not to use technology. We will also train our staff to be digital health champions who can support patients and their families.

## ○ Pledge 3: We will ensure our colleagues have the knowledge and skills to use the technology available to them

Adapting to new technology can be difficult for some of our colleagues. We want to support them to get the most from the technology available, helping them to work more efficiently and ultimately to improve the care they provide patients. We want to extend the training and support we offer. We also want to increase our visibility in clinical areas so that any issues can be dealt with quickly without the need to escalate.



## **Pledge 4: We will continue to engage with our colleagues and patients about our plans**

When asked, colleagues and the public told us they want to be more involved with the digital changes we're making. Starting early conversations with them around our digital ideas will give us a better understanding of what they need. To help with this, we have already introduced new Digital Business Partner roles, who work with our clinical and non-clinical areas to engage and collaborate. For members of the public, we plan to set up a virtual Digital Patient Experience Group to help us achieve this continuing engagement.

We also need to ensure that our digital systems are safe so we can avoid unnecessary harm. We have introduced digital clinical safety processes where both clinicians and technical staff work together to ensure there is a culture of digital safety.

We want to further improve patient safety by understanding 'what good looks like'. We can do this by looking at the benefits and cost savings associated with best practice, equipping staff, patients and partners with the opportunities and skills to improve patient safety throughout the patient pathway. We will also embed digital clinical safety in policy and regulatory documents and look for further opportunities for digital technology to solve patient safety problems. To support this, we will work with NHS Digital and local partners to share insights about what works best and why, and have an open forum for discussing potential digital safety risks and solutions.



See [Maria](#) and [Bens'](#) stories on the following two pages, which show the difference that meeting these pledges could make to our colleagues



## COLLEAGUE STORY

# MARIA



Age: mid 40's

Lives: Hastings

Works: Eastbourne DGH

Digital confidence: Good

Maria works in the digital project team, based at Eastbourne DGH. Although her role is mostly desk-based, she often attends meetings and visits clinical areas as part of her role.

Concerns: Balancing work and home life, access to technology at work that helps rather than hinders



## 2017



Maria worked full-time, travelling from Hastings to Eastbourne each day. She sometimes had to take her son to school on her way to work or collect him on the way home and felt like she was always rushing from one place to another.

Maria's team enjoyed working together, there was a good atmosphere in the office. Maria often attended meetings in the hospital's designated meeting rooms, but the equipment in each room was different so she didn't always have the right kit, causing unnecessary stress. It was also not unusual for Maria to find the room had been changed with no notice given to attendees. Wifi coverage around the hospital was patchy, making it difficult to access systems when out in clinical areas.

As the pandemic began, Maria started to work from home. She was provided with a laptop and access to systems through a Virtual Private Network (VPN) connection. As working from home became longer term, Maria was provided with a screen, keyboard and mouse to set up a home office.

## 2021



The introduction of Microsoft Teams completely changed how Maria and her colleagues interact. At a glance, she can see if colleagues are available, send them an instant message and have virtual meetings. Maria and her team have regular virtual catch-ups in the diary to make sure that everyone is doing OK and not feeling isolated.



## 2026

Maria works two days a week in the hospital and three days at home. She has a much better work-life balance and has agreed a flexible work pattern which she can fit around the school run. Working at home every day felt quite isolating so Maria enjoys seeing colleagues on her office days and feels she has the best of both worlds.

When at work, Maria no longer has a dedicated office but books a desk in one of the agile working spaces. Equipment in the meeting rooms has been standardised and wifi coverage has improved. A smart room booking system has also been introduced, which automatically notifies attendees if the location of their meeting changes.





At the hospital, Ben used a 32 inch screen to see all the necessary detail of scans. When on-call, he used his laptop which was much smaller, making the job more difficult. The connection to the hospital's systems from home was slow, with no guarantee that the Virtual Private Network (VPN) would connect. Scans are large files, up to a gigabyte in size, and downloading them can take time. From being woken at night, it could take up to 40 minutes for Ben to review a scan and then make the decision to travel to the hospital to perform a procedure.

2018

The radiology team has new equipment for working from home including larger screens, a new VPN and webcams. Almost everyone in the department has the same equipment at home as what they use on site. It can now take as little as 10 minutes from Ben being woken up to reviewing a scan and making the decision to go to the hospital.

2020

The improved equipment gives team members the option to work from home during the day. This has helped productivity as it allows a quiet space to concentrate, rather than being interrupted as happens when in the office. This has also had a positive impact on work/life balance, with Ben able to collect his children from school on the afternoon he works from home. Wherever they are, the team members are always contactable and everyone has set times to be in the hospital each week.

A new Picture Archiving Communication System (PACS) will be introduced in 2022, procured by Trusts across Surrey and Sussex. Ben can now view scans taken at any hospital in the region immediately, rather than sending a request and waiting for them to be sent. Electronic requesting for radiology imaging has also been introduced, replacing the hand-written piece of card previously used to request scans. This has made the requesting process quicker and provides clearer information to clinicians.

2026

## COLLEAGUE STORY BEN



Age: early 30's

Works: Conquest Hospital  
Digital confidence: High

Ben is a Consultant Interventional Radiologist, performing minimally-invasive procedures guided by medical imaging such as x-rays and scans. This involves looking at very detailed images to make a diagnosis and decision on suitable treatment. Ben works from Conquest Hospital during the day but is part of an on-call rota overnight and at weekends. When on-call, Ben will review scans at home before travelling to the hospital to perform a procedure, for example, an angiogram and embolization for a patient with bleeding from the colon.

# OBJECTIVE 1

## Give patients electronic access to their records through a Personal Health Record

We are working to introduce a Personal Health Record, giving patients access to their health information through any internet enabled device, such as a laptop, smartphone or tablet. We're still in the early stages of implementation – at the moment most patients can see appointments and clinical letters sent to them online. We will move to a more ambitious roll-out which will include:

- All appointments, medical correspondence, test results, medication lists and care plans, together in one place and accessible on any device
- Notifications when new information is available
- Messaging clinicians directly, with the ability to share data, photos, videos and documents
- Access to tailored resources designed for the individual patient
- Sharing data from wearable devices with clinicians
- Keeping a journal and monitoring symptoms
- Sharing records with other people such as GP, pharmacist, paramedic, carer or next of kin

Giving patients access to this information will empower them to be more involved in their healthcare whilst for clinicians, it will give quick and easy access to the most up-to-date information they need to make decisions about their patients' care.



What difference could this make to patients? Read [Lydia's](#) story to find out



## PATIENT STORY

# LYDIA



Age: early 20's  
Lives: Polegate  
Digital confidence: Very high

In summer 2020, Lydia was knocked off her bike by a car. She was taken to Eastbourne DGH and diagnosed with a traumatic brain injury. As a result of her injuries, Lydia was referred to the Neurology team and worked with the Trauma Rehabilitation team and Neuro Physiotherapists, who are amongst the early adopters of the Personal Health Record platform at ESHT.

Concerns: Memory loss and reduced cognitive function due to brain injury

# 2015

All correspondence was sent in the post – likely that letters wouldn't have arrived in time to attend short notice appointments. Also issues with letters getting lost or being sent to the wrong place.

“ I wouldn't have been able to cope with all the bits of paper, I would have lost and forgotten things and missed appointments. ”

Lydia could see all her appointments, letters and the information she had been sent in the Personal Health Record app. She also received an email whenever an appointment was booked. Given her memory loss, having all this in one place was a huge help. Lydia also used the app's symptom tracker to record her symptoms, which she could refer back to at appointments. She used a medication tracker which listed her medications and doses, again this was really helpful to have to hand at appointments when coping with memory loss.

Lydia also accessed services to help her recovery online through the links given and her rehab exercises were provided online rather than on paper. This meant any changes to the exercises or information could be given immediately, rather than being printed on paper.

# 2020

# 2026

We want to have fully implemented a Personal Health Record across all our services. For Lydia, this will mean having access to all health information in one place. Lydia would be able to send messages, videos or photos securely to clinicians, saving time spent on the telephone or unnecessary appointments. The information could be shared with other clinicians involved in Lydia's care.

# OBJECTIVE 2

## Introduce a single Electronic Patient Record across all our services

We currently have around 400 different systems within the Trust which all collect information and use it in different ways. Many of these systems are standalone and cannot share the information they hold, which means clinicians have to log in to different systems to find the information they need to provide care. Inconsistencies in the data across these systems places a significant administrative burden on our staff but could also cause safety risks to our patients.

There is also still a large amount of paper in use and patients often have to repeat themselves, giving the same information over and over again to different people.

To overcome this, we want to introduce a single Electronic Patient Record (EPR) which is used across all our services. This would mean all patient information is available electronically, across our acute hospitals and community services and is available at all times.

Doing this will give clinicians more time to spend caring for patients as they will have faster access to information and will save patients having to give the same information to different members of staff.

Our plans have been boosted by the announcement that we have been selected to be part of the Digital Aspirants Plus programme, and will receive national funding and support to implement a full EPR.

This would also be the first step in allowing information to be shared more easily with other NHS organisations, GPs and social care providers across our acute hospitals and community services.



What difference could this make to colleagues? Read [Mark's](#) story to find out



## COLLEAGUE STORY MARK



Age: mid 40's

Works: Conquest Hospital  
Digital confidence: High

Mark has been a nurse for over twenty years and currently works on a ward at Conquest Hospital.

Concerns: Providing best possible care for patients and adapting to new technology

A system that provides bedside observations is introduced on Mark's ward. This records patient observations (such as temperature, pulse and blood pressure) digitally. The information is displayed on mobile devices which Mark and his colleagues carry round with them. The system automatically generates a National Early Warning Score (NEWS) to identify patients who may be deteriorating, improving patient safety by giving an early warning. The information is available 24/7, unlike paper charts which can go missing. The system has also removed any issues around the illegibility of handwriting.

Additional digital functions have been introduced over time, such as the monitoring of patients' fluid balance. Mark and his colleagues were able to co-design other assessments and tools, which have enhanced patient care and improved collaboration between ward colleagues.

“ The new systems make my job much easier, having all the information I need about my patients readily available has given me more time to spend with them and greater confidence in the care we give them. ”

The new systems save Mark and his colleagues time which is spent with patients and visitors. Although they've had to learn and adapt, having all the information needed readily available has given more confidence when caring for patients, leading to a higher standard of care.

Further developments will see a move towards paperless wards. Colleagues from ESHT Digital visit the ward regularly to deal with questions and further support is provided by eHealth Practitioners. Digital equipment across all wards has been standardised, so Mark can do a shift on a different ward and use the same digital equipment that he is already familiar with.

Mark's role will change as patients start to take greater control of their care, with more information available to them. Data will become more important and Mark will be involved in discussions around the impact of this and how it is used as an additional nursing tool.

2014

2021

2026

# OBJECTIVE 3

## Empower patients by using digital to support personalised care, putting them at the heart of everything we do

Personalised care is one of the five major changes to the NHS outlined in the NHS Long Term Plan. It means giving people more choice and control over the way their care is planned and delivered, recognising that the complexity of people's needs and expectations for health and care can no longer be met through a one-size-fits-all approach.

We recognise that digital solutions have a significant role to play in moving towards providing personalised care. We want to support people in East Sussex, empowering them to access health and care services via digital solutions to provide care in a way that suits them and their personal needs.

### Examples of this include:

- Choice around how they attend outpatient appointments, with the use of virtual consultations (video or telephone) where appropriate
- Access to clinicians and clinical advice or support online, for example, through email or web chats
- Using wearable technology (for example, insulin pumps, skin patches, smartwatches) so symptoms can be monitored remotely, giving patients greater knowledge about their condition and reducing the need for unnecessary appointments



What difference could this make to patients? Read [Aisha's](#) story to find out





## PATIENT STORY

## AISHA



Age: early 40's

Lives: Heathfield

Digital confidence: Average

Aisha lives with her husband and two sons. She was generally fit and healthy until, in April 2020, she tested positive for Covid-19. Although Aisha's symptoms were fairly mild, she has struggled since with fatigue, breathlessness and anxiety. She also finds it hard to concentrate, describing a "brain fog". As a result, Aisha hasn't been able to work for over a year. Following a diagnosis of long-Covid, Aisha was referred to the Post-Covid Assessment Service (PCAS).

Concerns: Scared about the future, returning to normal life and to work, the family's finances, will she fully recover?

2015

All outpatient appointments were face-to-face, requiring travel to our hospital sites. All information provided would have been in paper copy.

Aisha completed an online self-assessment form which was used as the basis for her initial assessment, held virtually via video link. All her appointments were held via video or telephone, removing the need to travel and saving time. Aisha was able to email the team directly with any questions in between appointments.

Aisha was signposted to online resources, which she could work through in her own time. Being online, the resources were quickly and easily updated, so she had access to the latest information and research. Virtual support was also given to her family, again without leaving their home. With Aisha's permission, a virtual meeting was held with her employer to discuss phasing her return to work.

The PCAS team could work remotely from different locations and access patient notes digitally wherever they were. The use of technology broke down barriers between organisations, with the team finding it easier to liaise with Aisha's GP and specialists who work for other Trusts.

2021

The PCAS team are now looking to use technology to set up virtual group sessions, where patients can support each other from the comfort of their own homes. These will be attended by other professionals, for example, GPs or specialists from out of area.

As outlined in objective 1 on page 16, the intention is to use a Personal Health Record to give patients electronic access to their records. The use of the app as an engagement and feedback tool is also being investigated.

The model of virtual appointments and the closer working with professionals from other specialties and other geographical locations that this enables is being copied in other areas.

2026

# OBJECTIVE 4

## Work with partners in the Integrated Care System (ICS) to implement regional priorities and ensure data is used to inform the decisions we make

One of the key programmes being worked on by the Sussex Health and Care Partnership (SHCP) is Our Care Connected, which aims to deliver a single Local Health and Care Record (LHCR) for every person living in Sussex. This would mean that every health and social care practitioner in Sussex would have access to the right information they need at the right time to provide care. This would also remove the need for patients to repeat the same information at every appointment.

Part of this work is the Plexus Care Record which will see systems across GPs, acute, community and mental healthcare services and adult social care connected. In practice, this will mean the same patient data being accessible across organisational boundaries and, as part of the national programme, across geographical boundaries as part of the LHCR.

Sharing data is key to providing the best possible care. Having a more complete picture of a patient's journey across different services will allow clinicians to provide a better patient experience and improve safety and efficiency, ultimately leading to better care and outcomes.

Sharing data is just the first step though, we need to ensure that all data flowing in and out of our systems is correctly coded and structured, in line with NHS Digital's standards e.g. Transfer of Care. The focus is on the digital sharing of structured discharge and clinic attendance documents sent from secondary care to primary care. This will ensure that information follows the patient and continuity of care is maintained because services are better connected.





Not only is ESHT a partner in this work providing and consuming the data, but we are also the technical delivery partner for the Cloud hosted platform, building the infrastructure this sits on.

Intrinsically linked to this is the development of the Sussex Integrated Dataset (SID). This is a population health management system which takes data from all health and care providers. This data is then analysed to help redesign clinical pathways and measure patient outcomes for the population of Sussex.

Raw data sent through to the SID is depersonalised so any patient identifiable information is removed and the data is therefore anonymous. Analysis of the data is used to identify trends in population health and to inform evidence-based decisions around service delivery and reconfiguration and effectively target prevention measures.



What difference could this make to patients? Read [Louise's](#) story to find out



## PATIENT STORY

## LOUISE



Age: early 30's

Lives: Rye

Digital confidence: Average

Louise has just found out that she's pregnant with her first baby.

Concerns: Nervousness around her first pregnancy, feels overwhelmed by amount of information available (some of it conflicting)

Louise made an appointment with her GP and was then referred to the Maternity service. At her first midwife appointment, she was given a set of paper notes, which she had to remember to take to every appointment. Sometimes Louise forgot so the clinician seeing her had very little information available to them. Once when visiting family in Kent, Louise was taken to hospital and didn't have her notes, so they only had the information she could give them. These paper notes often became bulky as additional information was stuck in, such as ultrasound scans and blood test results. It wasn't unusual for these pieces of paper, containing highly sensitive information, to become unstuck and lost or for whole sets of notes to be mislaid.

2015

2021

Louise self-refers using the online form on the Trust's website. A bounce back email tells her about an electronic maternity notes system and gives instructions on how to download the app to her smartphone. At all appointments, information about Louise's care is added to this secure system so any clinician she sees can access the information they need, 24 hours a day. This

removes the need for Louise to remember to take her notes to appointments. Louise's midwife can send her relevant information, and she receives a notification whenever a new message or appointment is available on the app. During appointments, Louise's midwife inputs information straight in to the system and so doesn't have to spend time after writing or inputting details into other systems.

Information from the electronic maternity notes system feeds in to the Local Health and Care Record. Clinical information about Louise's pregnancy is available whenever she accesses healthcare, regardless of organisational and geographical boundaries.

Anonymised data about Louise is sent through to the Sussex Integrated Dataset (SID). Analysis of data across the local population identifies those at risk of poor health and informs decisions around the services and support that are provided. For example, the data identifies areas where the number of smokers is above average, so smoking cessation services can be focussed where they can have the greatest impact to improve the health of the population. The data is also used to measure patient outcomes, so the success of interventions can be assessed.

2026

# OBJECTIVE 5

## Maximise opportunities for using robotics and artificial intelligence

Within healthcare, there are a number of processes that currently have to be undertaken manually and are time intensive for staff. We want to maximise opportunities for these repetitive processes to be automated, by using robotics.

For example, all referrals that come in to the organisation have documents attached, which currently have to be downloaded and reloaded in to the system. Using Robotic Process Automation (RPA) would remove the need for this to be a manual process.

There are a number of areas where Artificial Intelligence (AI) could be used, for example, working alongside consultants to help identify and diagnose conditions, leading to improvements in patient care and patient outcomes.

Another example could be in Outpatients, where patients are sent a text message reminder in advance of their appointment.

This would allow patients to be seen quicker and reduce the number of missed appointments, which cost millions of pounds each year.

Increasing our use of RPA and AI would reduce the administrative burden for colleagues, cutting mundane and repetitive tasks in both clinical areas and back office functions. However, this is not aimed at replacing humans or reducing the size of the workforce. The aim is to increase capacity and give colleagues working in support functions more time to devote to other tasks and to give those who work in clinical areas more time to devote to their patients.



What difference could this make to patients? Read [Joan's](#) story to find out



## PATIENT STORY

# JOAN



Age: mid 60's

Lives: Battle

Digital confidence: Low

During the summer, Joan was in her garden when she suddenly felt a strange sensation down one side of her body and collapsed. Luckily Joan's husband saw her collapse, recognised the signs of a stroke and called an ambulance, which took Joan to Eastbourne DGH. On arrival and after assessment, Joan was given a brain scan.

# 2021

Cutting edge software that uses artificial intelligence (AI) technology is being used across Sussex to improve the way people who have suffered strokes are diagnosed and treated.

The software analyses Joan's brain scan, automatically highlights the position of the clot and areas of possible damage and quickly provides an ASPECT (Alberta Stroke Program Early CT) score to show the number of areas of the brain affected. Consultants use this information, alongside the other information they have available to them, to make decisions on the most appropriate treatment for the patient.

In Joan's case, this led to her quickly being transferred to the specialist mechanical thrombectomy centre in Brighton, where she underwent an operation just a couple of hours after being diagnosed with a blood clot on the brain. Two days later, Joan was able to return home and has now made a full recovery.

The stroke team can now use an app on their smartphone to view scans remotely and instant message colleagues in other hospitals. This means decisions around treatment and transfer to other hospitals can be made more quickly, which is crucial when treating stroke patients.

# 2026

# OBJECTIVE 6

## Ensure that our infrastructure and all data held in our systems is secure

The patient information held in our systems is a high value target for cyber criminals. Ensuring that information is protected and is secure is paramount to give staff and our patients confidence in us and our work.

In 2020 we recruited a new Information and Cyber Security team who provide and coordinate expertise to influence our information security approach, helping ESHT to achieve its strategic objectives by aligning with local and national strategy and ensuring the availability, confidentiality and integrity of our information.

We have already made some progress in implementing the technical standards recommended by the National Cyber Security Centre (NCSC). The next step is to implement an Information Security Management System (ISMS) which gives a framework for policies and controls that manage security and risks systematically.

We also want to achieve accreditation for International Standard ISO/IEC 27001 on managing information security, achieve a high level of compliance with the Data Security Protection Toolkit and Cyber Security Essentials+ certification.

A key component to achieve this objective is recognising that all colleagues across the Trust have a responsibility to ensure that the security of our systems and data is maintained. Our colleagues need to be sufficiently trained and understand what action they need to take to reduce the likelihood of a cyber attack succeeding, and so we will undertake an ongoing education programme to ensure all colleagues have the skills, knowledge and guidance to improve our information security posture.



What difference could this make to patients? Read [Liam's](#) story to find out



## COLLEAGUE STORY LIAM



Age: mid 30's

Works: Conquest Hospital

Digital confidence: Very high

Liam is a member of our dedicated Information and Cyber Security team.

Concerns: Keeping Trust systems and the data in them secure

There was very little knowledge or resource within the Trust about cyber security. However, realisation about its importance was increasing following the Wannacry attack in 2017.

# 2018

The team has started to use the latest monitoring software to scan for possible cyber threats. This works in the background, analysing network data generated by users and their devices, looking for activity that the system believes is "not normal". Any alerts generated can then be investigated by the team, who feed their findings back in to the system, which learns from these. So for example, if the team disagree with the system and feel that an alert was not necessary, the system will learn from this and not flag the same concern again. By doing this, the system improves over time and the number of alerts that the team will need to investigate will reduce.

# 2021

During June 2021, the system saw over 8,000 alerts from 5,355 devices. Although most of these were the result of normal activity, previously they would have needed investigating, which was unmanageable. The introduction of monitoring software means that normal activity is excluded automatically, so Liam and his colleagues can focus on the abnormal alerts that require investigation – in June, this was just 59 alerts across 5 devices.

Further developments in artificial intelligence and automation will increase efficiency in dealing with alerts and allow the Trust to respond in a more timely way to emerging cyber security threats at any time of day or night. This will free up time for Liam and his colleagues to spend on other tasks.

# 2026

# OBJECTIVE 7

## Ensure the digital infrastructure in our buildings is consistent and resilient

Our hospital buildings were designed many years ago, long before the start of the digital age in which we now live. New technology has had to be installed within the limitations of these buildings, which has led to a digital infrastructure that is inefficient and unreliable.

The Building for our Future programme gives us an exciting opportunity to transform the environment in which we provide care and ensure that our buildings support technology, both now and in to the future. We want to move towards our hospitals becoming smart buildings, where the technology is fully integrated and enhances the experience of patients, colleagues and visitors.

The first step to achieve this will be to ensure the fabric of our buildings is fit for purpose and able to support the necessary digital infrastructure. We will then look at the many existing systems that we currently have in our buildings and network them so they are joined up, share information and work together to improve the experience of everyone using the buildings.

We will also ensure that the digital infrastructure in our buildings supports the Trust's aims around sustainability, in line with the Estates Strategy. This sets out our commitment to improve our carbon footprint and reduce the environmental impact of our services, to support the national aim for the NHS to become the world's first net zero national health service.



What difference could this make to colleagues? Read [Frank's](#) story to find out





## PATIENT STORY

## FRANK



Age: late 70's  
Lives: Uckfield  
Digital confidence: Low

Frank is attending an outpatient appointment at Eastbourne DGH. Whilst his husband uses technology frequently, Frank is not so keen. However, after persuasion from his children, he has recently got his first smartphone and, with their help, is starting to get to grips with it.

Concerns: Stress of appointment (will it be bad news?), made worse by stress of going to hospital - finding a parking space and finding way around the building

2019

Frank left home in plenty of time to make sure he wasn't late for his appointment. It was fairly busy when he got to the hospital but after driving round the car park for a while, he found a space.

Once in the hospital, Frank queued at the desk to book in for his appointment and was given directions to the clinic. However, he took a wrong turn, got lost and had to ask someone for help. He was almost late for his appointment, stressed and out of breath from rushing.

“ Attending hospital, whether you're a patient or visitor, can be really stressful. Although I'm not a big fan of new technology, if there are simple things that can be introduced to make the experience a bit less stressful, that's got to be a good thing. ”

The first phase of the re-development of the hospital has seen a new car park built, with more spaces available to patients. Lighting is used to direct people to available spaces so Frank is able to drive directly to a space on level 3 and there is no need to leave home quite so early.

As he walks in to the hospital, scanners pick up the signal from his mobile phone and book Frank in for his appointment automatically. He then gets a text message to tell him that the appointments are running a little behind schedule so he goes and gets a cup of tea from the café. Directions to the clinic are then given on his phone via a way finding app, supported by new digital signage which can be updated immediately when departments or clinics move. Frank arrives for his appointment feeling relaxed and calm.

2026



# OBJECTIVE 8

## Achieve HIMSS Level 7 by 2026

HIMSS (Healthcare and Information Management Systems Society) is an internationally recognised model used to assess the digital maturity of healthcare organisations.

There are eight stages in the HIMSS model and each stage must be fully met before an organisation is assured as compliant. To reach the highest level, an organisation will have become truly digital, achieving digital maturity resulting in improved patient care, better workforce experience, financial efficiencies and innovation benefits. Only a handful of NHS Trusts have achieved this.

We had a HIMSS assessment in 2020, which rated us at Stage 0. Although it was acknowledged that we were making good progress towards some of the higher stages, we were not yet fully compliant with Stage 0 and so could not be rated any higher.

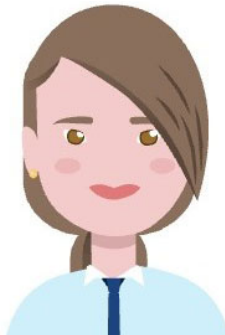
Our aim is to achieve HIMSS Level 7 by 2026. Achievement of the objectives outlined above will help us to reach this. In particular, we will need to:

- **Ensure that departments who support clinical care, (e.g. pathology laboratories, pharmacy and radiology) are fully digital with requests ordered electronically and all results available digitally and visible across systems**
- **Integrate the Plexus Care Record in to other systems so it is visible at point of care**
- **Implement a new Trust-wide system for digital imaging and for the storage and archive of images**
- **Introduce closed loop systems so that the ordering, prescribing, verification, dispensing and administering of medication and blood is fully electronic**
- **Use data and analytics for decision making around patient care**
- **Integrate data into the Health Information Exchange and the Patient Health Record**
- **Ensure robust business continuity plans for all systems are in place**

What difference could this make to patients? Read [Sophie's](#) story to find out



## COLLEAGUE STORY SOPHIE



Age: late 20's

Works: Eastbourne DGH

Digital confidence: High

Sophie is a pharmacist working at Eastbourne DGH. The majority of her time is spent out on the wards supporting clinical teams and talking to patients.

Sophie would visit a ward to review patients' medication charts, these were handwritten on paper. If a chart was mislaid, staff would spend valuable time searching, delaying care for the patient. Information on the chart was sometimes illegible and it took Sophie time to read what some of her colleagues had written. Illegible handwriting could also lead to administration errors due to the dose or drug being misread. When any changes were made to a prescription, the process to order new medicines could take over three and a half hours, relying on nurses writing the order in a book, which Sophie checked when she was on the ward.

An Electronic Prescribing and Medicines Administration (ePMA) system has been introduced, so inpatient medication charts can now be updated electronically. Sophie can view medication charts from her office before she visits the ward and can prioritise the patients to review and speak to first. The time colleagues previously spent searching for paper charts is now spent caring for patients.

Sophie accesses online resources through the ePMA software such as the British National Formulary, NICE guidance and Trust guidelines to aid safe, effective and evidence based prescribing. The system is linked to Pharmacy so Sophie can order medicines remotely from the electronic drug chart straight to the dispensary rather than having to check the ward book.

The overall time to order and supply medicines has reduced to approximately 90 minutes. The information in the chart is typed, so there are no issues with illegible handwriting. If, for any reason, the system fails, a robust Business Continuity Plan is in place to ensure patients will continue to receive the treatment and care required.

A complete closed loop system means the ordering, prescribing, verification, dispensing and administering of medicines is fully electronic. Barcode scanning has been introduced so the barcode on any medicine given to a patient is scanned, alongside the barcode on the patient's wristband. The system alerts if a patient is about to be given the wrong medicine and there is a complete audit of the patient's journey through the hospital so if ever there is a recall on a particular product, those patients who may be impacted can be easily traced.

2017

2022

2026

We have a wide range of volunteering opportunities and you don't need previous experience in a health setting to volunteer for us.

For more information visit our website:

[esht.nhs.uk/volunteering](http://esht.nhs.uk/volunteering)





## ● 4

# GLOSSARY

## of words used in this document

### Artificial Intelligence (AI)

The theory behind and development of computer systems able to perform tasks normally requiring human intelligence such as visual perception, speech recognition, decision-making and translation between languages.

.....

### Building for our Future

This is the name of the Trust's programme co-ordinating both the new developments to be funded by the national Health Infrastructure Plan and the Trust-wide transformation initiatives.

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### Care Quality Commission (CQC)

The Care Quality Commission (CQC) is an executive non-departmental public body of the Department of Health and Social Care. It was established in 2009 as the independent regulator of all health and social care services in England. The CQC monitors, inspects and regulates hospitals, care homes, GP surgeries, dental practices and other care services to make sure they meet fundamental standards of quality and safety and publishes what it finds, including performance ratings to help people choose care.

### Digital Aspirant

A national programme which aims to accelerate procurement, deployment and most importantly, uptake of the technology that is needed to underpin digital transformation in NHS Trusts.

.....

### Healthcare and Information Management Systems Society (HIMSS)

The Healthcare and Information Management Systems Society (HIMSS) is an internationally recognised model used to assess the digital maturity of healthcare organisations. There are eight stages in the HIMSS model and each stage must be fully met before an organisation can be assured as compliant. To reach the highest level, an organisation will have become truly digital, achieving digital maturity resulting in improved patient care, better workforce experience, financial efficiencies and innovation benefits.

## Integrated Care System (ICS)

Integrated Care Systems (ICSs) are partnerships that bring together providers and commissioners of NHS services across a geographical area with local authorities and other local partners to collectively plan health and care services to meet the needs of their population. The central aim of ICSs is to integrate care across different organisations and settings, joining up hospital and community-based services, physical and mental health, and health and social care. Since April 2021, all parts of England have been covered by one of 42 ICSs.

.....

## Place

The term "Place" refers to collaboration at a local level (meaning over a smaller area than an ICS). In Sussex, there are three Places; Brighton and Hove, East Sussex and West Sussex. The collaboration is between sovereign organisations working together to improve population health outcomes. These organisations will include health, social services, third sector and other local networks.

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## Plexus

A care record which will see systems across GPs, acute, community and mental healthcare services and adult social care connected, allowing practitioners to securely access and update relevant information anywhere anytime.

## Sussex Integrated Dataset (SID)

A population health management system which takes data from health and care providers and analyses it to help redesign clinical pathways and measure patient outcomes for the population of Sussex. Raw data sent through to the SID is depersonalised so any patient identifiable information such as name, date of birth or address is removed and the data is therefore anonymous. Analysis of the data is used to identify trends in population health and to inform evidence-based decisions around service delivery and reconfiguration and effectively target prevention measures.

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## Voice Over Internet Protocol (VOIP)

Technology that allows users to make voice calls using a broadband internet connection rather than a regular phone line.

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