

Ref: FOI/GS/ID 6527

Please reply to:
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28 January 2021

Freedom of Information Act 2000

I am writing in response to your request for information made under the Freedom of Information Act 2000 in relation to EPR and PAS.

You asked:

- 1. When will the Trust be looking to procure a new EPR?*
- 2. What is the contract end date for the Trust's existing EPR or PAS?*
- 3. Please supply a copy of the Trust's latest Digital Strategy.*
- 4. What digital maturity model is being used or considered to support the Trust's Digital Strategy/Roadmap?*

Trust response:

1. This would not be before 2027 as the contract for the existing EPR does not expire until June 2028
2. Jun-28
3. Please see the following policy.



**Maidstone and
Tunbridge Wells**
NHS Trust

MTW Digital Transformation Strategy

2020-2030



MTW Digital Transformation Strategy **2020–2030**

Our Trust mainly relies on paper patient records and multiple aged and legacy IT systems with limited integration and capability. We want all clinical areas across both of our hospitals to be completely transformed.

We want data-driven care and improvements to safety using advanced digital technology. We also want to ensure all our support staff have access to the right technology and software to deliver their roles efficiently and effectively. This digital transformation will enable us to achieve our vision of both our main hospital sites becoming eHospitals delivering digitally seamless enhanced patient care.

A digital revolution

There is a clinical desire to move away from paper-based and manual clinical processes, to fully digitalised ways of recording and accessing information, to support the provision of outstanding patient care. We will do this by combining a fully integrated Electronic Patient Record (EPR) with a refresh of the computing estate, and the introduction of integrated mobile devices.

The Trust's EPR will give the ability to access comprehensive electronic health records, at the touch of a button. It will allow our staff to view and record all clinical information, in real-time, wherever and whenever they need it. All clinical teams across our hospitals will be able to see the same information about a patient in our EPR, which is vital to patient care and safety.

To support this, we will focus on introducing technology that meets the needs of our users to support their working processes by being reliable and resilient, as well as ensuring they have the right technology available at the right time. We will also ensure the IT infrastructure in the Trust meets the needs of the organisation both now and in the future.

We want to develop the ability to share data across our partner organisations, and with patients and carers directly, with the aim of improving care and the patient experience through data

collaboration. We will have access to all the data we hold, promoting audit and good clinical governance and intelligent reporting dashboards. MTW will become a leader within Kent for sharing information across organisations, empowering our staff to access patient records whenever and wherever they need to. We will also start to promote patients having access to their own data – involving them more in their own care will help us all.

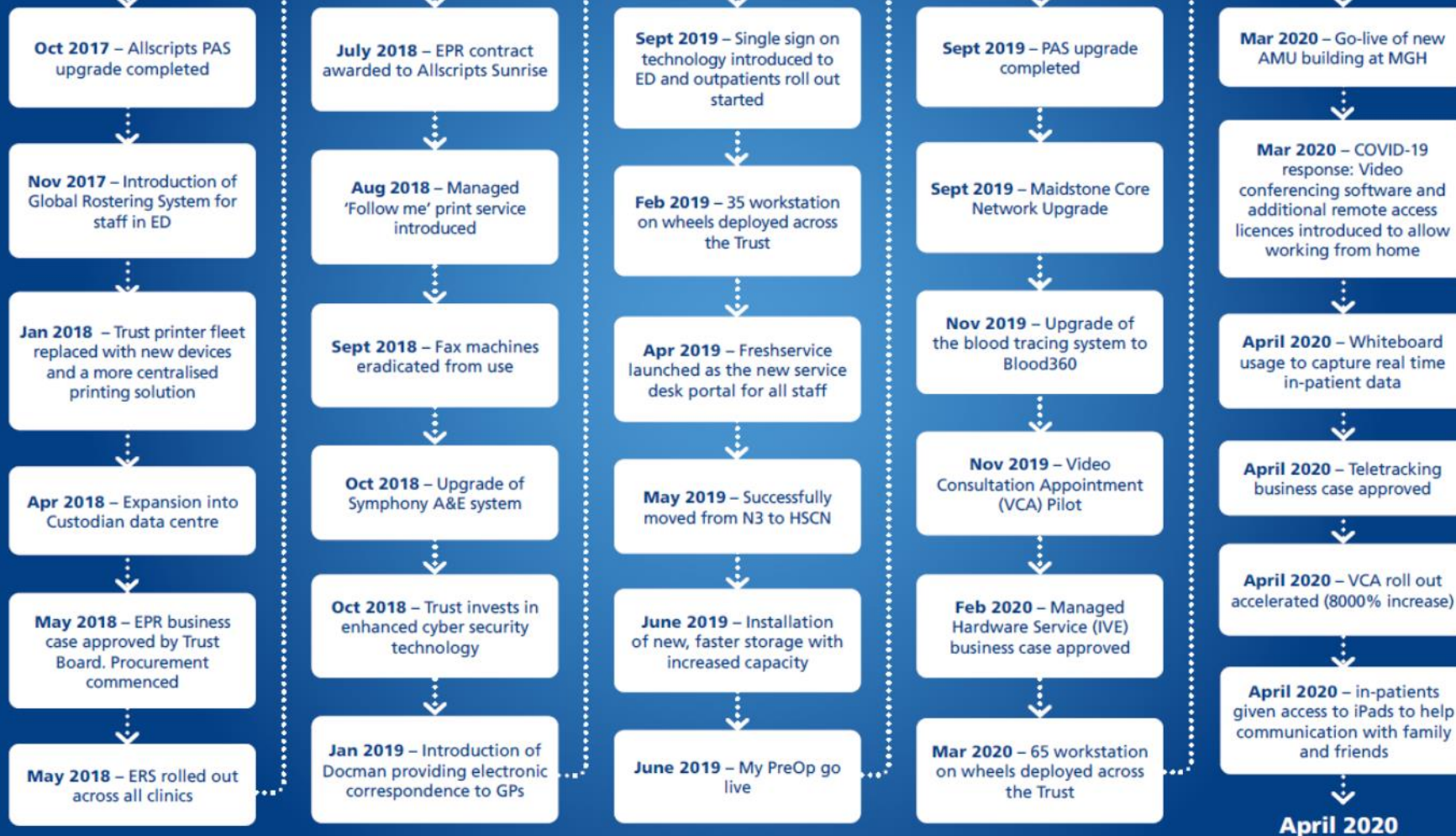
Our ultimate aim with this strategy is to develop an eHospital which will help us to revolutionise the way our clinical teams care for their patients. It is important to note that this strategy sets out our aspirations for digital transformation and we recognise that it may not be possible to deliver everything in the short to medium term. However, MTW is committed to aspiring to deliver outstanding care supported by the latest technology and this document sets out how our organisation would like to look in the future.

Digital Transformation Achievements

Oct 2017- Apr 2020

We have already begun our journey towards digital transformation and this timeline highlights the work done to April 2020.

October 2017



April 2020

Chapter 1

Our eHospital

Our Digital Hospital

Our Digital Hospital will focus on technology meeting the needs of our users. We need to become more agile as an organisation to ensure we can respond to change quickly, supporting our clinical teams through technology.

We will assess how users can gain easier access to information from wherever they are and if they have the right technology to meet their needs. As part of a programme of significant investment we aim to address our environments to ensure the IT infrastructure meets the workflows of our users, as well as promoting new devices that are easy to use, with the latest software, to reduce the time wasted accessing information, and reducing support calls.

We will look not only towards improving the user experience regarding end user devices, but also accessing Trust systems such as the EPR and departmental systems through single sign-on and customised screens. This means that instead of replacing devices like for like, we aim to understand the change in working practices to adopt a paper-lite approach, as well as supporting other service transformation taking place within

the organisation. The Trust will also begin to review other organisations' approaches to end user technology, look at innovative new technology that is coming to the market and how this can be used within our hospitals, whilst allowing the device types and deployment approach to be driven by users through the Clinical Digital Design Authority.

We have already seen improvements such as additional screens in outpatients, faster logon speeds, and single sign-on being rolled out across the Trust. On our wards we've invested in more computers on wheels providing patient data at the patient's bedside, and touchscreen PCs to aid bed management and access patient results. The introduction of video outpatient consultation and telemedicine had begun before the COVID-19 pandemic, but has seen significant progress since, and will continue to be rolled out within the organisation.



The Trust is also looking to adopt technology to improve productivity and in turn patient care. Examples of this include the introduction of voice recognition in some departments for the creation of correspondence, reducing admin time for staff and improving the turnaround time of letters within the Trust.

Instant messaging applications have become common within everyday life and are becoming an important part of how our staff communicate with each other to manage operations. However, we are starting to see examples of how these applications are being used to directly manage patient care. Before we introduce such technology, we will ensure that we meet our information governance requirements for patient data.

We believe strongly that by working with our partner organisations across Kent and into London we can deliver better, more efficient care.

Globally we are seeing companies such as IBM and Google continue to develop Artificial Intelligence (AI) functionality, with the benefits now starting to be utilised within healthcare. Beyond the roll out of the EPR, the Trust would like to explore adopting AI functionality in the following areas: further decision support tool for clinicians; automate management of patient pathways; and support the Trust with process management, including in non-clinical areas, alerting, implementing plans and supporting analysis of population health data.



Virtual Fracture Clinic

MTW's Fracture Clinic used to be one of our busiest clinics. In 2018 we set up a 'Virtual Fracture Clinic' to help with service demand and improve patient care and experience. Before then, patients with a suspected fracture would come to our Emergency Department (ED) and receive an x-ray. If a fracture was confirmed, the patient would be given a temporary plaster cast and an appointment made for them to attend the hospital's fracture clinic a few days later to discuss follow-up care and treatment. With the Virtual Fracture Clinic, our therapists and consultants study patients' case notes and x-rays within their records after receiving an electronic referral from ED before contacting patients to discuss their follow-up care. Only those patients who need to come back into hospital to attend the fracture clinic for further treatment receive an appointment. This will be enhanced further once our EPR system is fully functional.

Anytime Anywhere – Virtual outpatient clinics

The NHS aims to avoid up to a third of face-to-face outpatient visits by 2025. Virtual outpatient clinics are crucial for reducing unnecessary outpatient visits, saving time for patients and our clinical teams as well as contributing to reducing our overall carbon footprint. The technology used facilitates virtual waiting rooms, from which patients can be seen at set times, via the web, using video consultation for their appointment. We have already introduced this system into a number of specialities and this was codesigned with patient involvement and feedback. Our aim is to now roll this out to all specialities, to complement our pre-existing telephone consultations giving patients and staff options for how appointments can be facilitated without the need to visit hospital on every occasion.

Digitally ordering tests and making referrals

We have enabled our clinical teams to order blood tests and x-rays for inpatients electronically for some time. With the introduction of our new EPR this facility will be extended to all our outpatient areas as well. The EPR will also make accessing the results and images easier as they can be viewed in

one place for each individual patient, with the added benefit of reducing the amount of paper relating to test results circulating within the Trust. In addition, referrals made within the Trust between departments will no longer need to be printed and will be accessed electronically, in real time, reducing delay.

My Pre-op

Our patients are already able to complete pre-appointment questionnaires electronically within 'My Pre-op', with the results discussed with the pre-assessment team. The nurses can then assess which clinic is most appropriate, for example, telephone assessment or face to face, or which patient needs a more detailed anaesthetic clinic. This makes appointments much more effective as our patients and clinicians spend more time discussing care and treatment plans together for their forthcoming surgery.

eConsent

We plan to introduce eConsent which will allow doctors to consent patients in clinic using a ready-made form that can be adjusted to suit the needs of the individual consultation. These consent forms will ensure the correct type of consent (based on mental capacity) is assessed, as well as provide a complete list of risks and benefits for each procedure, and each

patient and or their representative will receive the most recent versions of any associated information leaflets. This will ensure that all patients and their representatives can access clear documentation regarding their forthcoming operation which can also be accessed via a link to an electronic copy if requested.

OpenEyes

OpenEyes is an open source electronic patient record designed by ophthalmologists to work intuitively with the unique ways ophthalmologists record and manage eye conditions. It has grown and evolved over the last decade into a fully functioning ophthalmic EPR. We have been using this in patients with macular degeneration for around eight years and have developed innovative sharing of this EPR with community optometrists to create a shared care scheme.

Over the next few months we are expanding the use of OpenEyes into the cataract service followed by the other sub-specialities over the next few years. This development is part of the Kent Ophthalmology Record which will allow information about patients' eye conditions to be shared across trusts, opticians, general practices and other primary eye care providers to create a fully integrated eye care system for all patients in the south east of England.

Our Digital Correspondence

Automated letter creation

Clinical documentation is already being recorded electronically in some of our clinics. With the advent of EPR clinicians will be able to utilise data quickly and easily formulate letters, rather than having to manually re-type information into a letter after the clinic. This means that in some areas, patients could receive their clinic letter before they even leave the room, or will receive the correspondence via email.

Voice recognition

Our clinical teams have started to implement voice recognition for clinical correspondence in some departments to speed up the turnaround of letters, reducing delays in patients' diagnosis or treatment. This will release time for our administrative staff to continue to provide a high-quality service for patient enquiries.

Remote reporting of x-ray images

Our radiologists and radiographers have been enabled to report x-ray images from home, which will

improve reporting capacity and flexibility. This will help us to make the service more efficient, flexible and able to react to our patient's needs, including quicker cancer diagnosis, as well as improve our staff work life balance.

Automated coding of outpatient procedures

Currently, our clinicians document on paper the procedures they have performed during an outpatient or emergency visit, then submit this paper documentation to our clinical coding department for transcription in order to collect payment from our commissioners. When the EPR is deployed, this will become automated. For example, our clinicians will document in our EPR any procedures undertaken. This will be easily accessible for our clinical coding department to view to ensure that the correct information is passed onto our commissioners for the care we have undertaken. As an interim measure during 2020, we will be introducing to Maidstone Hospital the electronic clinic outcome forms already used at Tunbridge Wells Hospital.

Our Digital Emergency Department (A&E)

Rapid access to information

Once our EPR goes live, if a patient has been treated by any of our services within the last 12 months their health record will be immediately available to staff upon their arrival in ED. When they reach the reception desk their demographic, allergy, infection screening, disability and GP information contained in their electronic record is available to receptionists, making registration and checking of information much faster. Upon seeing the triage nurse, the patient's assessment will be documented in their electronic health record by a triage nurse using a mobile device – usually a workstation on wheels.

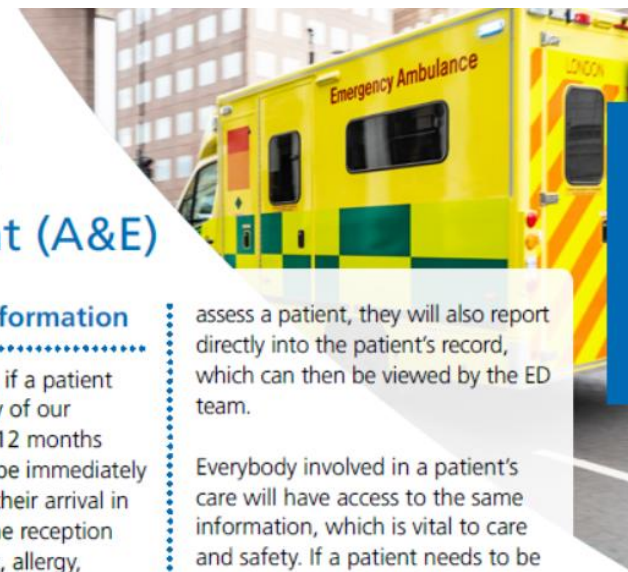
Single source of the truth

Wherever a patient is being treated within the ED (high dependency, resuscitation, low dependency, minor injuries) their entire clinical team will be able to simultaneously document information in their electronic health record. If speciality-specific clinicians that work outside of the ED (for example, surgeons, anaesthetists, neurologists) have been requested to

assess a patient, they will also report directly into the patient's record, which can then be viewed by the ED team.

Everybody involved in a patient's care will have access to the same information, which is vital to care and safety. If a patient needs to be transferred for surgery, to intensive care, or for specialist care on a ward, their entire ED health record, including all the care received and documented whilst in the ED, will be immediately available for clinicians in the receiving areas. This will allow them to plan the patient's care appropriately before they are actually transferred to their area of care.

The administrative burden of urgently sourcing paper records for patients arriving in our ED will be eliminated. Letters are already automatically sent to the patient's GP when they are admitted to an inpatient area from the ED and this will continue. In the future there will be no need to wait for paper notes to be released from the ED before follow-up appointments can be booked.



Real-time information for effective management

With the EPR in place, the current status of the ED (at any point of time) can be viewed on a dashboard. Staff can see, at a glance, colour coded information about each patient: waiting time, which area and bed they are in, acuity level, early warning score, status of their emergency care pathway, when they were last reviewed by a clinician, when assessments were completed. This snapshot helps with the effective and efficient management of the ED and ensures that our patients are receiving the appropriate and timely care that they need. In the future clinicians will be able to automatically add the key details about a patient's condition, accident or trauma into their health record in our EPR so that the entire clinical team has quick and easy access to the data when the patient arrives, avoiding potential life-threatening delays to their care. This vital information is currently handwritten on paper, making it difficult to quickly share with an entire clinical team.



Electronic alerts

We are designing our EPR system so that alerts can be triggered to make appropriate staff aware if a patient is a frequent ED attender with an emergency management plan (for example, a paediatric asthmatic patient), as well as infection control status or acute kidney injury, or if they need to be seen more urgently as a result of their early warning score, for example if there is an indication of sepsis. This early warning score is automatically calculated in our EPR from their initial triage assessment.

eTriage

We are aiming to introduce eTriage within our ED departments. On arrival, patients will be asked to enter information via a tablet device detailing their symptoms and reason for their visit. They will input their demographic data, before completing a simple set of triage questions. Based on the patient's response, the eTriage will be pushed immediately into the clinical system and patients will be listed by priority according to their clinical need, including being referred to see the GPs on site. This will save time for both reception and emergency staff as patients will be streamed to the most appropriate care quickly.

Our Digital Wards

Gone will be the days of paper drug charts hanging at the end of patient beds, doctors documenting in paper notes during their ward rounds, nurses having to wait for a patient's set of notes to become available before they can write in them to record regular observations, multiple trips back and forth to pharmacy to submit paper medication prescriptions... The list goes on.



Just like in our clinics and ED, the inpatient team caring for a patient will be able to see the patient's health record within our EPR. A patient's notes will always be available and accessible electronically, with multiple clinicians able to contribute to a record simultaneously, avoiding any unnecessary delays to care. As the system matures, clinicians will be able to access other clinical records stored in systems such as eNotes, TOMCAT (Cardiology), Endobase (Endoscopy), and the Kent Oncology Management System (KOMS), via tab integration with our EPR.

Recording care at the bedside using mobile devices

Our doctors and nursing staff use mobile and handheld devices on our wards to view and record information about their patients, in real-time, at the bedside. In the future, we would like to bring technology as part of our EPR that will enable nurses to use handheld devices with an in-built barcode scanner in a medical grade waterproof casing. Nurses will scan a barcode on the patient's wristband to access their electronic health record, allowing the patient's observations to be recorded (temperature, blood pressure, pulse) directly into their record in our EPR, in real-time, at their bedside.

Workstations-on-wheels are already used in a number of our wards to view results and x-rays as well as record information during ward rounds. The amount that can be recorded will substantially increase when our EPR system is launched enabling clinical teams to update patient care, any medication changes or further tests/procedures required. All of these will be documented and ordered in real-time, ready for action by nursing staff and other clinicians involved in the patient's care.

Patients do not stay in hospital for longer than necessary

Discharge summaries are completed within an electronic system and are used to dispense the drugs patients need to take home with them, as well as being sent electronically to the patient's GP as soon as they are discharged from our hospitals. Eventually this will be incorporated within our new EPR system reducing the time taken to complete these documents and allowing our doctors to secure access to the patient's record wherever they happen to be, avoiding any unnecessary delays to their care or discharge.

Improving flow and capacity within the hospitals

When a patient is discharged or transferred, our nurses can update our live bed management system using electronic touchscreen whiteboards. This gives real time information to assist with the management of high occupancy areas and the planning of upcoming patient discharges. During 2020 we will introduce Teletracking technology that will enable staff to track the movement of patients to identify delays that can be avoided and indicate to ward staff the type of bed clean that should be ordered based upon the departing patient's

clinical status. This will further help improve patient flow, bed capacity and efficiency across our wards. This technology will also be applied to enable us to tag medical equipment across the Trust, allowing staff to find and move devices to where they are needed more rapidly.

Automation of vital patient data from medical devices

All of our physiological monitors will eventually be directly connected to our EPR. This means that the data generated from medical devices will be automatically and continuously recorded into their health record in our EPR, removing the need for manual transcription and associated errors. Medical device integration improves safety allowing our clinicians to spend more quality time at the bedside caring for their patients, instead of spending time manually capturing and recording data on paper every 5-10 minutes, day and night, for each patient.



Effective transfers of care

When our EPR system is implemented in all areas, all information about the patient will be available to staff in a ward area before the patient arrives. From within the patient's record in our EPR, the team will see, for example, which medications the surgeon/doctor has prescribed to be administered. They will also easily see the information that has been recorded by previous teams treating the patient, from operation details, surgical notes and anaesthesia information, to procedures performed and medications prescribed.

Rapid response

We already have an electronic system in place so that if any of our patients on any of our wards start to deteriorate or suddenly become acutely unwell, the Trust's Outreach Team (a dedicated team of nurses) can immediately respond with critical care expertise. The team are alerted to any patients whose vital signs cause concern (using the NEWS 2 algorithm) so that they can visit the patient's bedside and, if necessary, move the patient straight to the intensive care unit for round-the-clock care and attention. This will eventually be incorporated into our EPR giving clinical teams easy access to the patient's relevant clinical history.



Electronic prescribing and administration of medicine

As part of our EPR system we will be introducing e-prescribing to further enhance the safe administration and dispensing of medicines. Clinical teams will be able to prescribe patient drugs on the ward round electronically using workstation on wheels, before being automatically transmitted to the Pharmacy Department to process. The same system will also aid clinical teams to complete discharge letters more efficiently thus reducing the time patients have to wait for drugs to take home. Nurses on the wards and in departments will administer and record drugs given electronically within EPR, except chemotherapy which will be carried out via an existing dedicated e-prescribing system.



Our Digital Theatres

Efficient use of our Theatres

We have a well-established electronic theatre management system that allows our staff to record all activity that is captured whilst the patient is undergoing surgery and this includes real-time data capture. It allows us to schedule and manage patients, use resources effectively and efficiently, and record supplies used during surgery.

Our EPR will eventually replace this system, providing us with a single record that covers the whole surgical patient journey from admission to discharge. This will also be integrated with our administrative systems to further enhance the efficiency of the booking process. We will also be investing in the longer term to implement an anaesthetic record system which can be integrated with our EPR.

Intensive care

We are working closely with our intensive care team to ensure that this area has the right IT system that meets the specific needs of the patients in both of our units, to complement the EPR system being rolled out across the Trust.

Ensuring patients waiting for trauma surgery are managed effectively

We have developed a system that allows our Orthopaedics team to track and plan the trauma cases both within the hospital and those waiting at home. This has ensured patients are managed more effectively via a single 'Trauma Board' and has reduced waiting times for surgery. This is planned to be rolled out to cover all emergency surgery.

Our Digital Maternity

Ensuring mother and baby are supported through every step

We have a well-established electronic system which the maternity team use to record notes from the first antenatal appointment until postnatal discharge, in both the hospital and community settings. Future developments will increase the points of contact when data is captured to include early pregnancy and enhanced care. We are currently working with the system supplier to develop a Maternity Personal Health Record portal which will give women digital access to their maternity records and reduce the need for paper notes. A recent update of our website pages and greater use of social media provides a wealth of information for women regarding pregnancy, childbirth and beyond. The introduction of online self-referral has enabled direct access to maternity care, improving choice, personalisation and timely referrals to the appropriate pathway.

We will also as part of our EPR programme provide additional devices so the whole obstetric service can order tests electronically and review images. In addition, we will be looking to enhance our mobile devices so that midwives in the community can also access the information they need when they need it.



Our Digital Oncology Service

Our Kent Oncology Centre (KOC) works in partnership with other healthcare organisations to provide cancer services across Kent, Medway and into East Sussex. Clinician access to high-quality information throughout the region is essential to the delivery of our services.

We already have in place existing systems that support electronic prescribing of chemotherapy, planning of radiotherapy, and the Kent Oncology Management System (KOMS) to support clinicians in treating cancer. These will continue to be developed by our Computer Science team to respond to the needs of the organisation, including integration with EPR and eNotes projects to ensure that excellent care is provided to our patients irrespective of where they are interacting with our cancer services. Research into the use of information technology

to personalise the management of patient care is beginning to show improvements in patient outcomes. In radiotherapy, for example, it is now possible to adapt the delivery of radiotherapy treatment in near real-time and the KOC will look to implement similar techniques.

Our clinicians will need access to advanced decision-making tools when delivering personalised healthcare more widely. These tools are often complex and involve machine learning techniques applied to large cohorts of patient data.

“We want to ensure our patients have access to clear and relevant information before, during and after their journey through our cancer services.”



In imaging, for example, machine learning is beginning to support the interpretation of CT scans used in cancer pathways, but there are a number of challenges to overcome, including those relating to information governance and clinical assurance, which will require us to work with partner organisations to introduce these developing digital technologies.

We want to ensure our patients have access to clear and relevant information before, during and after their journey through our cancer services. This is an area where clinician validated apps have a role. The Breast Cancer Kent Patient App produced by the MTW Breast Unit is

one example and we will work to ensure that other appropriate apps and resources are available to our oncology patients.

The cancer team will continue to support investment in safe and secure IT solutions that will allow our services to be delivered in new and innovative ways where these are of benefit to our patients and staff, including extending remote working where this is appropriate and ensuring that staff have access to the information and resources they need to function as a single integrated team, even when they are working from multiple sites.



Our Digital Patients

Allowing our patients digital access via a patient portal

Living in a digital society, people are accustomed to accessing services and personal information (finances/banking, shopping, social media) on computers, laptops, smartphones and tablets, so why should they not be able to access their health information in a digital way too? Research shows that patients want to be more involved in, and more informed about, their healthcare and treatment, particularly those with long-term health conditions. We plan to implement a patient portal so that our patients can access the following documentation electronically instead of it being posted to them:

- Appointment letters / past appointment details
- Clinic letters / clinical correspondence

The aim is that patients will also be able to use the patient portal to contact the hospital to change or cancel appointments, as well as update us with their latest contact details. We will also ensure any IT systems introduced

for patients' use adhere to the accessible information standards involving them in the design and implementation. The Trust is already working to bring a system that will enable maternity patients to hold their own records electronically and contribute to their health information without having to make unnecessary visits to our hospitals.

Eventually we would like to see this developed and extended to cover all patients, including functionality that enables patients to:

- upload health trends, for example, their blood pressure, weight, blood glucose;
- arrange e-visits with their clinicians;
- Proxy access for parents, relatives of elderly patients, power of attorney circumstances;
- integration with wearable devices such as FitBit and Apple HealthKit.
- Introducing specific apps to support patient care



Keeping patients in touch with their family and friends

Patients want to be informed, they want access to the internet, and they want to connect with their family at home whilst they are in hospital. We are committed to supporting as many of our patients in hospital by offering a number of mobile devices so they can keep in touch. In the future these devices could be used to enable patients to update their clinical information such as recording how they feel, food they have consumed, etc.

Putting patients at the heart of their care

With timely medical record sharing a challenge across the NHS, our ambition as a digital trust is to create integrated technology to:

- enable our hospital staff to see a single unified view of a patient's health record, electronically, in its entirety (Sunrise EPR);
- give our patients the ability to view their electronic health record held at our hospitals, to involve them more in their care and support them with the management of their health conditions (patient portal);
- enable the sharing of key clinical information with other hospitals and patients GPs via the Kent & Medway Care Record.

Our Digital Workforce



Remote access and enabling working from home

MTW is committed to implementing the technology our workforce needs in order to help them to achieve a work-life balance. This includes providing staff with the technology that supports remote access working from home, including video conferencing facilities for meetings so that teams can keep in touch, progress projects and provide input to care without the need for travelling.

Smartcards and single sign-on

All staff across the Trust, interacting with patients, will be issued a Smartcard to access clinical IT systems, alongside using a single sign-on password. This allows our staff to quickly access and create electronic health records, or to gather and document treatment for all our patients whilst in our care.

Removal of Bleep systems

Messaging applications for clinical use will be explored to see how the Trust can remove the legacy 'bleep' system for non-emergency communication, in line with national requirements. This means our staff will no longer have to 'bleep' a number and wait by a phone for someone to call them back. This will release time, for both our nurses and doctors, to care for patients.

Our Digital Enablers

MTW is committed to extending the benefits of digital technology to all of our 'back office functions' to enable the continuous improvement of services for all our staff and patients. This includes reducing reliance on paper processes, increasing automation to free up resources to support expert tasks, introducing systems to support remote working, as well as streamlining legacy IT systems to provide real-time data that supports decision making.

Human Resources

MTW already has introduced a number of systems to improve the processes within HR. This includes an online recruitment system for managers covering all stages of the recruitment process. We have also introduced an electronic rostering system for all non-medical staff to help managers allocate shifts more effectively, and record time and attendance data, whilst also reducing bank and agency staff usage. A further module is also due to be implemented this year in order to match staffing levels to patient acuity. In addition, we will shortly be commencing the rollout of a Trust-wide medical e-rostering system alongside a regional Collaborative Medical Bank.

Our staff are now able to view their payslips and P60s online via a specific app which they can register to and log on to make any payroll related queries. Alongside this we have implemented ePay to enable our

employees to claim their expenses electronically, with plans to further utilise the Employee Staff Record (ESR) system to provide a self-service model for our employees and managers. Our staff can now access and complete their appraisal through the MTW learning portal which has reduced the need for manual data entry within HR.

Finance

Our Finance Department aims to automate transactions and invoicing to reduce reliance on paper and routine manual data entry. This will release resources to support our clinical areas and allow us to introduce systems, such as patient level costing, that will actively support decision making by using real-time data to ensure our services continue to be financially sustainable.

Procurement

Ensuring we have the right product, for every member of staff at the right time is critical to providing safe effective care. Therefore, we will be ensuring digital transformation supports our procurement team to work more efficiently with suppliers to ensure quality and affordability of all the products we use within the Trust. This will include refining existing IT systems that support automation of stock management, facilitate e-tendering, provide e-catalogues for staff to choose from and links with the national procurement systems.

Business Intelligence

It is very clear that improvements can be made to the way that information and data is made available and used across the organisation. Our strategy is to implement information

management systems that can be utilised to enhance the organisation's ability to understand its performance and work with 'one version of the truth'. This will include streamlining our systems, whilst ensuring consistency of output, using statistical process control methodology and introducing mechanisms for managers to access information through self-service portals and performance dashboards. This will not only improve workflow within our teams, but will support delivery of the objectives of our Quality Improvement Strategy. Robust training of staff for all clinical systems will be provided with regular refresher updates. Frequent data quality reports will be run to pick up any errors or omissions, so prompt action can be taken to rectify any problems ensuring that digital information recorded is accurate at the time of entry.



Estates

Our Estates and Facilities Management Team uses various digital systems and associated hardware. This includes a specialist facilities management helpdesk and maintenance system, auditing and reporting software packages, biometric attendance systems, online car parking applications and automatic number plate recognition. These provide our team with the ability to record and document activity across the Trust in order to evidence compliance with national standards and legislative requirements.

We are planning to bring in new technology to help patient flow, particularly to ensure beds are released to our EDs as soon as patients are discharged home. We also plan to bring in new audit software to help our cleaning teams keep our hospitals cleaned to high standards. Our staff will see new software recording their attendance in health roster saving time for managers to manually update systems. Those who have hospital accommodation will be able to book and manage their tenancy through an electronic system. All visitors to the Trust will be able to benefit from new car parking software similar to RingGo making it much more convenient than queuing at payment machines.



Communications

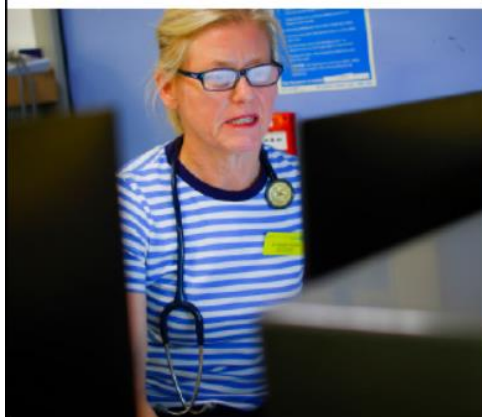
Communication with our staff and patients is fundamental to providing outstanding care. It is crucial for our communications team to be able to target specific communications to specific teams or groups within the organisation. We also need to enable them to analyse receipt of information, such as whether individuals click on links provided, to make sure the communications is effective.

We are committed to investing in a new intranet site, as well as hosting webinars and live events. We also aim to bring in live media screens to digitalise messaging used within the Trust.

Enhancing Digital Care

Within our region and beyond

MTW recognises the importance of accurate and timely access to clinical information across Kent and Medway – for patients themselves, for our hospital clinicians and clinical teams, for a patient's primary care providers and for other hospitals involved in a patient's care. Working with our healthcare partners, developing and utilising the extensive capabilities of our clinical IT systems, we aim to innovatively share electronic clinical data and information to enable joined-up healthcare to benefit our patients.



Our digital connection with other hospitals and GPs in Kent

MTW already has a good working relationship with our local system partners. We collaborate with partners at various levels, including across the Kent & Medway Strategic Transformation Programme (STP), with other providers across Kent, within the Integrated Care Partnership (ICP) and locally via the West Kent Alliance.

With the increasing need to collaborate with our health and social care partners, there is a requirement to ensure that we are providing our clinical staff not just with MTW patient data, but data from any health or social care provider, to ensure the best possible care. Currently, there is no easy way for the clinical teams to share vital clinical information with one another in a timely way.

To further support multidisciplinary teams working across organisations and support the vision of the STP, a key programme for the region is delivering a Kent & Medway Care Record (KMCR) over the next three



to five years. Through the KMCR and utilising all the EPRs across providers, clinicians in Kent will be able to view the latest information about their patients, from conditions, tests and procedures, to results, treatments, clinical letters and recommended follow-up care. For example, if a patient visited our ED department and then went to one of Kent's GP surgeries the following day or later, their GP would know everything about the care they received at our hospitals and any follow-up care or treatment that is required. The aim is to provide a clinical portal containing a complete care record across the county. This would also include access for patients and carers and the ability to add to their patient record, improving patient engagement and outcomes.

Alongside this we are working with the STP which is focusing on developing a Kent-wide approach to Pathology services, this will include implementing a Kent region LIM system for processing, capturing and sending out blood test / sample results.

Integrating patient records across the county

The local West Kent Integrated Health Partnership (ICP) is in the process of developing its own supportive strategy. We will continue to collaborate with our partners to deliver the best solutions for our

communities. We will learn from each other and share our experiences so that we can all improve digital technology for the benefit of our patients wherever they are treated. As the West Kent ICP develops we will see integrated service models developed that also align clinical IT systems so that users' experience is seamless even when services are provided by multiple organisations. The Trust will also be involved in utilising patient data to support population health analysis, aiding further service transformation across the ICP.

Although ICP development is in an early stage it is key that our IT team engages at an early stage to act as an enabler in the process. A Digital Collaboration group is being established initially reporting via the West Kent Alliance, but eventually to the ICP board which contains IT and Information leads from all providers and the CCG within West Kent. The aim will be to ensure our strategies align, and to support our users in sharing of data between organisations and the group through both system integration and consolidation to support both the wider West Kent transformation and integrated care system vision.

There is also a need to share data with our patients and their carers to both inform and support patient



care. This will improve engagement with patients and their carers, promote data quality and provide additional opportunities to improve patient care. Providing access to Trust services via apps, accessing appointment information via email and video consultations are also key to improving patient interaction and providing improved services.

We will need to ensure that our long-term external patient interaction aligns with both the Kent and Medway STP and NHSX in the form of building upon the KMCR and solutions, such as the NHS App. However, in the interim we will look to embrace specialist products, working with suppliers to integrate and shape these solutions to achieve our long-term strategy. Examples include patient appointment letters being replaced

by electronic correspondence, patient record portals for long term condition management, allowing patients to enter information on their condition which will aid their treatment, and an increase in video consultations.

The Trust has also recently embarked on the implementation of a 'virtual ward', allowing patients to be

managed remotely. It is anticipated that this type of practice will be implemented further and, due to technology enablers now available, the workstream will also look at real-time remote monitoring of patients via provided devices and patients' own equipment, such as smart phones, to improve remote patient care.

National drivers for change

Alongside our work in the region, we will ensure that our local digital transformation incorporates national IT initiatives as they are made available to us, such as those that:

- help patients to manage their care in the community, including Apps;
- enable NHS staff to work more effectively from home;
- support clinical decision making using AI; and,
- improve security and interoperability of national systems used to share data across healthcare.



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Chapter 2

Our Digital Future

Through the use of digital technology, we are seeing huge improvements to patient care, safety and quality, but it has the potential to go beyond this. Digital technology offers solutions to some of the most complex challenges facing the NHS and we want to fully embrace this over the years to come.

A digital revolution in healthcare

Like many other sectors, healthcare is experiencing the 'digital revolution', having recognised the potential that technology has to support and transform the delivery of care. To date, this has most notably been done through digitalised health records. Building on our success, this strategy enables us to further explore and develop the use of digital technology to fundamentally change the way we deliver healthcare in West Kent.

Our digital vision for the future

The 'NHS Long Term Plan' sets out that we, as the NHS, need to continuously adapt to take advantage of the opportunities offered by technology, to continue to serve our patients and to meet future challenges and demand.

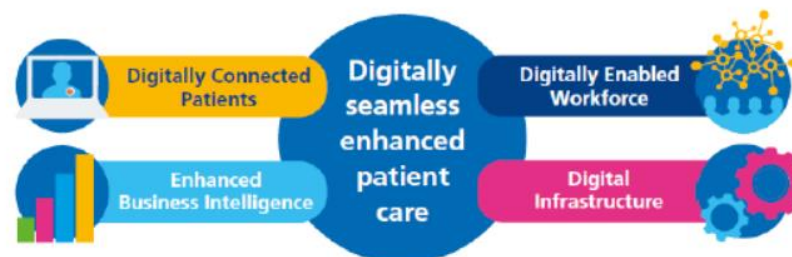
The aim of our eHospital model is to help treat patients more effectively by giving healthcare staff easier

access to a single version of up-to-date information, to improve care through decision support tools, giving healthcare staff the functionality and data needed to be safer and more efficient. It also opens opportunities for working differently across boundaries, to improve care and how our services are provided by different teams across organisations.



MTW's vision for Digital Transformation is to provide:

'DIGITALLY SEAMLESS ENHANCED PATIENT CARE'



Our digital transformation strategy focuses on four areas:

Patients: who will be able to access their information more easily via patient portals to receive correspondence via email as well as inform us about their condition via apps or through virtual clinics.

Staff: who will be supported to access clinical records quickly and simply, from various systems to ensure they can assess and treat patients more effectively.

Infrastructure: Single sign on and bring your own device will be introduced as well as significant investment in new computers and technology to support this transformation of care.

Information: Data collection will be used to reduce duplication of work, minimise manual data entry and audits, as well as support improvements in patient care and research.

Our digital transformation aims to:

FURTHER IMPROVE PATIENT JOURNEYS

Pathways will be more streamlined, outcomes improved, and patients will have greater involvement and engagement with their care. Digitally supported transformation will be business as usual.

STRENGTHEN THE ORGANISATION

Digital processes will be embedded across our organisation as our default way of working, and we will be financially and operationally resilient in our delivery of this.

WORK WITH OUR COMMUNITIES

MTW will play a leading role in establishing Kent as an exemplar region for sharing healthcare data in real-time.

CONTRIBUTE NATIONALLY TO FURTHER DIGITAL TRANSFORMATION IN THE NHS

To be internationally recognised as a centre of excellence for digital innovation in healthcare collaborating with industry, academia and other healthcare providers. We will continue to support other NHS trusts with their advancements in digital maturity by sharing our journey and successes through a series of digital 'blueprints' for others to adopt, and through Trust visits and collaborative activities.

Embracing advancements in technology



There are a number of well-recognised opportunities in digital healthcare which we are keen to embrace further by advancing our digital technology and extending the capabilities of our EPR, including:

- Patient self-management facilitated through access to their own records
- Increasing patient access to information via the internet
- Mobile and remote medicine
- Use of devices for care and management
- Wearable devices
- Robotics Process Automation (RPA)
- Artificial intelligence

Understanding the true value of digital data

As a data-rich healthcare trust our aim is to move away from simply 'analysing' data, to instead understanding the true value of the information we hold on our patients, bringing profound benefits for them and their clinicians alike. Combining clinical data with social and genomic data, for example, will generate comprehensive information that will help to support patients through the delivery of more personalised forms of care in the future, ideally moving from a reactive system to one where maintaining health is a proactive programme.

Extending our cloud-based services with Microsoft Office 2019

Windows 10 and Microsoft Office 2019 will work alongside our IT systems to enhance the administrative side of our work, speeding up many processes from conferencing to communication, helping us to work even more efficiently and effectively across MTW to ultimately benefit our patients. It will also save us valuable time and money.



Our Digital Design Principles

Digital technology is constantly changing and evolving and as a Trust we will be flexible and open to new opportunities. Though we already have key programmes planned, it is important to outline the principles on which we will all be developing digital technology. No single team can deliver digital transformation in isolation, and a number of individuals and teams across the organisation are responsible for developing solutions and implementing improvements.

Digital transformation will continue to be driven from multiple sources, but there is a need for greater cohesion to ensure that we are all moving in the same direction and collectively can meet our digital vision. The Design Principles are a statement of our collective values for the development of digital technology in the future. They have been produced following discussion with staff, patients and partners and have been informed by the Trust Board, the IT Department and with partner IT colleagues in the organisation.

The Design Principles will:

- Provide **governance and oversight** of all digital initiatives, ie, when proposals come to the Business Case Review Sub-Committee they will need to meet each of the five principles in order to be approved.
- Act as a **consultation and engagement tool** to create better conversations around the possibilities for digital transformation.
- Provide **guidance and support** for digital programmes or improvement initiatives that are in planning, development, implementation or review stages, ie, they can be considered success criteria against which a digital programme can be deemed to be effective.

Technology and digital solutions should be **Simpler; Connected; Faster; Enabling; and Secure:**

Simpler	<ul style="list-style-type: none"> • We will rationalise the number of systems in use. • We will not replicate complex processes digitally.
Connected	<ul style="list-style-type: none"> • We will create tools and systems that bring together information from disparate systems. • We will not create closed systems which create silos of information
Faster	<ul style="list-style-type: none"> • We will develop digital solutions that streamline work for clinicians, improving their speed and efficiency, whilst enhancing the patient experience. • We will not develop inefficient solutions that detract from the patient experience.
Enabling	<ul style="list-style-type: none"> • We will create digital solutions to transform care pathways. • We will not create solutions in isolation and will learn from others to accelerate implementation.
Secure	<ul style="list-style-type: none"> • We will develop digital solutions that are safe and secure, and meet our security standards. • We will not support any solutions that put patient data at risk.

For example, if we take desktop technology, the design principles would be applied as below.

Simpler	<ul style="list-style-type: none"> • Desktop tap-and-go technology simplifies the user's experience, bringing their workspace to them, wherever they are in the hospital.
Connected	<ul style="list-style-type: none"> • Single sign-on is a user session and authentication service, providing access to multiple applications through one set of login credentials.
Faster	<ul style="list-style-type: none"> • Desktop provides a modern end-user workspace, utilising enterprise-class technologies to deliver faster access to the tools a member of staff needs to do their job releasing time to care.
Enabling	<ul style="list-style-type: none"> • Staff will be able to access their workspace from as many devices the application can run from, at anytime, anywhere, even remotely, enabling more efficient ways of working. • By providing access to clinical tools to allow easier access to the clinical information required to better manage care pathways.
Secure	<ul style="list-style-type: none"> • A shared environment provides a single place for deployment of security updates, impacting all users of the platform. This provides greater protection against vulnerability as inconsistencies between devices are minimised. • Ensuring the standard practice that all files are saved to secure network locations is continued.

Chapter 3

Supporting Our Digital Transformation Strategy

Underpinning the digital transformation strategy our IT infrastructure must meet the needs of the organisation both now and in the future. This includes focusing on our capacity, availability, speed and security. We have projects aimed at increasing storage, providing more applications across the Trust and increase communications (voice, data, video) around the organisation.



Digital transformation is everyone's responsibility, but the IT Department will have a clear role to play and are supportive of change. There are three functions within the IT team to help deliver our future priorities and deliver on the Design Principles.

Clinical Systems Management

Our Clinical Systems Management team is responsible for coordinating engagement with clinicians, staff, patients and partners for a number of key clinical systems. It encompasses

all aspects of the successful project and programme delivery of digital solutions, including business analysis, project governance, quality assurance and testing, whilst keeping to budget, adhering to policy, and communicating with teams affected. In addition to this team there are specific system administrators who help support other applications across the Trust.

Digital Services & Infrastructure

This team oversees all current technology in the organisation by coordinating all digital services, including the service desk, network and operations centre, infrastructure, information and data, and training and education. This team also assess and ensures implementation of the appropriate architecture, to mitigate the organisation's risk, ensuring compliance relating to technical security. This team is supported by project managers to ensure specific programmes are delivered.

Our commitment

Our team is already well known for providing excellent support, but we want to build on this and become the enablers to transformation. We want to bring our technical expertise to life in new ways and will be appointing new roles and promoting new skillsets in our teams to achieve this.

We want to be involved at every stage of solution delivery, from identifying the problem to assessing options through to implementation and review. We know that the best results will come where we collaborate and that no single individual or team has the answer. We will work in collaboration with clinicians, staff, and other enabling functions to do what is best for the Trust and patient care.

We will ensure that we tell the 'story' of digital change in a way that helps people understand what benefits they will see, by improving the ways in which we engage with people. As far as possible training should occur where people work and given at the right time rather than in a remote classroom on set days.

We will build and continue to engage with staff patients and partners to deliver the Digital Transformation Strategy. We will build engagement into the way in which we deliver all of our programmes of work. In collaboration with other enabling functions we will lead and support

the digital transformation of pathways and new ways of working across the organisation.

Our request

We want to work with staff at every stage of the digital transformation journey. Where we are leading digital transformation we are asking everyone in the Trust to engage with us throughout planning, development and implementation. We want to collaborate to ensure that we get feedback and insights so that we can build solutions that meet the needs of our staff and patients. Not all digital transformation will be led by the IT Department. We want to be working with Trust teams from the time that you first begin to identify a problem. Though it won't be possible to meet all aspirations we want to focus on the good that we can do together.

New leadership and engagement model

In order to support the new Digital Transformation Strategy, the Director of IT, supported by the Programme Director for EPR and Digital Transformation, will provide leadership on digital health and care, across technology and information and set standards and priorities for the Trust. They are our advocates to ensure the importance of digital transformation is considered in every aspect of what we are aiming to achieve in our organisation. They will take a leadership role regionally and nationally, representing the Trust at the highest levels.

We already have a **Chief Clinical Information Officer**, supported by deputies, who is responsible for ensuring that the design, implementation and use of digital technology is done safely and efficiently. In addition, we will be appointing a **Deputy Clinical Information Officer**, recognising the key role that nursing professionals already play in digital transformation and design. These leadership positions will be supported by a nominated triumvirate of **Digital Transformation Leads** for each Division (Clinical Lead, Matron and General Manager). All these roles will have dedicated time allocated to supporting digital transformation. These roles will be a key point of contact for other clinicians and staff. They will provide guidance and leadership and have a central role to play in delivering the Digital Transformation Strategy.

Our IT team will provide guidance and technical expertise to ensure the right solutions are in place for services and that they are developed and implemented through clinicians in order for them to be truly successful. In addition, the IT team will work closely with Transformation and Quality Improvement colleagues to support change across the organisation.

We also have dedicated teams for implementing EPR and also supporting our key clinical systems within the Trust. Eventually, these two teams will merge providing expertise as we move away from our legacy systems towards a single point of information via our EPR portal alongside eNotes.

We have established a **Clinical Digital Design Authority** (replacing the Clinical Advisory Group, CAG). This group, with representation from all clinical areas and divisions, will oversee the Digital roadmap to guide the priorities and projects to deliver the Digital Strategy. They will also own and drive standards throughout the organisation ensuring the digital principles are upheld.

Skillsets and training

To support the structure and the establishment of new roles, we acknowledge that individuals may need training and support.

The use of digital technology will play an increasingly large part in all roles in the NHS. The recent Topol Review estimated that within 20 years, 90% of all jobs in the NHS will require some element of digital skills. The majority of staff will be very digitally adept in their own lives, but this does not always translate to confidence with use of digital technology at work. Part of this is driven by the user-unfriendliness of systems, which are much less intuitive than most current personal technology. We will be working hard to address this over the next 10 years to 2030, including developing a **Digital Transformation Hub** on both sites.

To increase digital confidence, we need to ensure that we are recruiting for the right skills, giving new staff appropriate induction and supporting skilled staff with the right training to develop others. We know that it can be difficult for staff

to take time away from their day-to-day roles so we will be looking at how we can deliver technical training differently. We will prioritise training on the ward, rather than in the classroom, where appropriate and will focus on delivering practical training at the right time for users.

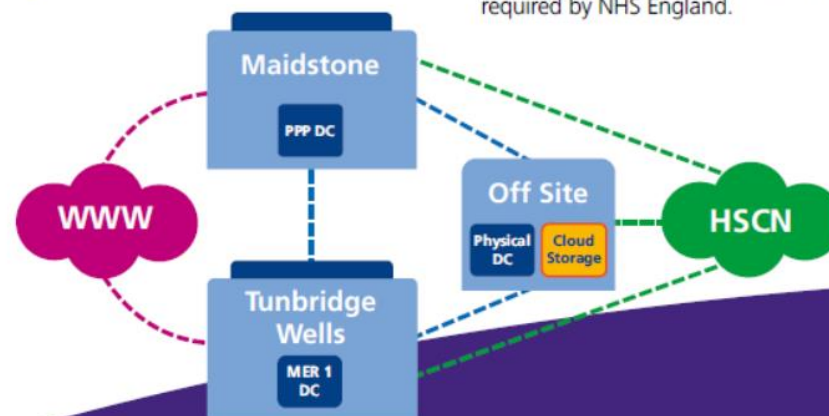
Strengthening our infrastructure

The Health and Social Care Network (HSCN) has allowed us to improve the resilience of our Trust systems, whilst providing the ability to expand its IT capacity in the future. It provides us a platform for further solutions to support our users. Examples include the introduction GovRoam across Kent, which will make it easier for staff to contact to any care network to access network drives and systems, without an additional layer of authentication. This will benefit users such as multi-disciplinary teams, and community midwives.

The infrastructure developed will also maintain options for collaborative working and/or IT outsourcing opportunities with other NHS organisations moving forwards as well as providing increased resilience for the IT team for specialist roles.

The Trust is required to migrate from Windows 7 and Microsoft Server 2008 by the end of 2020. We will also use this as an opportunity to focus on end user devices. All hardware or software replacement, migration or upgrade will be completed with the clear objective of ensuring that the IT estate maintains a warranted environment, based on Microsoft and Cisco best practice to ensure it is manageable and sustainable in the future.

We will also focus on cyber security, ensuring that all solutions have the latest security patches installed and being proactive in addressing new vulnerabilities. This includes ensuring that the Trust obtains the Cyber Essentials Plus accreditation, as required by NHS England.



Our Digital Prioritisation

In order to address the Trust's current digital maturity challenges and to deliver a strong foundation for the future, a significant amount of work must be done. We have heard from our staff that technology is outdated and hard to use, and there are areas where improvements need to be made to keep pace, as well as the need for more innovative forward-looking technology. Digital initiatives can be described as falling into three stages:

- **Maintain:** necessary work that needs to occur to address immediate issues and prevent problems from occurring;
- **Improve:** work to improve current systems and ways of working; and
- **Transform:** work that fundamentally changes how we work and operate.

While work will need to be undertaken to address current issues, solely focusing on these activities will not help us to achieve our goals or keep pace with technological change. The IT department has a prioritisation approach, and has worked closely with clinicians, care groups and partners to understand key priorities. This takes a balanced approach to rank priorities using weighted categories to ensure that we are focusing on things that will make the biggest impact. These categories include:

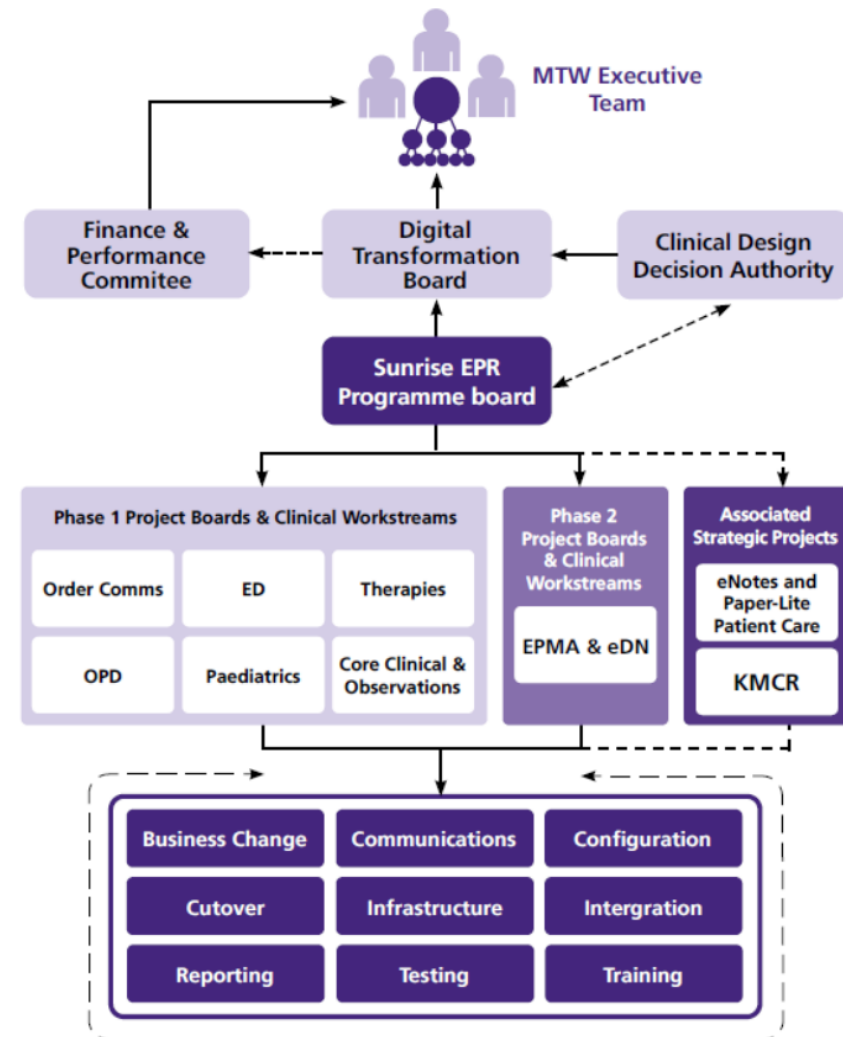
- **Risk:** level of corporate and clinical risk of not implementing
- **Benefit/Return on investment:** level of corporate and clinical benefit delivered against investment
- **Business imperative:** meeting Executive and Board priority and national mandates
- **Time criticality:** on phasing of implementation
- **Funding availability:** for implementation and support
- **Resource consumption:** required to implement

We will continue to work directly with clinicians to review this approach across the life of the Digital Transformation Strategy to ensure we are pursuing the right priorities.

Robust governance

We have identified that as a Trust there is too much fragmentation and diversity in the digital solutions we have in place, and the ways in which they are used. The Design Principles outlined earlier identify the standards that the Trust will collectively work towards and this will be supported by robust governance.

There is a clear line of governance and oversight from the Board downwards (see overleaf for diagram). We know there are additional key governance forums not shown on this diagram and there must be consistent messaging across the Trust.



Enabling Workstreams

All proposals for digital investment will be reviewed at the Business Case Review Panel. Business cases for IT must demonstrate how they meet the Design Principles, in addition to existing requirements to show alignment with the Trust's strategic aims and good programme management. Guidance and advice will be provided to assist with developing business cases through the Digital Transformation Board.

Chapter 4

Delivering Our Digital Transformation Strategy

The Trust's vision is to be more responsive and focused on improvement, to fulfil its potential and be the high performing organisation its patients and staff deserve. The aim is to be a Trust where patients choose to be treated and the best people aspire to work.

The Trust aims to deliver the vision through its values:

- **Patient First** we keep the patient at the heart of everything we do
- **Respect** we respect and value our patients, visitors and staff
- **Innovation** we take every opportunity to improve services
- **Delivery** we aim to deliver high standards of quality and efficiency in everything we do
- **Excellence** we take every opportunity to enhance our reputation



IT systems and infrastructure, information and data sharing, are identified as central to ensuring that teams have the tools and support they need to succeed. The Trust Strategy identifies the importance of IT and system investment, addressing current gaps and issues, and ensuring that solutions are integrated across the community, and beyond.

To deliver against this aim, a number of programmes of work have been identified and will form part of a ten-year implementation plan. These programmes are designed to organise the many strands of work that need to be completed, and the implementation plan will be used to organise resources and plan for the future. This high-level plan outlines our intention to meet our Digital Transformation Strategy building on work done so far. A further detailed plan will be made available at the start of each year to deliver the roadmap ensuring that we

remain agile to respond to the latest technology that is available and to provide the right solution for patient care at all times.

Digital transformation is an important foundation upon which greater transformation can occur. The implementation plan will deliver benefits against all of the Trust's strategic aims. The below diagram outlines each of the programmes of work, and highlights where each programme delivers benefits against the Trust's values.

	Patient First	Respect	Innovation	Delivery	Excellence
Delivering the Strategy				x	x
Enabling the patients	x	x	x	x	x
Enabling the workforce		x	x	x	x
Digital records & interoperability	x		x	x	x
Protecting patient information	x	x			x
Strengthening digital health care systems	x		x	x	x
Strengthening infrastructure	x		x	x	x
Enabling patient flow & integrated care	x	x	x	x	x
Beyond MTW	x		x	x	x

On the next few pages you will find a summary about each programme of work including the desired outcomes and key projects. More detail about the programmes can be found in the supporting implementation plan.

Delivering the Digital Strategy

Why	Outcomes to Achieve	Highlight
The Digital Transformation Strategy begins with this document and work will need to be undertaken to make sure that it is embedded in the organisation and structures are put in place for the objectives to be realised.	<ul style="list-style-type: none"> Launch and communicate the Digital Strategy to support successful delivery of the objectives Establish necessary governance and prioritisation arrangements to support the Digital Transformation Strategy Create the teams and skillsets to support the delivery of the Digital Strategy Engage with staff, partners and patients to support the delivery of the Digital Transformation Strategy Regular measurement of benefits delivered and review of progress against the Digital Transformation Strategy Develop strategic outline business case for investment over 10 years to deliver our eHospital 	<p>Launch and embed the new governance structure and roles</p> <p>Produce a clear two-year rolling roadmap for investment in digital transformation which is responsive to technology advancements</p>

Enabling Patients

Why	Outcomes to Achieve	Highlight
Patients are keen to see improvements in current technology, and in exploring how digital improvements could change the way in which they receive care, enabling them to take the lead and giving them more choice.	<ul style="list-style-type: none"> Enable patients to have more choice over how they receive care and provide options to access their personal information Improve patient and visitor navigation around the Trust Continually improve patient and visitor Wi-Fi throughout the Trust Support divisions and specialities to implement tools and technology to support research and innovation Provide patients with more opportunities to access information and give feedback 	<p>Deployment of the patient portal</p> <p>Development of personal health record through which patients will be able to directly access information about their healthcare</p> <p>e-referrals for Outpatient appointments to be triaged electronically and stored in eNotes</p> <p>Digital self-check-in to be deployed at Maidstone Hospital</p> <p>Introduce Apps to support patient care and remote monitoring</p> <p>Provide mobile devices for patients to stay in contact with family and friends</p>

Enabling the Workforce

Why	Outcomes to Achieve	Highlight
<p>We have heard from staff that many of our current systems and technology are a point of frustration and provide a barrier to delivering great patient care.</p> <p>We know that we need to plan for different ways of working in the future, and are aware of the digital capabilities, training and culture we need to create.</p>	<ul style="list-style-type: none"> • Enable staff to document patient care within a single electronic patient record • Enable staff to prescribe and manage medicines safely and digitally by delivering a Trust-wide medicines administration solution • Enable staff to communicate and collaborate more quickly, reliably and securely • Provide the necessary infrastructure to enable mobile working • Support staff to work differently utilising new digital innovations to address fundamental workforce challenges 	<p>Move towards a fully managed service which will see total replacement of legacy hardware with roll out of Windows 10 & Microsoft Office 2019</p> <p>Introduce EPR system within the Trust that has tab integration to provide a portal into key clinical systems</p> <p>Introduce Trust-wide electronic prescribing and medicines management, enabling staff to prescribe and manage medicines safely</p> <p>Expand remote access to allow improved working from home for employees as well as introduce a catalogue of approved conference call facilities, such as Webex or Microsoft Teams that works best for meetings / providing clinical care</p> <p>Invest in improved finance and procurement systems</p> <p>Introduce improved communications tools and analysis technology;</p> <p>Develop and fully utilise ESR self-service for managers</p> <p>Introduce single sign on for all staff</p>

Digital Records and Interoperability

Why	Outcomes to Achieve	Highlight
<p>The Trust has significant number of applications of which there are over 40 clinical systems, many of which are silos of information that some clinicians cannot access.</p> <p>Where systems can be accessed there are many to navigate with time-consuming logins and access obstacles to overcome. Systems may contain different versions of the same data, which could lead to inconsistencies and potential safety concerns.</p>	<ul style="list-style-type: none"> • Deliver a single clinical information portal, giving a unified clinical view of patient care data for staff, with information from a variety of clinical systems • Improve our digital maturity as a Trust and start our journey to reach HIMS level 6 by 2030 	<p>Continued evolution of the EPR system to providing staff with a unified clinical view using tab integration as required</p> <p>Further develop and enhance eNotes to support our paper light Trust strategy</p> <p>Implement new RIS system which is tab integrated with the EPR</p> <p>Implement a mechanism to safely store medical photography images which can be accessed via the EPR</p> <p>Consider the introduction of AI and RPA technology</p>

Protecting Patient Information

Why	Outcomes to Achieve	Highlight
<p>Following the 2017 WannaCry attack cyber security in healthcare is high on the national agenda. NHS England has initiated a cyber programme of work to address serious security failings within the NHS. It is important that patients know that their personal information and data is kept safe.</p>	<ul style="list-style-type: none"> • Deliver a safe and secure Security Architecture which protects the Trust's data and assets 	<p>Deliver a robust cyber security strategy covering governance arrangements, data classification and data handling, cultural improvements and the establishment of a Cyber Security Operations Centre</p>

Strengthening Digital Healthcare Systems

Why	Outcomes to Achieve	Highlight
There are systems in use around the Trust which are either out of date, unsupported, or lack key functionality. Any change in clinical systems should be led by the Design Principles with support from the IT Department to ensure we are meeting our strategic ambitions.	<ul style="list-style-type: none"> Support the replacement and improvement of priority clinical information systems Collaborate with divisions and teams to identify appropriate decisions in relation to end-of contract and end-of-life digital healthcare systems 	Develop and implement a roadmap for the EPR and systems currently supporting clinical speciality areas

Enabling Hospital Flow and Integrated Care

Why	Outcomes to Achieve	Highlight
Managing the flow of patients through the hospital efficiently, especially those admitted via the Emergency Department for unscheduled or urgent care, is critically important.	<ul style="list-style-type: none"> Deliver digital solutions to enable improved patient flow Digitise workflow to support and enhance patient care across the Trust 	<p>Introduce touchscreen technology to enhance live bed management system</p> <p>Introduce patient tracking and RFID technology</p> <p>Enable eTriage within ED at both sites</p> <p>Extend Trauma Board for emergency surgery</p>

Strengthening Digital Infrastructure

Why	Outcomes to Achieve	Highlight
In order to deliver the ambitions of the Digital Strategy the Trust needs to invest in the necessary hardware and software infrastructure.	<ul style="list-style-type: none"> Maintain and improve the Trust's data centre and network capability, capacity and performance Support patient care through the management and tracking of medical equipment and devices, ensuring they are in the right place at the right time 	<p>Refresh the Trust's data centres, servers and networks</p> <p>Replacing end-of-life equipment and providing the digital infrastructure to support the Trust</p> <p>Introduce Windows 10 across the organisation</p> <p>Introduce a Trust-wide asset tracking system and management solution for medical equipment and devices</p>

Beyond Maidstone and Tunbridge Wells Hospitals

Why	Outcomes to Achieve	Highlight
<p>Our patients, staff and partners report frustration with the difficulty of sharing information with organisations beyond MTW.</p> <p>We and our system partners are committed to improving the use of digital technology to enable us to share clinical information with our care partners more effectively, helping to improve care for patients wherever they receive treatment.</p>	<ul style="list-style-type: none"> Support the implementation of STP-wide solutions which create greater system integration and digital interoperability Support the delivery of the Local Digital Roadmap for the ICP Enable staff to connect securely to digital healthcare systems from wherever they provide patient care 	<p>Implement STP-wide digital systems for Pathology</p> <p>Enrich the KMCR, improving access to patient information, supporting clinical decision making</p>

What this Means for Me

Patients will be able to say:

- I have more information and know more about my care and what to expect. I have the opportunity to access my information in a way that suits me and have confidence that it will be kept private and secure.
- I can tell my story once and know that my information will follow me around the hospital and beyond.
- Technology helps me to do more, for example navigating around the hospital sites, managing my appointments and supporting the management of my long-term condition.
- Technology helps me to have more choice and control over my care, and where appropriate I have flexibility around where and how I receive treatment.

Staff will be able to say:

- Digital technology helps me to do my job well now and in the future.
- I am able to access relevant information at the right time and in the right place. It is easy for me to find the information I need, without having to access multiple systems.
- I have confidence that the data I access can be trusted and know that all my colleagues have the same information.
- Doing things digitally helps to make everything we do more efficient, and I do not have to waste time or duplicate effort. This makes more time for me to focus on the work that really matters.
- Digital technology helps us to work together and collaborate with partners to deliver the care and experiences that are best for patients, wherever that care is delivered.
- I have the support I need to get the best out of digital technology. I know who to speak to when I want to know more about what digital transformation can do for me and my team.

What this will mean for the Trust and the healthcare system:

- Information can be easily and safely shared with other health and care organisations. This will support joint working and deliver more responsive and safer communication centred on the patient.
- We continue to improve our digital maturity which will help us to realise our potential as a digital leader providing state-of-the-art digitally enabled healthcare.
- We are integrated with our local partner organisations. We are strategically aligned and moving in the same direction. We learn from each other, share insights and collaborate to deliver the right solutions for our communities.
- Digital technology helps us to deliver care differently in the community and wider healthcare system that meets the population's needs now and in the future. It helps to remove boundaries between organisations to ensure that patients are receiving care in a way that best meets their needs improving wellbeing and delivering a sustainable system.



4. HIMMS