University Hospitals of Leicester NHS
NHS Trust

Cover report to the Trust Board meeting to be held on 2 July 2020

Trust Board paper I2

Report Title:	**People, Process and Performance Committee Conference Call – Committee Chair's Report** *This was not a formally-constituted virtual Board Committee meeting, and was confined to any time-critical items/governance must-dos only. Its purpose was to provide information on, and assurance of, progress.*
Author:	Alison Moss – Corporate and Committee Services Officer

Reporting Committee:	**People, Process and Performance Committee (PPPC)**
Chaired by:	Col (Ret'd) Ian Crowe – PPPC Chair and Non-Executive Director
Lead Executive Director(s):	Debra Mitchell – Acting Chief Operating Officer Hazel Wyton – Director of People and Organisational Development (OD) Andy Carruthers – Chief Information Officer
Date of last meeting:	25 June 2020

Summary of key public matters considered:

This report provides a summary of the following key public issues considered at the People, Process and Performance Committee assurance conference call on 25 June 2020:- *(involving Col (Ret'd) I Crowe, the PPPC Non-Executive Director Chair, Mr B Patel, PPPC Non-Executive Director Deputy Chair, Mr M Traynor, PPPC Non-Executive Director, Ms H Wyton, Director of People and Organisational Development, Ms D Mitchell, Acting Chief Operational Officer and Mr A Carruthers, Chief Information Officer)*

- **Declarations of Interest –** none.

- **Minutes & Matters Arising** – the summary of the previous PPPC Conference Call meeting held on 28 May 2020 was accepted as an accurate record (paper A refers) and the PPPC Matters Arising Log (paper B refers) was received and noted. It was agreed that items 3a and 3c could be closed.

- **Quality and Performance Report – Month 2**
- **Performance Briefing**
  The Acting Chief Operational Officer highlighted key issues as evident from the Month 2 Quality & Performance Report and the Performance Briefing (papers C & D). The Reports highlighted the impact of Covid-19 and progress in relation to the Recovery and Restoration Plan. The Acting Chief Operational Officer highlighted the challenges for Fractured Neck of Femur service which had been located the Leicester General Hospital at the beginning of the Covid-19 activity. It was planned to move the three quarters of the service back to Leicester Royal Infirmary on 28/29 June. The Quality and Performance Report included new metrics in relation to Covid-19 to note the percentage of patients coming into hospital with Covid-19 and the percentage of patients acquiring the virus in hospital. The next report would include actual numbers as well as percentages. The Acting Chief Operational Officer agreed to check with the Chief Nurse whether the descriptor for the metrics was a national definition. The Acting Chief Operational Officer noted the challenge in addressing 52 week breeches given the difficulty in treating those patients assessed as a clinical priority. Work was underway with the CMGs on their recovery plans and some lists included 52 week wait patients. Guidance on Phase 3 of the Recovery Plan was awaited from NHSE/I. The Acting Chief Operational Officer made reference to the Cancer Report, noting the increase in number of patients being treated and greater use of the private sector for urology in particular. The target for non-face to face consultations for out-patients was thought to be challenging and the current achievement of 50% encouraging. The Chair of PPPC enquired about the timeframe for reaching the target and it was noted that there were delays in procuring the equipment given the national demand for webcams, headsets, etc. The implementation was focussed on those areas, such as dermatology, where video-conferencing added value. It was noted that the video-conferencing facility enabled multi-disciplinary reviews and created potential to involve GPs. It was reported that the arrangements for Covi-19 in terms of infection prevention and control impacted on the throughput in theatres. A newly developed dashboard would assist to identify inefficiencies and review ways of working. In terms of diagnostic services, scans for Osteoporosis had stopped at the outset of Covid-19 and there was an increased urgency to resume to the service. The PPPC Chair asked whether there should be a greater ambition to resume diagnostic services, for example, audiology. The Acting Chief Operational Officer agreed and commented that during the command and control phase of Covid-19 national guidance was implemented to the letter. However, there was the opportunity to review the guidance in context as the service was restored. The Deputy Chair agreed with the need to reinstate diagnostic services noting that ophthalmology services could prevent sight loss and early diagnosis of numerous conditions impacted on patient outcomes. The Acting Chief Operational Officer, in response

to a question from the PPPC Deputy Chair, noted that many of the diagnostic services were delivered off-site and further discussions were being had with PCL and the regional diagnostic cell to increase the provision off-site. The number of attendances at the Emergency Department had increased and the medical activity was at the same level as that seen prior to Covid-19. The focus would be on the Restoration and Recovery Plan and preparing for a potential second surge in Covid-19 activity at the beginning of winter.

- **Waiting List Management – Administrative Process**
  The Acting Chief Operational Officer introduced the report (paper E) which provided assurance regarding the accuracy of waiting lists. It was reported that the RTT teams had validated the data and identified a number of issues that would inform the training delivered. The sign off process was considered to be important in demonstrating accountability. The PPPC Chair enquired about the potential harm to those patients waiting longer than 52 weeks. The Acting Chief Operational Officer reported that the waiting lists had been subject to greater clinical review during the past few months and was looking to see how this could be maintained. The PPPC Deputy Chair suggested that the process for communicating waiting times with patients be reviewed, both in terms of general information on the website and communication to individual patients indicating how they raise concerns. He thought there should be a central point of reference for patients to contact rather than telephoning the respective medical secretaries. The Acting Chief Operational Officer agreed to review the process for communications, cautioning the need to consider resource implications. It was agreed to receive a further update on waiting list management at the next meeting.

- **Workforce Briefing**
  The Director of People and Organisational Development presented a briefing (paper F) which detailed the People Services' response to the COVID-19 pandemic. The Director noted that many staff were fatigued and the new ways of working whilst presenting opportunities for efficiency also gave raise to new challenges. The PPPC Chair agreed and acknowledged the need to be proactive in maintaining relationships when at a distance. Many staff had deferred their annual leave in order to support UHL and/or because they were unable to travel. They were now being encouraged to book leave to recuperate. However, it was noted that many staff would experience problems with childcare over the summer as they would be unable to access holiday clubs and nurseries due to Covid-19 restrictions. The PPPC Chair proposed that childcare be included in the review of lessons learnt for Covid-19 as it was a key enabler for staff. The Director reported that significant work was being undertaken to support BAME staff including health and wellbeing sessions and risk assessments. Support was being provided to bring staff back to work and create safe environments for them to do so, bearing in mind that changes to workspaces may have created barriers for some staff, for example, those with visual or hearing impairments. Work was underway to secure the services of those who had returned to the NHS at the outset of Covid-19 activity. Whilst it had not always been possible to match the skills offered to the specific needs of the Trust there could be different opportunities in the future. The Committee commended the work of the Occupational Health Department which had seen a huge increase in workload, including case reviews, and delivered 15,000 antibody tests. The Committee discussed the need for reward and recognition, including the Board's appreciation of the Executive Team and its increased workload during the pandemic. The PPPC Chair thought that the reward should differentiate those who had worked on the front line to ensure they were recognised for their unique contribution. The Director of People and Organisational Development would provide a report on Reward and Recognition at the next PPPC meeting. The Committee accepted that significant work, which was classed as business as usual, had been deferred and asked that the People Strategy be reviewed and reprioritised in light of staff capacity.

- **Junior Doctor Guardian of Safe Working Quarterly Report**
  The Director of People and Organisation Development presented the quarterly report, required by the 2016 Junior Doctors Contract, the Guardian of Safe Working (GSW) noting the low level of exceptions reported which was attributed the fact that clinical areas had worked differently due to Covid-19.

- **IM&T Briefing**
  The Chief Information Officer, presented a briefing which detailed key actions taken since the last meeting of the PPPC and included: 1) Modality "OneConsultation" for video appointments , business case approval in progress to continue roll out and include multi-disciplinary calls; 2) Infection prevention case management module live in NerveCentre; 3) Fax capability being removed & replaced with secure email and online referrals via managed print equipment refresh project; 4) Naso Gastric Tube (NGT) eAssessment completed & tested; 5) Blood ketones now captured as an observation in NerveCentre; 6) NerveCentre mobile requesting scope signed off and pilot areas agreed. The presentation addressed the security of mobile devices noting that this was an increasing concern given the exponential increase in the number of devices issued and the number recorded as not active. The challenge was to instigate security measures, which were expensive, measured against the relatively low cost of devices. Options were being explored. The Chief Information Officer reported that the current contract with IBM/NTT was being reviewed noting that it had run for seven years and parts were no longer fit for purpose. Areas to be addressed included visibility of support and provision of mobile device support. The negotiation would seek improvements without incurring additional cost. Proposals would be submitted to PPPC and Finance and Investment Committee. The Chief Information Officer noted concern around the EPR programme

as the funding had yet to be confirmed. He noted that successful implementation relied on several strands, including business and clinical changes, process design and project staff. In response to a question form the PPPC Deputy Chair the Chief Information Officer noted that system partners were working collectively across the STP and were supportive of UHL's IM&T strategy and were actively engaged. The senior clinicians in the CCGs were keen to see transformation and much of that relied on the sharing of patient records. The PPPC Chair noted the importance of IT in transforming pathways and services and asked that reports presented to the Committee reflected on the resource implications and the capacity required.

Items for Information

The following reports were noted:-

- People Strategy Update
- Equality, Diversity and Inclusion – UHL Implementation of NHS 5 Point Plan
- Workforce and OD Data Set
- Executive Performance Board – EPB Action Notes from 25 May 2020
- Executive People and Culture Board – action notes of the EPCB meeting held on 21 April 2020 and actions arising from the EPCB meeting held on 16 June.

Matters requiring Trust Board consideration and/or approval:

Recommendations for approval:-
None.
Items highlighted to the Trust Board for information:
The following issues were highlighted to Board members (the papers relating to which are available to Trust Board members through the PPPC folder of the BI portal):-

- The new metrics in relation of Covid-19 (as detailed in Month 2 Quality and Performance Report – paper C, page 12, refers)

The following Reports are appended to this summary and presented to the Trust Board for Information:-

- Junior Doctor Guardian of Safe Working Quarterly Report
- IM&T Strategy 2019-2022 v1.1

Matters referred to other Committees:

None

Date of Next Virtual Conference Call Meeting:	30 July 2020 NB – this would be convened at the earlier time of 11am.

Junior Doctors Contract Guardian of Safe Working Report

Author: Jonathon Greiff, Guardian of Safe Working, Consultant Anaesthetist, Joanne Tyler-Fantom, Deputy Director of Human Resources and Vidya Patel, Medical Human Resources Manager
Sponsor: Hazel Wyton, Director of People and Organisational Development

Paper G

Purpose of report:

This paper is for:	Description	Select (X)
Decision	To formally receive a report and approve its recommendations OR a particular course of action	X
Discussion	To discuss, in depth, a report noting its implications without formally approving a recommendation or action	
Assurance	To assure the Board that systems and processes are in place, or to advise a gap along with treatment plan	
Noting	For noting without the need for discussion	

Previous consideration:

Meeting	Date	Please clarify the purpose of the paper to that meeting using the categories above
CMG Board (specify which CMG)		
Executive Board	Quarterly	
Trust Board Committee	Quarterly	
Trust Board	March	

Executive Summary

Context

In line with the requirements of the 2016 Contract; this report provides a quarterly update on Exception Reporting activity at the Trust. The implementation of the 2019 Junior Doctors Contract changes has re-started, after a pause due to COVID 19.

Questions

1. How many Exception Reports have been received at UHL in the last quarter and how are Exception Reports being managed?

Conclusion

1. From 1st March 2020 to 31st May 2020, 42 exceptions reports have been recorded, which is a significant decrease from the previous quarter. The Exception Reporting procedure was initially implemented in December 2016.

Input Sought

We would like the Trust Board to note the progress being made and provide feedback if required.

We would welcome the Trust Board to note the progress being made and provide feedback if required.

For Reference** (edit as appropriate)**:

This report relates to the following UHL quality and supporting priorities:

1. Quality priorities

Safe, surgery and procedures	[Yes /No /**Not applicable**]
Safely and timely discharge	[Yes /No /**Not applicable**]
Improved Cancer pathways	[Yes /No /**Not applicable**]
Streamlined emergency care	[Yes /No /**Not applicable**]
Better care pathways	[Yes /No /**Not applicable**]
Ward accreditation	[Yes /No /**Not applicable]**

2. Supporting priorities:

People strategy implementation	[Yes /No /**Not applicable**]
Estate investment and reconfiguration	[Yes /No /**Not applicable**]
e-Hospital	[Yes /No /**Not applicable]**
More embedded research	[Yes /No /**Not applicable**]
Better corporate services	[Yes /No /**Not applicable**]
Quality strategy development	[Yes /No /**Not applicable**]

3. Equality Impact Assessment and Patient and Public Involvement considerations:

- What was the outcome of your Equality Impact Assessment (EIA)? N/A

- Briefly describe the Patient and Public Involvement (PPI) activities undertaken in relation to this report, or confirm that none were required N/A

- How did the outcome of the EIA influence your Patient and Public Involvement ? N/A

- If an EIA was not carried out, what was the rationale for this decision? N/A

4. Risk and Assurance

Risk Reference: N/A

Does this paper reference a risk event?	**Select (X)**	**Risk Description:**
Strategic: Does this link to a ***Principal Risk*** on the BAF?	No	N/A
Organisational: Does this link to an ***Operational/Corporate Risk*** on Datix Register	No	N/A
New Risk identified in paper: What ***type*** and ***description***?	N/A	N/A
None		

5. Scheduled date for the **next paper** on this topic: September 2020
6. Executive Summaries should not exceed **5 sides** [My paper does comply]

1. Introduction

1.1 In line with the requirements of the 2016 Junior Doctors Contract, the Guardian of Safe Working (GSW) will provide a quarterly report to the Trust Board with the following information:

- Management of Exception Reporting
- Work pattern penalties
- Data on junior doctor rota gaps
- Details of unresolved serious issues which have been escalated by the GSW

1.2 These reports are also be provided to the Local Negotiating Committee and the Trust Junior Doctors Forum for review and oversight management.

2. Management of Exception Reporting

2.1 In line with the Trust procedure for Exception Reporting, doctors that have transitioned to the 2016 contract will raise Exception Reports on work pattern or educational problems using a web based package.

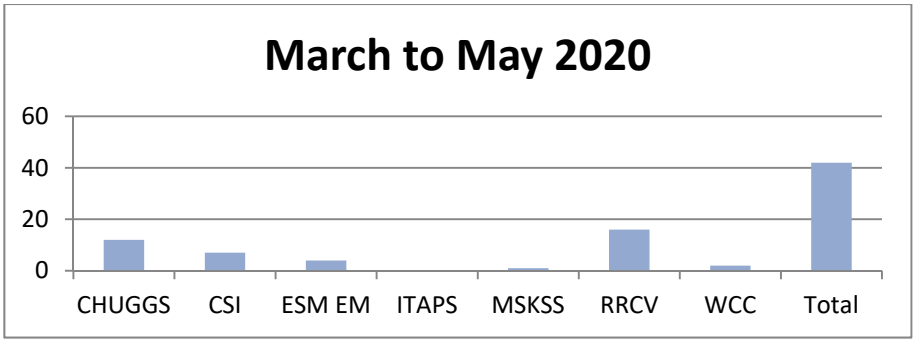
2.2 At UHL all junior doctors (including Trust Grade Doctors) are encouraged to raise exception reports if there are concerns with their work patterns and/or education, therefore this report includes exceptions raised by junior doctors in training and Trust Grade Doctors.

3. Number of Exceptions Recorded in this Quarter

3.1 From 1st March to 31st May 2020, a total of 42 Exception Reports have been recorded, all of which related to Hours, Working Pattern and Service Support. There were no Education exceptions. This is significantly lower than normal (in comparison in the last quarter there were 170 Exceptions reports), this is expected due to the reduction in normal service activity and the focus shift to manage COVID 19 activity during the pandemic. The lower number of exception reports was discussed at the Trust Junior Doctors Forum and as a result a reminder email was sent to all junior doctors to remind them that they should continue to Exception report if the need arises.

3.2 Graph 1 provides an overview of the number of Work Pattern exceptions received by CMG in the last quarter.

Graph 1 Work Pattern Exception Reports



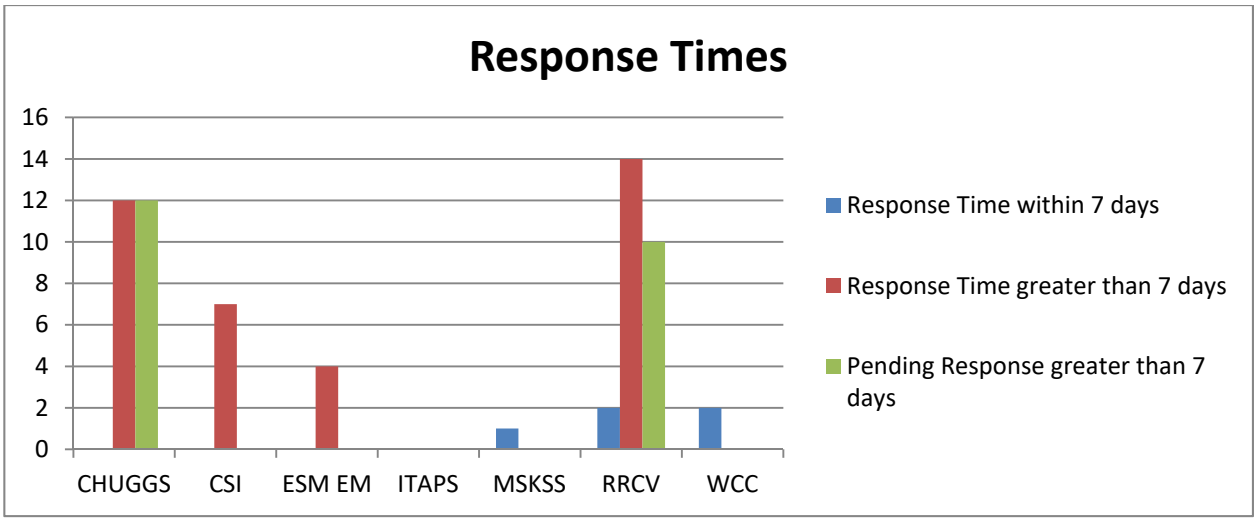
4.1 There were no Education exceptions received by CMGs in the last quarter.

5. Outcome of the Exception Reports in this Quarter

5.1 For the majority of the Exception Reports time off in lieu (TOIL) is allocated. In the last quarter out of the 42 work related exceptions received, TOIL has been allocated for 20 exceptions. There will be no additional payments made for extra hours worked. There are 22 exceptions still open and requiring a response, the majority of these are for Surgery and RRCV doctors. Action to provide responses is being sought through CMGs.

5.2 Junior Doctors are required to raise Exception Reports with 14 days (7 days if payment is being requested) of the issue occurring. The response time for exceptions in the last quarter is detailed in the Graph 3 below:

Graph 2 Response Time



6. Work Schedule Changes

6.1 There have been no work schedule changes in the last quarter as a result of Exception Reporting, although junior doctors rota templates have been changed to manage COVID 19 pressures and deployment of doctors several times since end March 2020. Rota templates are now being updated in preparation for August 2020 changeover.

7. Conclusion

7.1 Exception reports are being reviewed and changes being implemented as required, including enhancing Trust processes such as response time.

7.2 The next Guardian of Safe Working report will be provided in September 2020, although we are awaiting further guidance from NHS Employers on exception reporting in the current climate.

8. Recommendations

8.1 Trust Board members are requested to note the information provided in this report and are requested to provide feedback on the paper as considered appropriate.

University Hospitals of Leicester NHS Trust
IM&T Strategy 2019 – 22

V1.1 January 2020

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1. Introduction

The creation of a strategy for an ever evolving function operating in a highly complex, changeable environment such as an acute hospital is not an easy task. The pace of change with regards to digital technology means this cannot be a static document, more a snapshot at a point in time as we progress and evolve our thinking.

It is important to get the foundations right and build flexible platforms that can change and adapt, both supporting and encouraging the organisation though its transformation.

Our digital strategy for the next 3 years is to further consolidate those basics and allow the organisation to accelerate its transformation through dependable, flexible high class IT built to meet our requirements.

The policy context is such that digital is one of the key enablers to continued operation of the NHS amid the unprecedented financial and operational pressures we find ourselves under as we look to deliver the vision set out in the Five Year Forward View (2014) and the NHS Long Term Plan. Locally and regionally more specifically our Leicester, Leicestershire and Rutland *Better Care Together* and trust reconfiguration plans both inform and depend upon our progress.

We will see a rapid increase in working with our patients to provide access to appointments and information, increased flexible provision of services through virtual services and a better overall experience through digital connections with our clinical function.

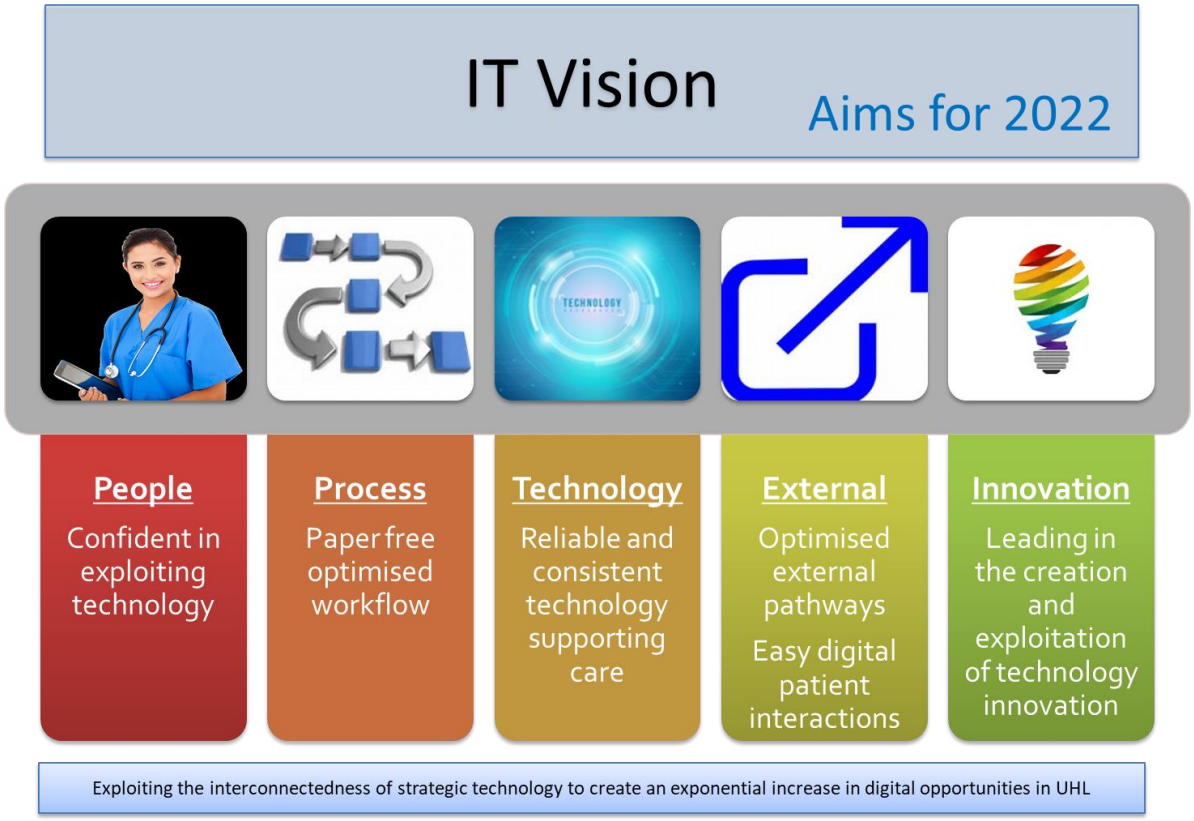
We will build in across all our foundational services the principle of supporting research, innovation and teaching to further enhance our reputation for excellence in these areas. As we progress our 'Becoming the Best' strategy and look to move from good to outstanding as an organisation, IT and digital will play a key part.

2. Our Vision for 2022

We will deliver a trusted, secure, class leading IT service enabling a seamless digital service to our staff, patients and researchers.

This strategy is about more than simply the delivery of an IT service, however. Digital transformation is an organisational, rather than a technological challenge.

Our aims for 2022 involve our people being confident in exploiting technology, our processes being paper free and optimised with the support of digital solutions, our technology being reliable and consistent in support of delivery of care, enabling our patients and health and care partners to contribute and interact with us and to lead in the creation and exploitation of technology and data innovation.



We want to exploit the interconnectedness of strategic technology to create an exponential increase in digital opportunities in the trust as we move into the 2020s. Delivery of this strategy will allow us to achieve these aims.

We will use recognised digital maturity indices such as the NHS digital maturity index, NHS Improvement's model hospital and Healthcare Information and Management Systems Society

(HIMMS) Electronic Medical Record Adoption Model (EMRAM) scoring[1] to benchmark and assess our progress over the lifetime of this strategy.

The outcomes we aim to deliver are as follows:

- Have **all** information available about a patient through a robust single patient record
- Have patients able to contribute to their record
- Deliver clinical functionality everywhere
- Have our patients able to interact with UHL's digital services
- Have easy access to GP, health and care partner information
- Implement computer assisted processes
- Automate clinical escalation
- Have our staff free to work from any location
- Enable virtual clinical services
- Ensure information for research is readily available
- Deliver back office optimisation
- Leverage inward investment through research
- Be seen as a leader for the human factors around cyber security and information governance
- Have IT be seen as a recruitment asset for the trust
- Increase the scope of our 24x7 IT support services
- Be in the top 10% of acute trusts for NHS digital maturity
- Achieve HIMMS EMRAM Level 7 compliance
- All supported through a safe, secure scalable infrastructure

Delivering these outcomes as we execute our digital strategy will make the trust a different place to work and receive care by 2022.

- Less **looking for information** rather the **information being readily available** in an easy to read manner
- Less **writing to patients** more **contacting patients using their preferred method**
- Less **looking for working equipment** more **knowing the equipment works**

[1] See https://www.himssanalytics.org/emram for further explanation.

- Less **computers being admin** more **computing adding value to clinical processes**
- Less **patient frustration with our administrative processes** more **patients being in charge of their data and bookings**
- Less **working in UHL is the only option** more ability to **work anywhere** it is safe to do so
- Less it is **difficult to work with partners** more **easy working with partner agencies** for patient benefit
- Less **technology innovation is difficult** more **technology innovation is the norm** in delivering future care
- Less **research data is separate** more **research data is part of the EPR**

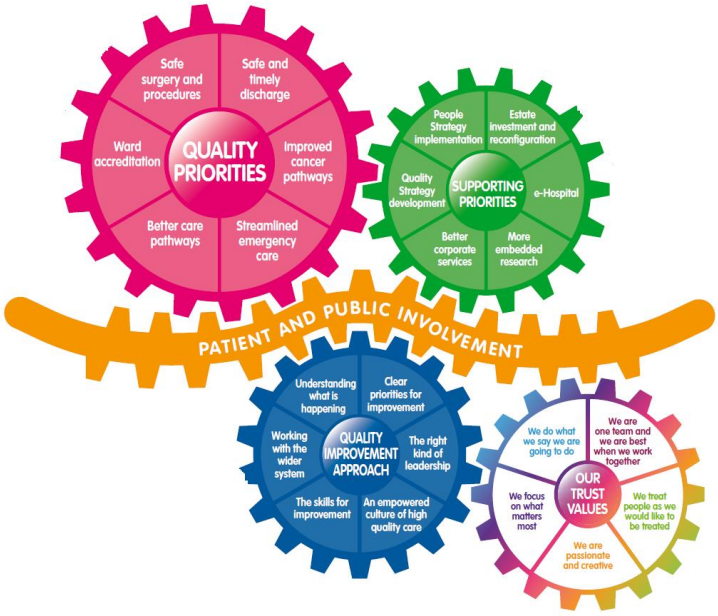
2.1 Principles supporting our vision

A key issue in taking forward this strategy is how to streamline decision making and make the speed of implementation faster whilst maintaining a cohesive direction. To that end, we have agreed a set of principles that will make it easier to test whether new developments are in line with our strategic path.

1. All clinical and administrative output to be stored in a single patient history
2. All future programmes of work to be linked to organisational objectives
3. Information to be available anywhere, any place and any time
4. Investment to only be made in systems and services that use internationally recognised standards
5. Data to be collected in suitable forms for and accessible for research and clinical care
6. Systems must make it easy to follow best clinical practice
7. No dual data entry for any data
8. Patient access and contribution to clinical care and records
9. All new workflows should be digital by design and the information interoperable with our economy partners
10. All IT developments must be sustainable, safe and secure

3. An enabler to our quality strategy

The IT programme is one of our supporting priorities as part of the 3 year 'Becoming the Best' quality strategy at UHL. Quality and safety are at the heart of the objectives of our IT and digital programme, we aim to support safe and effective care by progressing our eHospital plans to implement user-friendly and integrated solutions that make people's jobs easier to do.



From an organisational perspective our digital agenda is crucial:

- To enable visibility and the sharing of patient records real time, anywhere, any time
- To improve patient safety through better alerting and decision support based on capturing clinical data and transforming it into dashboards and clinical analytics
- To improve the efficiency of our workforce through better workflow of referrals, treatment and transfer to other health and social care partners
- To improve patient flow through our emergency department, wards and onward discharge or transfer out of the organisation
- To improve and enable outpatient transformation

The six core drivers of our quality improvement approach underpin the IT strategy component.

Understand what is happening in our services: through the application of intelligence, analytics, use of data, coding at the bedside

Giving people the skills to enable improvement: utilising multi media and multi channel approaches to raise awareness and skills of our staff around our digital programmes, such as eLearning, videos, a learning platform to improve digital skills and maximise value of our solutions.

The right kind of leadership: ensuring our workstreams are clinically led, staff from all groups feel engaged and able to contribute.

Embedding empowered culture: supporting best practice, making the right thing easy to do, patient and public contribution and co-design and co-production where appropriate and as much as possible, for example when considering the design of correspondence, pre-op assessment, self service elements.

Working effectively with the wider system: through interoperability and digital record sharing we will reduce organisational barriers to the delivery of seamless care.

Clear priorities and plans for improvement: we have a clear set of priorities for our IT workstreams over the three year lifetime of this strategy. We will adopt a quality improvement approach to

delivery of our IT programme, managing a balance between traditional project and programme management and the shift towards a more agile product management approach utilising the principles of the IHI quality improvement approach[2].

3.1 Partnership working

We will provide leadership to the Leicester, Leicestershire and Rutland (LLR) community on IT opportunities, and will work closely with our Sustainability and Transformation Partnership (STP) partners to deliver the local digital roadmap as we move towards an Integrated Care System (ICS).

Our patients expect us to have a seamless, continuous record of their care across health and social care settings which given historic siloed investment and implementation of IT systems remains a challenge.

Through delivery of our IT strategy we will advocate, promote, develop and implement record sharing capabilities in line with our data standards driven approach, ensuring that we work together to minimise and eliminate organisational boundaries with respect to our patient's records across the health and social care system.

As prescribed and approved by NHSX, this will be delivered by sharing records based on agreed NHS data standards, not by sharing systems unless that is mutually beneficial.

This will enable us to contribute to and consume local, regional and national record sharing platforms as these programmes of work progress over the next three years.

3.2 National Strategy

The NHS Long Term Plan proposes a set of actions defining ways to address some of the challenges that the NHS faces, such as staff shortages and growing demand for services, by:

1. **Doing things differently**: to give people more control over their own health and the care they receive, encourage more collaboration between GPs, their teams and community services, as 'primary care networks', to increase the services they can provide jointly, and increase the focus on NHS organisations working with their local partners, as 'Integrated Care Systems', to plan and deliver services which meet the needs of their communities.

This will require greater sharing and integration of healthcare records and enabling patients to access their own records

2. **Preventing illness and tackling health inequalities**: the NHS will increase its contribution to tackling some of the most significant causes of ill health, including new action to help people stop smoking, overcome drinking problems and avoid Type 2 diabetes, with a particular focus on the communities and groups of people most affected by these problems.

This will require sharing our healthcare data with research and education and playing our part in supporting our patients reducing their ill health

3. **Backing our workforce**: to continue to increase the NHS workforce, training and recruiting more professionals – including thousands more clinical placements for undergraduate nurses, hundreds

[2] See http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx for further details.

more medical school places, and more routes into the NHS such as apprenticeships. To also make the NHS a better place to work, so more staff stay in the NHS and feel able to make better use of their skills and experience for patients.

This will require us to ensure we provide the right infrastructure, systems and support so staff are able to make the best use of IT to work at UHL and support patient care

4. **Making better use of data and digital technology**: we will provide more convenient access to services and health information for patients, with the new NHS App as a digital 'front door', better access to digital tools and patient records for staff, and improvements to the planning and delivery of services based on the analysis of patient and population data.

This will require us to make a step change in the implementation of our EPR to meet this requirement and enable the ability for patients to access their health records and interact with us in terms of appointments and their clinical care

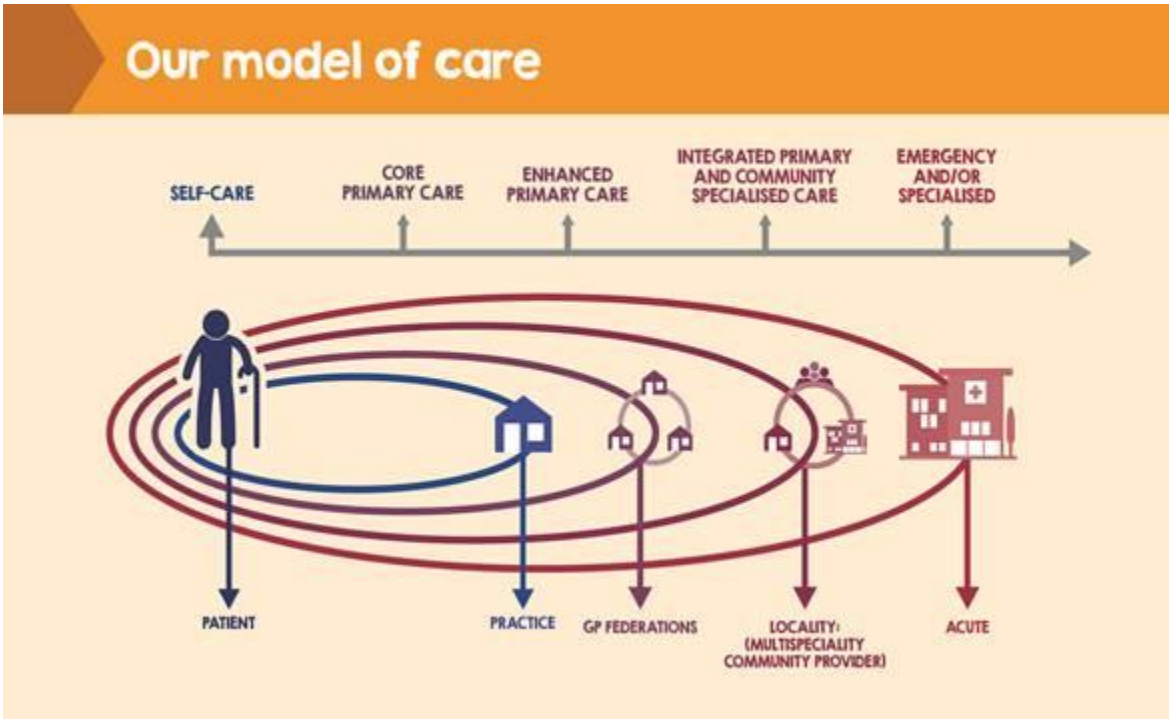
5. Getting the most out of taxpayers' investment in the NHS: we will continue working with doctors and other health professionals to identify ways to reduce duplication in how clinical services are delivered, make better use of the NHS' combined buying power to get commonly-used products for cheaper, and reduce spend on administration.

This requires us to share the patient health records and plans with our health and social care partners so we can provide the appropriate service closer to home and avoid unnecessary visits and admissions to UHL

3.3 STP and Local Digital Strategy

Working closely with our STP partners we are improving the route that people take through the care system to provide joined up, high quality care for children, pregnant mothers, those with mental health needs, learning disabilities, dementia, cancer, long term or multiple conditions. The LLR STP strategy to improving the health and wellbeing of our diverse population is centred on the following model of care that has been evolving over recent years, which has the following four key components:

- Keep more people well and out of hospital
- More care closer to home
- Care in a crisis
- High quality specialist care



Our IT strategy and EPR programme will support and enable the LLR STP digital strategy and Local Digital Roadmap (LDR) by providing real time tracking, effective care management and monitoring tools to support safe and rapid discharge of patients reducing their overall length of stay in the hospital and ensuring patients are transferred efficiently to the most appropriate setting for their care.

We will support the 4 main local strategic objectives

- Record Sharing
- Digital Self Care
- Supporting Pathways
- Business Intelligence and Research

The technology aim is to provide secure, shared access to a single source of electronic patient records across all systems supporting health and care within LLR, to create a safer, more efficient system, improve patient outcomes and support integrated care by 2021. This will enable clinicians to have access to a patient's care record at any point in the care pathway, from GP appointment, to urgent or emergency situations, within hospital and back at their local surgery after discharge.

Shared access to patients' records is critical to the successful delivery of Integrated Locality Teams and care pathways that require input from different specialisms and it will improve the patient experience, since they will not have to repeat the same information whenever they are transferred from one part of the system to another. To achieve this, the STP are working to deliver a single, core electronic record transcending primary, community, acute and social care with patient access/contribution. This will allow all partners to have one version of the record describing who that patient is, where they are registered and who is actively caring for them.

4. People Vision

Operating alongside and supporting our people strategy, the IM&T strategy will aim to:

4.1 Attract

We will ensure that we have IT systems and services that are a positive attractor for the best clinical staff to come and work at UHL.

We will ensure we have the flexibility to support new clinical innovation and research.

We will create and promote our technical capabilities to support the attraction of the best IT talent to the trust.

4.2 Engage

We will ensure that we work with all staff groups such that we can take their different requirements into account.

We will create a programme that listens to, evaluates and values new ideas, turning them into new systems and services and adopt an inclusive approach, listening to our staff and acting on their concerns and suggestions.

4.3 Retain

We will invest in staff interested in technology through their development and talent identification, giving them opportunities to grow their skills and put them to use, irrespective of their background or core training experience.

4.4 Develop

We will ensure IT is embedded within the organisational development plan for the trust. We will create a programme of activities via integration with our people strategy designed to increase the capability of all our staff, ensuring they have the skills they need to use digital solutions effectively.

5. Patients

The Topol review (Feb 2019)[3] identified several key points in relation to participation of patients and workforce in adoption of technology to improve delivery of healthcare. In line with the golden thread of patient and public involvement demonstrated in our quality strategy graphic this will be a core element of our IM&T strategy delivery.

- Patients need to be included as partners and informed about health technologies, with a particular focus on vulnerable/marginalised groups to ensure equitable access
- The healthcare workforce needs expertise and guidance to evaluate new technologies, using processes grounded in real-world evidence
- The gift of time: wherever possible the adoption of new technologies should enable staff to gain more time to care, promoting deeper interaction with patients.

We aim to provide our patients, their carers and families with a service that meets their expectations and that they want to receive. We will involve patient representatives in our programme of work to demystify IT in healthcare and ensure their needs are taken into account as we design and implement new services, to allow them to access their information and enable them to become partners in their care by contributing to their electronic records and interacting with us in new and different ways whilst under our care.

We understand that 'one size does not fit all', and will ensure we give people choice in how they interact with our services whether through digital or more traditional means if that is better for them.

[3] https://topol.hee.nhs.uk/

6. A Digital Workplace

We aim to be paper free at the point of care for all of our patients. We will ensure that communication with all our key health and care partners is done in a structured, electronic manner and work with our patients and their families and carers to ensure that their information is available to them electronically should they wish to interact with us in that way.

We will enhance access to data held by third parties, such as medical device vendors that may be relevant to clinical activity in UHL, whilst at all times protecting our patient records and data.

Our strategy to promote digital ways of working is not about simply digitising the traditional ways of working on paper. It is about enhancing our working practice with new workflows, connecting information and presenting it once and adding value wherever possible. This will apply across the health economy and ensure we connect with our local partners but also with our tertiary peers such that images, diagnostic data or other elements of the record of care that may have been delivered elsewhere can be seamlessly integrated into the view presented to our clinicians.

We will use automation technologies to automate simple repetitive tasks, and adopt AI and analytics to support our clinical processes. We will also create automated information flows to key partners around their clients.

We will make tooling available to our staff to make their day to day jobs more streamlined, ensuring they are able to access critical resources such as files, messaging, policies and procedures from anywhere and via any device.

7. Applications, information and data standards

We will invest in our electronic health record (EHR) solution to meet the objectives described above, this will consolidate a number of existing systems into a single platform, reducing overall complexity of the IT estate.

Information is a critical asset for the trust, supporting day to day operations and effective management of services and resources. Increasing our ability to store and access information and make use of algorithms and artificial intelligence will allow us to become a more information driven organisation by 2022. As we move away from data capture on paper towards digital ways of working, we will unlock added and hidden value within our data both to support the more efficient working of our staff and services, and vitally the timely and quality care for our patients.

It is essential that our information is managed within a robust governance framework and in line with standards where these exist. Where they do not we will work closely with relevant national and global bodies to help define them.

We will work with our clinical and business system suppliers to ensure compliance with prescribed national and global interoperability standards such as FHIR, HL7[4] and SNOMED[5]. This will enable us to reduce barriers to communication between systems and deliver a better experience to our staff and patients.

Suppliers not able to meet interoperability or open data standards will not be considered for strategic requirements, in line with the national policy described by NHSX[6]. Specialist systems performing specific functions for a particular department or team will continue by exception and will require approval to be implemented or upgraded. Only where these perform a function outside the scope of the core EPR platform, for example a specialist specialty specific function such as clinical calculation or diagnostic function, will an exception be granted. Systems in this category must adhere to the specified interoperability criteria and meet the trusts' minimum standards for cyber security and information governance.

Where systems are used outside of our EPR platform, they must be able to operate in patient context and with single sign on, reducing the number of clicks and eliminating risk for staff having multiple systems open for a single record. All system should be able to contribute summary outputs to our central document records management system to ensure a single longitudinal record for the patient is able to be maintained without siloes of separate data existing in parallel.

7.1 Data as a critical asset

We will work closely with our Biomedical Research Centre (BRC) in Leicester to create a recognised data and analytics service that is considered excellent in the NHS research arena, aiming to lead on the development of new technologies and data algorithms that support the delivery of care and further the research agenda. We will build research requirements into all new systems that are implemented in the trust and ensure the data we collect is stored securely but in open formats making it accessible for primary and secondary uses.

[4] https://www.hl7.org/implement/standards/product_brief.cfm?product_id=343
[5] http://www.snomed.org/
[6] See https://www.england.nhs.uk/hssf/

To allow vendor agnostic access to data for AI and analytics we will utilise the OpenEHR[7] data archetypes for our data storage, reducing the risk of lock-in to particular IT suppliers and ensuring our data is transparent and available for re-use.

We will work closely with research and university colleagues and our specialist IT partners to build on and maximise our capability in the area of 'big data', data science, intelligence and analytics.

Through the development of our EHR we will adopt an approach whereby the outputs from algorithms or artificial intelligence can easily be fed back into the clinician's workflow, enhancing their ability to deliver the best possible care.

[7] https://www.openehr.org/

8. Technology Vision

Technology is constantly changing. Obtaining best value whilst not getting left behind is very difficult. As a healthcare provider we cannot get, routinely, into cutting edge technology as we have neither sufficient ability to accept failure nor the required finance. We will maintain a position towards the front edge of the innovation wave as far as possible.

We will maintain our standards based approach, building on our ISO27001 accreditation and the emergent enterprise architecture (EA).

Our approach to EA will be to utilise the "The Open Group Architecture Framework" (TOGAF) for designing, planning, implementing, and governing an enterprise information technology architecture.

We will model at four levels: Business, Application, Data, and Technology (Infrastructure and Cyber Security). This will ensure our approach is underpinned by standardisation, and already existing, proven technologies and products

To support this we will create and maintain a rolling three year technical roadmap which includes strategies for storage, networks and data centre architecture.

We will pursue a mobile first strategy for clinical teams, ensuring that they can access their information anywhere and anytime. We will invest in the technology to support access to medical devices, as these become capable of being connected. We will work with our strategic mobile network partners to ensure we have the best access to information when on and away from UHL premises, removing legacy equipment such as pagers and replacing them with more modern and functional devices and apps.

We will move our end user computing equipment onto a device as a service (DaaS) approach, reducing the requirement to find large capital investments on a regular basis to drive the refresh of our estate.

We will invest in the right technology, both physical and virtual, to enable all staff to have the best experience of our digital services. We will enable support of various technologies, including the user's own (via Bring Your Own Device) to access our systems and resources. We will work to blend work and personal digital profiles in an acceptable, easy to use manner for our staff.

NHS Digital published their Internet first policy and guidance in March 2018, which is aligned to the NHS Long term plan and 'tech vision' to increase the productivity of staff and to deliver digitally enabled care.

All systems will be assessed for suitability for moving to either public or private cloud services. All new systems will be reviewed from a 'cloud first' perspective, and will only be implemented on locally hosted infrastructure where this is necessary due to the criticality of the services or for business continuity or disaster recovery purposes. As far as possible, cloud hosting will become the norm for the organisation from a data centre perspective.

This will allow us to reduce our dependency on our on premise data centres, and consolidate services into fewer, streamlined, fit for purpose locations across our estate. The legacy design and

construction of our existing rooms do not allow for the scalability and flexibility required to ensure that they can keep up with modern requirements of the digital programme over the next few years, as our reliance on technology from a business and clinical perspective increases.

We will adopt a hybrid cloud strategy, based on using locally provided services, as well as consuming public cloud services where appropriate. The trust will utilise multiple public and private cloud vendors, this will ensure that the organisation is not locked into a specific supplier, giving the ability to use services that match the needs of the business.

Working in partnership with our medical equipment providers and our clinical engineering team, we will integrate devices and connect them in to our EPR solution where possible to reduce staff time spent on transcribing results, reducing the scope for error.

9. Cyber Security

Our staff and patients' confidence in our ability to ensure that we fairly hold and process their data in a secure and confidential manner is paramount to the delivery of excellent IT services.

The growing threat of data loss, through internal processes or external threats risks eroding their confidence.

Our Cyber Security vision is:

An agile, effective, and cost-efficient approach to cyber security aligned with current threats but adaptable to our needs while strengthening the protection of systems and data.

We will ensure we invest in appropriate cyber security measures to protect our staff and patient data. We will focus on the human factors elements of cyber security awareness and processes, to ensure our staff are aware of their responsibilities, and that we support them with appropriate training materials and information to help them make sensible decisions when using technology to enable their roles.

We will reduce the risk of loss, unauthorised disclosure, or unauthorised modification of information and information systems.

We will ensure our policies and guidelines are adaptable to meet changing needs and aligned with threats.

We will ensure all systems and networks are capable of self-defence through the dynamic recognition and response to threats, vulnerabilities, and deficiencies. This will include implementing an enterprise-wide asset management capability, and the establishment and maintenance of an enterprise cyber security architecture

In order to develop a workforce that are knowledgeable about cyber-security we will implement a trust wide training, education and awareness programme. This will aim to promote understanding and acceptance of security concepts and practices throughout the organisation.

Not all information risk can be eliminated. Ultimately we aim to ensure we have effective controls over our cyber security and information risks, and that these are reduced to acceptable levels via a risk based approach to investment. We will also take advantage of national and regional collaborations to share risk where tooling or security process controls are made available.

The National Cyber Security Centre (NCSC) and the National Data Guardian review have recommended that all NHS trusts should comply with the "Cyber Essentials plus" standard by June 2021, elements of which are included in NHS England's Data Security and Protection Requirements toolkit.

We will facilitate compliance with the Network and Information Systems (NIS) directive and recommendations from the Department of Health and Social Care through:

- 100% compliance with the Data Security & Protection Toolkit[8]

[8] https://www.dsptoolkit.nhs.uk/

- Implementation of an information security management systems (ISMS)
- Implementing the National Data Guardian 10 data security standards
- Move away from, or actively manage and protect any unsupported systems
- Implement security patches and update anti-virus software

We will ensure our business continuity and disaster recovery plans include the necessary detail around response to cyber incidents and include a clear assessment of the impact of the loss of these services on other parts of the health and social care system.

Annual cyber awareness training will be provided to all UHL staff and will include regular and targeted information governance awareness training, including internal phishing attack simulations to test the awareness of staff to the danger of opening spam email, through to specific training associated with the management of cyber incidents.

10. Information Security

Protecting our data, including that relating to our patients and staff is vitally important to us and we see this as a key priority in our strategy.

We will meet the requirements of the General Data Protection Regulations (GDPR) and maintain a highly effective privacy team who will lead the implementation and adherence to policy, regulations and law.

We will put the data security & protection toolkit at the centre of our plans and ensure annual compliance with the standards it prescribes.

11. Innovation

Innovation is crucial in healthcare and in digital technology and we will create an environment that stimulates innovation and creativity for our staff and our IT partners. Our patients and staff deserve services that are digital by design, and are as good as those provided by their bank or online retailer.

All new programmes of work will include the digital design from concept to completion, including new hospital buildings or refurbishments and the design of new pathways of care. We will ensure we tackle digital exclusion by working closely with our patients and their carers.

We will appoint a digital innovation lead, with the remit to further the promotion of the digital innovation agenda across the trust, and to ensure that these principles are built into our future activities driving additional value from IT and ensuring we have solutions that work for us and are enablers rather than making our staff and patient's lives more difficult.

We aim to support the organisation in being confident in innovation, working with our subject matter experts within IT and with our strategic partners to identify, develop and implement new products that add value to the care we deliver. We will share our successes and failures widely to ensure lessons are learned and the healthcare digital agenda continues to progress at pace nationally and internationally as well as locally within the region and the trust.

We will work closely with our local university partners and with the BRC to support research bids and developments, and ensure access to our data is as easy as possible whilst tackling issues around consent and data protection. We will include research as part of our digital by design ethos such that it is included as standard in all our new digital services.

12. IT operating model

To deliver this strategy we will need our IT operating model to be fit for purpose and able to act as an enabler for digital transformation, not simply the delivery of an excellent IT service. This will involve reviewing our strategic partnerships to ensure we are receiving maximum value for money, and that we are able to support our clinical services in the manner required to achieve true value back to the trust.

We will work with our strategic IT partners and advisory service to leverage the best skills, experience and knowledge to support us with the transformation and implementation of our digital services in coming years. This will allow us to move faster and with a greater degree of certainty than if we were working alone, and includes forming and developing new alliances with peer organisations on similar journeys to ourselves, to share learning as well as experience in the use of technology in healthcare.

We will make the IT service easy to interact with, reducing barriers to receiving support and ensuring our services such as our service desk or desktop support are delivered in a way that fits with our mobile first approach and how our staff prefer to work.

We will look to develop lasting partnerships rather than single procurements, simplifying our contract management infrastructure and giving clear lines of accountability for support and development of our estate. We will invest in our third party vendor management function within the IT programme management office structure, to deliver value for money from existing as well as new contracts.

From a procurement perspective we will work within the prescribed frameworks to ensure maximum value for money for the organisation from IT contracts. We will support the use of local subject matter expertise, where appropriate, for some developments, and will work with NHS and public sector partners where this delivers us better value or opportunity.

References

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Institute for Healthcare Improvement
http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx

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SNOMED http://www.snomed.org/

Health Systems Support Framework https://www.england.nhs.uk/hssf/

OpenEHR https://www.openehr.org/

NCSC Cyber Essentials Plus https://www.cyberessentials.ncsc.gov.uk/

Data Security & Protection Toolkit https://www.dsptoolkit.nhs.uk/

NHS Digital Internet First policy https://digital.nhs.uk/services/internet-first

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