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This document sets out the new Digital Strategy 2017-2020 to support the Trust deliver its clinical and business objectives.

It describes our ambition to become the most digitally advanced integrated care organisation in the NHS over the next four years.

The document is structured into three main sections:

- **Future Vision** - outlines how patients and staff will use digital services to improve care, outcomes and experience

- **Where are we now?** – outlines the current status of digital services using digital maturity indices

- **How do we get there?** – outlines the programmes of work to deliver the future vision

**Digital Strategy Consultation**

The new Digital Strategy has been developed through an extensive consultation with key staff to ensure it aligns with the Trust’s clinical and business needs via:

- Trust business planning away day – Oct 2016
- Trust Board seminars – Oct and Nov 2016
- ICSU specific workshops – Oct/Nov 2016
- Trust strategies e.g. Clinical, Workforce, Estates

The patient perspective has been drawn from a number of national reports e.g. *Kings Fund*¹, *Nuffield Trust*², *PHAC2020*³, *The Good Things Foundation*⁴, and the Islington Integrated Pioneer project.
02 Introduction

This chapter describes the Policy and Digital context.
Introduction

Policy Context

The NHS is facing unprecedented financial and operational pressures as it strives to deliver the vision set out in the Five Year Forward View (2014). The current models of care and levels of funding will not address the demographic challenges of a growing population, which is living longer, often with multiple long term conditions.

To address these widening gaps in health and well being, care and quality, and financial sustainability, NHS England set up:

- **New Care Models** programme - 50 vanguards to develop blueprints for new integrated models of care

- **Sustainability and Transformation Plans (STP)** - 44 local footprints to deliver improved, sustainable health and care

North Central London (NCL) STP

In 2015/16 NCL had a deficit of £121m, which will increase to £876m by 2021 if nothing changes.

The vision for the NCL STP is to:

- improve health and wellbeing outcomes and ensure sustainable health and social care services, built around the needs of local people

- To develop new models of care to achieve better outcomes for all, focused on prevention and out of hospital care

- To work in partnership to commission, contract and deliver services efficiently and safely
Alignment to National Strategies

Disruptive technologies such as smartphones and cloud computing have transformed the way we consume services e.g. on-line banking, retail, travel, social interactions, with one notable exception, healthcare.

Our new Digital Strategy aligns to the NHS England initiatives to embrace digitisation and achieve its vision to “operate paperless at the point of care” :-

- **Personalised Health and Care 2020 (2014)**
  - real time, interoperable digital records by 2020

- **Wachter Review : Making IT Work (2016)**
  - Chief Clinical Information Officers (CCIOs) to lead adoption of digital working

- **Local Digital Roadmaps (2016)**
  - local digital strategies to support delivery of STPs

---

"The goal of digitisation of health is to promote better health, better healthcare and lower cost ......

...digitising effectively is not simply about the technology, it is mostly about the people"

*Robert Wachter, Making IT Work (2016)*
# Alignment to Trust Strategies

Digitisation is the transformational enabler that underpins the delivery of other strategies.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Requirement</th>
<th>Digital Strategy deliverable</th>
</tr>
</thead>
</table>
| Clinical Strategy 2015-2020<sup>9</sup>       | “Helping local people live longer, healthier lives”  
Safer integrated care closer to home                                                                                                                                                                                                                                                              | Access to a comprehensive Shared Care Record of acute, community, primary & social care data                                                                                                                                                           |
| Nursing & Midwifery Strategy 2016-2021<sup>10</sup> | “Reduce harm and provide the best possible care”  
Better observations compliance and national early warning scores (NEWS)  
Safe, efficient nursing rotas to match skill mix with patient acuity                                                                                                                                                                      | Capture e-observations at the point of care and alert clinicians to deteriorating patients  
E-rostering and safer care system integrated with temporary staffing                                                                                                                                                                        |
| Estates Strategy 2016-2021<sup>11</sup>        | “Enable non-clinical support and corporate services space to be reconfigured and used more efficiently”  
Change working practices to reduce occupancy levels and reduce costs                                                                                                                                                                        | Secure access to digital services from anywhere on any device to enable remote working                                                                                                                                                            |
| Workforce Strategy 2016-2021<sup>12</sup>      | “Provide excellent care delivered by expert and caring staff ... that demonstrates our ICARE values”  
Workforce planning and performance management to maximise productivity  
Education, training and learning                                                                                                                                                                                                                                                                   | E-job planning, rota compliance, leave and on-call management and reporting  
Develop flexible, digital packages to enhance skills to deliver high quality care e.g. MOODLE                                                                                                                                                |
This chapter describes how digital technology will transform healthcare of our patients and staff.
Our Vision

To become the most digitally integrated care organisation in the NHS which will enable the delivery of patient centred high quality, safe and sustainable care to our community

Our Mission

To empower patients and staff to securely access information anytime, anyplace, on any device
Digital technology can deliver improvements in quality and efficiency, as well as revolutionise the patient experience by transforming how and where they access health and care services.

The diagram illustrates a potential future digital landscape (Nuffield 2015). At its centre is the patient using technologies to manage their health e.g. wearable devices/apps, and to engage with health care providers e.g. patient portal.

Next are the technologies that support health care professionals with decision support, access to others’ expertise and management of those patients at greatest risk.

Finally, there are a number of organisational wide tools which enable operational efficiency and financial sustainability e.g. patient flow, analytics, e-rostering. The Electronic Health Record (EHR) straddles across the whole model and is the foundation of the Digital Strategy.
Future Vision

Key Themes

The future vision for the Digital Strategy is underpinned by four key digital themes:

- Digitally Connected Patients - empower patients to actively manage their health and care
- Digitally Enabled Workforce - enable staff to access shared health and care records
- Business Intelligence and Analytics - insight driven culture to improve quality, outcome & research
- Digital Infrastructure - provide secure access and interoperability
Digitally Connected Patients

Health inequalities cost the NHS over £5.5bn per annum. 12.6m citizens have limited digital skills and 5.3m never access the internet. Improving their digital skills so they can manage their healthcare on-line will reduce inequalities and release significant cost savings.

The Good Things Foundation and NHSE have run a Widening Digital Participation programme4 to train digitally excluded patients to manage their own health and reduce inequalities.

221,941 people trained to use digital health resources and tools over three years. £6m potential savings from reduced GP and A&E visits in year three of the programme.

Based on a cost to the NHS of £45 per GP visit, if everyone had the Basic Digital Skills to access health information online would provide savings of £121 million a year by 2025.

50% of the UK population use the internet for self-diagnosis, while 75% search the web for health information. But only 2% of the population report any digitally enabled transaction with the NHS.

Future Vision
Digitally Connected Patients

We will transform our models of care by enabling patients to manage their own health using digital services.

As a patient I want to .... | Digital Requirement | Strategic Fit Solutions
--- | --- | ---
View and input to my digital health record | Access to a patient portal | Access Carecentric to view all historical episodes, future contacts and add/amend data

Develop and manage my personal care plan | Access to a patient portal | Receive digital training by The Good Things Foundation and amend care plan on Carecentric

Use on-line resources and wearable technology to manage my health and care | Remote monitoring for preventive and self-care management | Use Telehealth to capture biometrics e.g. AliveCor heart monitor, MyMHealth self management apps

Book and manage appointments at my convenience | Enable e-booking transactions | Access DrDoctor to book or amend future appointment and receive reminders

Have a choice between a physical or virtual consultation where appropriate | Enable virtual consultations | Use Skype or other virtual tools e.g. FaceTime, WebEx
**Digitally Enabled Workforce**

We will transform our ways of working by giving staff access to digital services anytime, anyplace.

### As a clinician I want to ....

<table>
<thead>
<tr>
<th>Digital Requirement</th>
<th>Strategic Fit Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>View a real time, accurate, and complete integrated digital care record for my patients</td>
<td>Access to a shared care record</td>
</tr>
<tr>
<td>Develop and share care plans across health and social care</td>
<td>Access to a shared care record</td>
</tr>
<tr>
<td>Use decision support tools to improve patient safety and quality of care</td>
<td>Enable electronic observations</td>
</tr>
<tr>
<td>Access best practice guidance to reduce clinical variation and improve outcomes</td>
<td>Trust wide standardised care pathways</td>
</tr>
<tr>
<td>Operate digitally at the point of care and stop using paper based processes</td>
<td>Access to mobile devices and interoperable digital tools</td>
</tr>
</tbody>
</table>
**Future Vision**

**Business Intelligence and Analytics**

We will transform our decision making by developing an insights driven culture to improve patient quality, safety, outcomes and effectiveness.

<table>
<thead>
<tr>
<th>We want to use data to ....</th>
<th>Digital Requirement</th>
<th>Strategic Fit Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve population health outcomes and reduce inequalities</td>
<td>Access to a population health platform</td>
<td>Utilise MedeAnalytics or HealtheIntent to risk stratify populations and develop patient registries</td>
</tr>
<tr>
<td>Shift from a reactive response to historical data to proactive management using predictive data</td>
<td>Data mining and modelling tools</td>
<td>Invest in commercial modelling tools</td>
</tr>
<tr>
<td>Develop an adaptive learning culture to rapidly implement data driven quality improvements</td>
<td>Real time access to performance, outcomes and effectiveness data</td>
<td>Use Qlikview dashboards and applications Improve patient safety using HealthRoster to optimise rotas that match skill mix to patient acuity</td>
</tr>
<tr>
<td>Collaborate with academia and industry to share knowledge, undertake research &amp; drive innovation</td>
<td>Access to on-line resources and collaboration tools</td>
<td>UCLP, DeepMind, Health Innovation Network, Advisory Board, Global Digital Exemplars</td>
</tr>
</tbody>
</table>
Future Vision

IT Infrastructure

We will transform our IT infrastructure by implementing a secure, resilient, and mobile operating platform.

<table>
<thead>
<tr>
<th>We want to our IT Infrastructure to ....</th>
<th>Digital Requirement</th>
<th>Strategic Fit Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protect the Trust’s information assets from cyber security threats e.g. ransomware, malware</td>
<td>Robust Cyber Security platform</td>
<td>Annual Cyber Security audits and penetration tests to test cyber status and address gaps</td>
</tr>
<tr>
<td>Enable “mobile first-digital first” approach to access and capture data anytime, anywhere on any device</td>
<td>Mobile devices and applications</td>
<td>Virtual desktops, mobile devices, use bespoke and commercial web applications</td>
</tr>
<tr>
<td>Support integration &amp; interoperability to share clinical data across the Trust and externally</td>
<td>Open supplier interfaces (APIs) and integration engine</td>
<td>Adopt standards e.g. FHIR, HL7, CDA, XDS, to exchange and share clinical data</td>
</tr>
<tr>
<td>Enable virtual communication and collaboration</td>
<td>Unified Communication platform</td>
<td>Mitel MiVoice and MiCollab tools</td>
</tr>
<tr>
<td>Provide resilience with near 100% availability</td>
<td>Real time data replication</td>
<td>Cloud hosted solutions, virtualised servers with replicated data stores</td>
</tr>
</tbody>
</table>
Future Vision

Current Data Silos Can Compromise Patient Care

In 2016, we treated 752 patients with community acquired pneumonia with an average LOS of 9.2 days. The example patient journey below shows how the current disparate data silos can compromise patient care.

Impact of Data Silos on Patient Care

Currently, clinicians are required to access multiple IT solutions using different logins and conduct numerous patient searches to collate data into a composite record for treatment.

They must also use multiple communication tools to elicit further information e.g. e-mails, phone calls, bleeps, paper notes.

These data silos can have a significant impact on patient safety, care, and experience:

- **Patient Safety**: Adverse events because clinically relevant data is not available on demand e.g. allergies, drugs
- **Patient Care**: Longer lengths of stay, higher costs and increased risk of harm because of delays in treatment waiting for information
- **Patient Experience**: Patient complaints and poor experience because of repeated clinical histories and tests, poor booking processes, lack of integrated care plans
Future Vision

Shared Care Records Can Improve Patient Care

The example patient journey below shows how a shared care record can improve patient care. All professionals involved with Dot can now view her shared record to provide better health and care.

Impact of Shared Care Records on Patient Care

Clinicians will be able to access a comprehensive real time shared health and care record anywhere, anytime. They will login once to access an aggregated patient record and be able to access more detail in the disparate IT systems in patient context.

They will be able share integrated care plans across health and social care to ensure much better co-ordination of multi agency resources and deliver care closer to home.

Accessing a shared care record will have significant benefits for patient safety, care, and experience:-

- **Patient safety**: Reduced adverse events and harm because clinically relevant data is available on demand
- **Patient Care**: Avoid admissions, shorter lengths of stay and lower costs as minimal delays in treatment
- **Patient Experience**: Improved patient experience because patients are empowered to book and amend appointments. Clinicians can also avoid duplicated actions e.g. clinical histories and tests
This chapter describes the current status of our digital services.

04 Where are we now?
Where are we now?

Current IM&T Services

IM&T provide Trust wide services for Information Management, Clinical Coding, Telecomms, Patient Applications and IT Technical Services (IT Service Desk, Devices, Networks, Storage, Data Centres, Security, Integration, Web Services)

- 6,133 devices
- 6.8m budget (2.2% of Trust)
- 4,500+ users
- 72 staff (1.6% of Trust)
- 100+ locations
- 80% excellent user rating
Digital Maturity Indices

There are three different Digital Maturity Indices available to assess the current status of our services. They all show the Trust to have some digitally advanced functionality:

- The **Clinical Digital Maturity Index (CDMI)** is a benchmarking tool managed by Digital Health Intelligence to assess digital maturity by measuring the implementation of a number of core and advanced modules.

- The **Health Information and Management Systems Society (HIMSS)** is recognised as the global leader for assessing digital maturity using a comprehensive survey to measure the adoption of technology to improve care and is independently validated on site with end users.

- The **Digital Maturity Assessment (DMA)** is a self-assessment tool managed by NHS England to measure the effective use of digital technology against 3 key themes: organisational readiness, capability, and infrastructure.
Where are we now?

Clinical Digital Maturity Index (CDMI)

The diagram shows our Clinical Digital Maturity Index (CDMI) in 2015. The green coding denotes we have achieved digital maturity in 27/34 clinical functions.

Subsequently, 2/7 red rated gaps have been addressed; we are the only London Trust to send digital assessments to Social Care; and we are live with clinical noting in a number of paper-lite services e.g. Ambulatory Care, ED, TB, Podiatry.

The plans for the 5 remaining red rated gaps are:

1. **Critical Care**
   *Plan to implement an ITU solution in 2017*

2. **Vital Signs Observations**
   *EPR supplier has an integrated e-obs & alerting solution*

3. **Clinical Workflow/Integrated Care Pathways**
   *EPR supplier is developing this functionality*

4. **Scheduling**
   *EPR supplier is developing this functionality*

5. **Blood Tracking**
   *Pending outcome of Pathology Service Review*
Where are we now?

Health Information and Management Systems Society (HIMSS)

The diagram shows the HIMSS Electronic Medical Record Adoption Model. There are currently no NHS Trusts that have achieved level 7 and there are only 3/153 providers who have achieved level 6.

In 2015, UCLP benchmarked all its providers and Whittington Health was ranked 4/16. We had the second lowest number of clinical functions to implement to progress up to level 6:

**Stage 3 :** Capture nursing documentation on EPR

**Stage 4 :** Fully compliant

**Stage 5 :** Manage non-Radiology images in PACS

**Stage 6 :** Capture medical documentation on EPR

- Decision support for medical documentation
- Closed loop auto-identification and medication administration at the point of care

<table>
<thead>
<tr>
<th>Stage</th>
<th>Cumulative Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 7</td>
<td>Complete EMR, CCD transactions to share data; Data warehousing feeding outcomes reports, quality assurance, and business intelligence; Data continuity with ED, ambulatory, ON</td>
</tr>
<tr>
<td>Stage 6</td>
<td>Physician documentation interaction with full CDSS (structured templates related to clinical protocols trigger variance &amp; compliance alerts) and Closed loop medication administration</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Full complement of PACS displaces all film-based images</td>
</tr>
<tr>
<td>Stage 4</td>
<td>CPOE in at least one clinical service area and/or for medication (i.e., e-prescribing); may have Clinical Decision Support based on clinical protocols</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Nursing/clinical documentation (flow sheets); may have Clinical Decision Support for error checking during order entry and/or PACS available outside Radiology</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Clinical Data Repository (CDR) / Electronic Patient Record; may have Controlled Medical Vocabulary, Clinical Decision Support (CDS) for rudimentary conflict checking, Document Imaging and health information exchange (HIE) capability</td>
</tr>
<tr>
<td>Stage 1</td>
<td>Ancillaries – Lab, Radiology, Pharmacy – All installed OR processing LIS, RIS, PHIS; data output online from external service providers</td>
</tr>
<tr>
<td>Stage 0</td>
<td>All Three Ancillaries (LIS, RIS, PHIS) Not installed OR Not processing Lab, Radiology, Pharmacy data output online from external service providers</td>
</tr>
</tbody>
</table>
Where are we now?

Digital Maturity Index (DMI)

The diagram shows our Digital Maturity Assessment (DMA) from January 2016 (green line) compared to the NHS average.

The Trust was above the national average for capability but below for infrastructure and organisational readiness.

The Trust has made significant progress over the last 12 months to improve its DMA score, most notably in regard to organisational readiness.

Our readiness score has increased from 52% up to 84% maturity due to the following developments:

- Appointment of a Chief Clinical Information Officer
- Establishment of a multi-disciplinary Clinical Advisory Group (CAG) to champion the adoption of digital working
- Significant increase in Board engagement e.g. NED lead for technology, multiple presentations to Trust Board, Board Seminars and underlying governance structures
- 5 year capital allocation
- New Digital Strategy 2017-2020 for Board approval
## Where are we now?

### Universal Capabilities

We are digitally advanced with achieving the Local Digital Roadmap universal capabilities.

<table>
<thead>
<tr>
<th>Mandated Requirement</th>
<th>Our Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionals across care settings can access GP-held information on GP-prescribed</td>
<td>Achieved. Clinicians can view via the Medical Interoperability Gateway which is interoperable with our Carecentric shared care record</td>
</tr>
<tr>
<td>medications, patient allergies and adverse reactions</td>
<td></td>
</tr>
<tr>
<td>Clinicians in urgent and emergency care can access key GP-held information for those</td>
<td>Achieved. Clinicians can view via the Medical Interoperability Gateway which is interoperable with our Carecentric shared care record</td>
</tr>
<tr>
<td>patients most likely to present in U&amp;EC</td>
<td></td>
</tr>
<tr>
<td>GPs receive timely electronic discharge summaries from secondary care</td>
<td>Achieved. All admitted care discharge summaries sent digitally</td>
</tr>
<tr>
<td>Social care receive timely electronic Assessment, Discharge and Withdrawal Notices</td>
<td>Achieved. Only London Trust sending digital notices to Social Care (Islington) via the London Adaptor using a new Interoperability standard</td>
</tr>
<tr>
<td>from acute care</td>
<td></td>
</tr>
<tr>
<td>Clinicians in unscheduled care can access child protection information</td>
<td>In Progress. Interface to access CP data in patient context from RIO</td>
</tr>
<tr>
<td>Professionals are made aware of end-of-life preference information</td>
<td>Not Achieved. Awaiting roll out of Co-ordinate My Care across London</td>
</tr>
</tbody>
</table>
Where are we now?

Carecentric Shared Care Record

The Trust went live with its Shared Care Record in December 2016. Clinicians can now access clinical data from separate systems in a single view i.e. no multiple logins or patient searches:

- **Acute Care** (real time)
  *ED, Admitted Care, Outpatient and Clinical Correspondence*

- **Community** (overnight feed)
  *Appointments. Assessment forms and progress notes will be next*

- **Primary Care** (real time)
  *Problems, allergies, medications, results*

There are three significant developments planned for 2017:

- **Social Care**
  *Care team and carer, Risks, Disabilities, Case Plans*

- **Person Held Record (PHR)**
  *Patients will have on-line access to view their record*

- **GP Interoperability**
  *GPs will be able to access Carecentric within their GP system*
Where are we now?

Carecentric Shared Care Record

Real time access to disparate patient data in a single view is transforming our patient care :-

This is FAB! Saves so much time and means much less important clinical detail is missed
Respiratory Consultant

Positively affected my work on take, made taking history much easier, much more streamlined
SHO, Medical Assessment Unit

Carecentric is easy, quick and reliable. Used during weekend post-take when we weren’t able to get in touch with a GP to find out a new patient’s regular medications. This proved crucial as the patient hadn’t informed us he was on warfarin
FY1, Care of the Elderly

Much easier to find medications for patients that are unable to give full histories, found it very useful,
SHO, Emergency Department
This chapter describes the digital transformation programme required to deliver the future vision.
# Digital Transformation Programme

## NHS Mandated Priorities 2017-18

<table>
<thead>
<tr>
<th>Future Vision Key Theme</th>
<th>Project</th>
<th>Requirement</th>
<th>Funding</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digitally Connected Patients</td>
<td>Electronic Referral Service (e-RS)</td>
<td>NHSE mandated targets: - 80% referrals made via e-RS by October 2017</td>
<td>£0K</td>
<td>Create paperless NHS to improve patient care, experience and reduce delays</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100% e-RS slot availability by April 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100% referrals made by October 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digitally Enabled Workforce</td>
<td>Child Protection</td>
<td>Universal capability to access Child Protection information from unscheduled care settings</td>
<td>£6K capital</td>
<td>Alert professionals when a child/unborn baby with a child protection plan (CPP) or looked after child status (LAC) visits unscheduled care setting</td>
</tr>
<tr>
<td>Child Health</td>
<td>New Child Health network hub for NCL &amp; NEL which requires 3 new IT solutions: - Child Health Information System (CHIS) e-Redbook Health Visitors application</td>
<td>Tbc</td>
<td>Population register to reduce health inequalities in access and outcomes E-Redbook is the first digital Child Health Record to record their health, growth and development</td>
<td></td>
</tr>
<tr>
<td>End of Life</td>
<td>Universal capability to access pan-London end-of-life preference information</td>
<td>Tbc</td>
<td>Empowers patients to make and share decisions about their care pan-London</td>
<td></td>
</tr>
<tr>
<td>Business Intelligence and Analytics</td>
<td>Pharmacy</td>
<td>NHSE mandated requirement to implement Directory of Medicines and Devices (DM+D)</td>
<td>£25K capital</td>
<td>National interoperability standard to share data on availability and use of licensed drugs</td>
</tr>
<tr>
<td>Community CSDS</td>
<td>Mandated submission of Community Services Data Set (CSDS)</td>
<td>£0K</td>
<td>National monitoring of community activity for planning services</td>
<td></td>
</tr>
<tr>
<td>Emergency Department</td>
<td>Mandated submission of Emergency Care Data Set (ECDS)</td>
<td>£0K</td>
<td>National monitoring of ED performance and demand management</td>
<td></td>
</tr>
</tbody>
</table>
## Digital Transformation Programme

### Trust Priorities 2017-18

<table>
<thead>
<tr>
<th>Future Vision Key Theme</th>
<th>Project</th>
<th>Requirement</th>
<th>Cost</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Digitally Connected Patients</strong></td>
<td>Transforming Outpatients</td>
<td>Patients book &amp; amend appointments on-line</td>
<td>£108K pa – CIP</td>
<td>Improve efficiency, patient experience, and reduce DNAs to support delivery of £1m CIP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enable virtual outpatient consultations</td>
<td>Tbc</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Digital Inclusion</td>
<td>Community Forum</td>
<td>Tbc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Good Things Foundation</td>
<td>£0K</td>
<td></td>
</tr>
<tr>
<td><strong>Digitally Enabled Workforce</strong></td>
<td>Shared Care Record</td>
<td>Roll out Carecentric trust wide ; pilot in 13 GP practices ; pilot Patient Portal</td>
<td>£5K</td>
<td>Real time access to acute, community, primary and social care data will improve care &amp; safety</td>
</tr>
<tr>
<td></td>
<td>Acute EPR</td>
<td>Personal Demographic Service (PDS) module</td>
<td>£120K - capital</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Community EPR</td>
<td>Off-line access to RIO using Store &amp; Forward</td>
<td>£0K</td>
<td>Release travel time directly back into clinical care</td>
</tr>
<tr>
<td></td>
<td>E-Community</td>
<td>Develop and implement new solution</td>
<td>Tbc</td>
<td>Optimise District Nursing productivity</td>
</tr>
<tr>
<td></td>
<td>Operate Paperless at Point of Care</td>
<td>100% digital workflows in ED and OP clinics, GP and Community requesting on ICE</td>
<td>Tbc</td>
<td>Real time access to patient data will reduce delays and improve patient safety and care</td>
</tr>
<tr>
<td></td>
<td>Scanning Strategy</td>
<td>Management of paper based records</td>
<td>Tbc</td>
<td>Available on-demand, release space</td>
</tr>
<tr>
<td></td>
<td>Improving Medical Productivity</td>
<td>Implement e-job planning, rota compliance, medic on duty, leave and on-call</td>
<td>£115K yr 1 - CIP</td>
<td>Improve productivity, rota compliance, &amp; reduce agency spend to support delivery of £1m CIP</td>
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<tr>
<td></td>
<td></td>
<td>£193K yr 2-5 – CIP</td>
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<td></td>
<td>E- observations</td>
<td>Digitised observations at the point of care with automated alerting of early warning scores</td>
<td>£900K - capital</td>
<td>Identification of deteriorating patients e.g. AKI, Sepsis will improve patient safety and outcomes</td>
</tr>
<tr>
<td></td>
<td>ITU/HDU</td>
<td>Ingest non-Radiology images e.g. Cardiology and videos e.g. Michael Palin, MSK, Paediatric</td>
<td>£150K - capital</td>
<td>Single integrated view for all digital images and videos for a patient</td>
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<td></td>
<td>PACS/VNA</td>
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<td></td>
<td>Intelligence and Analytics</td>
<td>Qlikview Enterprise Reporting</td>
<td>Promote use of live dashboards and develop new ones e.g. Finance, Imaging, Pharmacy</td>
<td>£20K - capital</td>
</tr>
<tr>
<td></td>
<td>IT Infrastructure</td>
<td>Cyber Security</td>
<td>Implement KPMG Cyber Security audit actions</td>
<td>£250K - capital</td>
</tr>
<tr>
<td></td>
<td>Devices</td>
<td>68% of PCs ; 32% of iPADS are &gt; 5 years old, re-instate rolling replacement programme</td>
<td>£1,900K - capital</td>
<td>More secure, efficient, supported devices ; fewer fails, reduced support costs</td>
</tr>
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</table>
## Digital Transformation Programme

## Trust Requirements 2018-20

Below are specific requirements identified by the ICSUs which have not already been highlighted in the National or Trust priorities.

<table>
<thead>
<tr>
<th>Children &amp; Young Persons</th>
<th>Emergency &amp; Urgent Care</th>
<th>Integrated Medicine</th>
<th>Patient Access, Prevention &amp; Planned Care</th>
<th>Surgery &amp; Cancer</th>
<th>Women’s Health</th>
<th>Clinical Support Services</th>
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<tr>
<td>Capture nursing documentation on Medway EPR to operate paperless at point of care (HIMSS level 3)</td>
<td>Blood Tracking</td>
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<tr>
<td>Capture medical documentation on Medway EPR to operate paperless at point of care (HIMSS level 6)</td>
<td>Digital Histo-Cytology</td>
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<td>Capture non-Radiology images into PACS to operate paperless at point of care (HIMSS level 5)</td>
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<tr>
<td>Implement standardised care pathways with decision support and closed loop medication administration (HIMSS level 6)</td>
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<tr>
<td>Partner with UCLP, Google DeepMind, Health Innovation Network, System C to develop and adopt innovative solutions</td>
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<tr>
<td>Unified Communications Platform to improve productivity, virtual collaboration, remote working and customer service</td>
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<tr>
<td>Digital comms to increase market share and income</td>
<td>Paperless ED</td>
<td>Develop patient portal to support self management of long term conditions</td>
<td>New Theatre System and digital pre-assessment forms</td>
<td>Implement Foetal Monitoring and integrate with EPR</td>
<td>Community e-prescribing</td>
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<tr>
<td>Interoperability with LAS &amp; OoH records</td>
<td>Tele-health e.g. remote devices, wearable tech</td>
<td>E-referral-grading-booking process</td>
<td>UCLH vanguard Cancer system</td>
<td>Integration of Maternity with ICE and JAC</td>
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</table>

**Section 05**
Governance

The proposed governance structure to oversee the delivery of the Digital Strategy:

- **Trust Board**
  - Monitor delivery of Digital Strategy
  - Ratify annual digital development plans and investment priorities

- **Trust Management Group**
  - Monitor delivery of Digital Strategy
  - Approve annual digital development plans and investment priorities

- **Digital Steering Group**
  - Manage delivery of Digital Strategy
  - Recommend digital development plans and investment priorities
  - Link to PMO for service improvement and CIP

- **Clinical Advisory Group**
  - Promotes adoption of Digital Strategy
  - Develops annual development plans and investment priorities
All future investments in technology should be prioritised using the model in advance of a full business case.
Acknowledgements
Acknowledgements

References

1. A Digital NHS? *The Kings Fund, Matthew Honeyman, Phoebe Dunn, Helen McKenna, (2016)*

2. Developing Care for a Changing Population, *Nuffield Trust, Angela Coulter, Ben Mearns, (2016)*


## Acknowledgements

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### Document Control

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<td>Authors</td>
<td>Glenn Winteringham, Director of IM&amp;T</td>
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<tr>
<td></td>
<td>Sam Barclay, Chief Clinical Information Officer (CCIO)</td>
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<td>Approval</td>
<td>Trust Board Seminar</td>
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