Information Technology Strategy
2017 – 2021

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CARING SAFE RESPONSIBLE VALUE EACH OTHER

Contents

1. Strategic Context

1.1. Introduction

Better use of data and digital technology has the power to support people to live healthier lives and use care services less. It is capable of transforming the cost and quality of services when they are needed. It can unlock insights for population health management at scale, and support the development of future medicines and treatments. Putting data and technology to work for patients, service users, citizens and the caring professionals who serve them will help ensure that health and care provision in the NHS improves and is sustainable. It has a key part to play in helping local leaders across health and care systems meet the efficiency and quality challenges we face.

1.2. Context

This Information Technology (IT) Strategy has been developed within the context of Kingston, South West London (SWL) and national plans and goals. These are described in greater detail in section 4, and summarised below.

At a national level, the NHS' Five Year Forward View makes a commitment that, by 2020, there would be "fully interoperable electronic health records so that patient's records are paperless". This was supported by a Government commitment in Personalised Health and Care 2020 that "all patient and care records will be digital, interoperable and real-time by 2020".

In South West London, the Local Digital Roadmap (LDR) describes a five-year trajectory of digital enablement that delivers the national targets, and underpins the transformation initiatives, including new models of care, articulated by the SWL Sustainability and Transformation Plan (STP).

For Kingston, the Kingston Health Campus: Vision and outline strategy 2016– 2021 sets out the vision for the delivery of excellent care to patients, and the service and technology changes necessary to enable this.

Across all these strategic contexts are a number of consistent themes

- Paperless at the point of care
- Digitally enabled self-care
- Real-time data
- Whole systems intelligence to support population health management and effective commissioning, clinical surveillance and research

In the context of care increasingly delivered across geographical and organisational boundaries, this also necessitates:

- Information sharing at the point of care
- Mobile infrastructure that enables clinical staff to deliver care

This translates into a number of programme goals and project outcomes that build upon the existing software, hardware and network infrastructure to produce a practical, deliverable plan of transformational improvements for patients and staff, including:

- Progress the development of the Electronic Patient Record and systems integration across health and social care to enable information sharing
- Use information more effectively to inform quality improvement
- Optimise the use of technological development to transform the delivery of care, particularly in relation to population health (virtual clinics, remote monitoring, self-care)

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- Make information more accessible to patients and staff

All of these 'improvements' have been identified and developed with the patient at the centre; and all are designed to support efficient and effective support for the patient's pathway.

The Information Technology environment in which the Trust operates is evolving at pace, with networks that enable information to be shared and consumed with relative ease. In this space, the emergence of 'Cyber Security' threats has grown exponentially and we will place the security of our systems and data at the centre of everything we do. Our strategy focuses on being strong in Cyber Security technical counter-measures, but acknowledging that data must be shared, in a secure way, to support the care of our patients.

1.3. Patient Journey

Patients are at the heart of everything we do. As we reach the end of our strategy, this is their story…

'I will be able to use my home computer or smartphone to access health advice, view my health record and in some cases add information to the record so that the clinician caring for me can see it. I will also be able to give permission for my health information to be seen by health professionals looking after me and record certain preferences for care that I receive.

If I need to see the health professional caring for me I'll be able to book the appointment online, and even arrange to have a consultation using software such as Skype, saving me the inconvenience of travelling to hospital. I'll have the confidence of knowing that they are able to see all of the relevant health information about me including a GP referral letter and any medicines that have been prescribed for me by my GP. We will be able to agree a plan of care that I can add to so that they can see how I am progressing.

When I have an appointment with my doctor he'll be able to order tests for me and get the results, wherever possible, during the same visit. My doctor's clinical observations, my test results and plan of care will be recorded electronically on the computer system and made available to my GP. If I need medication my doctor will be able to send a prescription to my local pharmacy so that I can collect it from them.

There may be times when a change in my health means that I have to go to hospital, as part of the plan for my care or unexpectedly when I need urgent care. If I need to call NHS 111 for advice, the staff taking my call will be able to access key elements of my health record, including community or mental health care I might already be receiving, so that they can take this into account when providing that advice.

If I need to visit the Emergency Department (ED) of my local hospital, the nurses and doctors will be able to see all the information they need to care for me including, the ambulance report created by the paramedics looking after me on my way to hospital, any tests requested by my GP, medications prescribed for me, any existing plans for my care and key items of health information about me. They will use the hospital computer system to prescribe drugs for me which will help to ensure that my prescription is safe, checking that my allergies won't be affected and that the doses of drugs is safe. The results of any tests that I have, including blood tests and images of x-rays and ECGs, will also be saved on the hospital computer system so that anyone caring for me can see them. If I am receiving care in the community the clinician looking after me will receive a notification to tell them I have been to ED and when I leave ED, a discharge summary from the hospital computer system will be automatically sent to my GP.

If I am admitted to a ward in the hospital, the nurses, doctors and therapists caring for me will be able to see the care records assessments and plans created for me in ED on the hospital computer system. Although they might check them with me, I won't need to keep repeating all of my details. My care will continue to be recorded on the hospital computer system and my blood pressure, temperature and pulse will be automatically transferred from the recording devices into my record. The system will alert nursing

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staff if my observations are unusual and in some cases a member of the infection control team will assess me to make sure that I receive early treatment for infection, if appropriate. Even when they are not in the hospital, doctors will be able to view my record if they need to. While I am in hospital, my family and I will be able to stay connected with the outside world by using free Wi-Fi to access the internet using our own mobile phones and tablets.

An electronic discharge summary containing information about my plan of care and drugs prescribed for me will be automatically sent to my GP when I leave hospital. My care records will be made available to staff who will be providing care for me at home or at another Hospital. Health care staff will be able to access, review and update my relevant records using electronic devices that they carry with them so that they can see and treat me in the location that is best for me. My follow-up outpatient appointments may be carried out over the phone or using an application on my computer to save me visiting the hospital again.

1.4. IM&T Vision

"IM&T will enable the delivery of excellent care by providing easy access to systems and data to staff and patients wherever and whenever it is needed to support the patient journey."

1.5. Principles

The NHS was created out of the ideal that good healthcare should be available to all, regardless of wealth. When it was launched by the then minister of health, Aneurin Bevan, on July 5 1948, it was based on three core principles:

- that it meet the needs of everyone
- that it be free at the point of delivery
- that it be based on clinical need, not ability to pay

These three principles have guided the development of the NHS over more than 60 years and remain at its core.

In March 2011, the Department of Health published the NHS Constitution. It sets out the guiding principles of the NHS and the rights of patient.

The seven key principles guide the NHS in all it does. They are underpinned by core NHS values which have been derived from extensive discussions with staff, patients and the public

This IM&T strategy has been developed with an underpinning set of principles that will support the delivery of this strategy over the coming years, namely;

- **Patients:** Patients are at the heart of everything we do.
- **People First**: Our workforce is our priority. We will create an open environment whereby individuals can test their potential and we support the development of their skills and abilities.
- **Foundation** : Our Cerner Millennium system will be the foundation of our Electronic Patient Record development and we will only use "best-of-breed" alternatives where they provide clear benefits
- **Secure**: The security of our patients' data is very important to us. We will have a smart and effective risk-based approach to security and we will be prepared and resilient to Cyber threats.
- **Collaborative**: We will partner with other Healthcare providers and share data to support patient care.

- **Efficient**: We are cost-effective and efficient, and provide a service that meets the Organisations' needs.
- **Standards**: Standards drive our service. We will have effective standards based approached to service delivery, and policy and procedure will drive how we behave

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2. Strategy Overview

The IT Strategy is based around 5 key goals, with clear objectives, to deliver a measurable outcome:

These objectives describe the key themes or developments that will support the delivery of the strategy. A detailed 5-year plan will accompany this strategy.

Achievement of the above is underpinned by effective IM&T Governance (linked to clinical, operational and transformation teams), and effective IM&T Delivery Plan and high-quality resourcing strategy.

These are described in further detail in the sections below.

Goal: EPR Complete delivery of EPR to deliver clinical benefit	Goal: Integration Extend capability across the local Health Economy	Goal: People Effective IT resource pool delivering real change	Goal: Technology Harness technology for staff and patients	Goal: Service Delivery Robust, secure and cost-effective service delivery
Objectives: 1. Complete Electronic Prescribing and Medicines Administration 2. Clinical documents for medical teams 3. Electronic Document Management (EDM) 4. Continuous programme of Millennium optimisation 5. Champion User Programme	**Objectives:** 1. Share data across Acute Cerner sites 2. Acute access to GP records for continuity of care 3. Align to and implement pan-London integration (HLP) 4. Support the delivery of patient access to health records 5. Enable population health capability	**Objectives:** 1. Attract, Develop and maximise retention, through inclusive, effective leadership. 2. Increase Organisational awareness to deliver a focused service 3. Support Organisational development through targeted training programmes.	**Objectives:** 1. Technology for virtual and remote working 2. Wi-Fi for staff and patients (anytime, anywhere) 3. Progress against "Universal Capabilities" 4. Innovative Technology to support developments and efficiencies	**Objectives:** 1. Cyber Secure 2. Leverage IT system investment, upgrade the core network, protect our data 3. Deliver excellent user experience upon contact with all aspects of the IT Service Desk 4. Pro-active Legacy retirement 5. Collaboration opportunities for services
Outcome: Electronic Patient Records supporting excellent clinical care	**Outcome:** Support for clinical workflow regardless of organisation or location	**Outcome:** Highly skilled, flexible and responsive IT team, focussed on business requirements	**Outcome:** Device agnostic access for all	**Outcome:** Always on, always safe, always supported

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3. Goals and Objectives

EPR

Goal: Complete delivery of the Electronic Patient Record (EPR) to deliver clinical benefit

Our Cerner Millennium EPR system will be at the heart of our strategy to provide a complete, consistent and up-to-date clinical record for all patients treated at Kingston Hospital. It will be one of the fundamental foundations for achievement of 'Paperless by 2020' (alongside EDRM). Whilst other clinical solutions may persist, because they hold particularly complex or specialist data, the strategy includes a rolling programme to drive adoption and effective use of the EPR.

Outcomes:

Electronic Patient Records supporting excellent clinical care

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Complete Electronic Prescribing and Medicines Administration (EPMA)

The Trust has made significant progress in EPMA in both in-patients and chemotherapy, and we will complete the circle by deploying EPMA in paediatrics and out-patients. This will be a significant achievement in improving patient safety and will bridge the gap between GP and Hospital prescribing. Complete patient medication history will be available across care settings.

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Clinical documents for medical teams

In a similar vein to EPMA, clinical documentation will continued to be deployed over the coming years to ensure that we are 'paperless at the point of care by 2020'. To support this, we will require clinicians to be truly mobile and have access to data from any location in the Hospital.

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Electronic Document Management

One of our strategic imperatives is to be 'paperless at the point of care by 2020' and EDM will be the biggest change project we will deliver over the first 2 years of the strategy. We have made significant progress in being 'paper-light' but EDM will transform the way clinical teams work in the Hospital and will mean that patient information will be available, in a digital format, at the point of care.

Continuous programme of Millennium optimisation

Cerner Millennium provides a wide and sophisticated range of functionality to support both administrative and clinical requirements, but there is more work to do in optimising the system, and better supporting clinical workflow. The IT Department will support the work of the CRS Operations Group to help standardise process and procedures, and truly exploit the opportunities the Millennium system provides.

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Champion User Programme

We are very experienced in delivering large change programmes (e.g. EPMA and clinical documentation) but we recognise that the true value in systems comes from embedding them within the clinical environment, reducing tasks and providing information to support patient care. The Trust must embrace and develop a Champion user programme that nurtures expertise, and embeds support deep within wards and departments. Nurses should support nurses in using IT systems and help to spread the knowledge within areas.

Evidence shows that an effective Champion User network helps to drive system usage into a business as usual state, and can remove variations in the way we do things.

The Kingston example:
Completion of the rollout of our EPR will underpin our move towards one stop diagnostic and treatment clinics by providing immediate, real-time access to patient information such as referrals, clinical history and any diagnostic images or test results. After the consultation the clinician will be able to use voice recognition to create a care summary that can be sent electronically to the GP

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3.2   Integration

Goal: Extend capability across the local Health economy

Delivery of the SWL STP will require a transformational approach to the provision of Healthcare services. Clinical staff will require access to information from any Healthcare site across SWL, and a "shared-care" plan will need to traverse both Health and Social care to ensure that information about a patient is recorded once, in a single shared record. Information will be integral to supporting patients in the environment of their choice, and help to prevent them from deteriorating and needing expensive, acute based care.

Outcomes :

Support for clinical workflow regardless of organisation or location

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Share data across Acute Cerner sites
As patients move between Healthcare settings in SWL, their data must follow them. As organisations move their services into shared settings, the need to access a single view of data is vital to provide a continuum of care. We will enable the viewing of data from other Cerner sites in SWL to support patients moving between acute settings and ultimately the community.

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Acute access to GP records for continuity of care
In urgent and emergency care settings, access to GP data is vital to enable continuity of care for patients. The same is true when a patient attends their GP following an acute encounter, and we will enable our Millennium system to achieve this detailed view of the clinical record.

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Support the delivery of patient access to health records
The Trust will publish and make available acute data for patient viewing. The means to view this data is not explicitly defined at this time but it is likely to be via the GP system (EMIS, TPP).

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Align to and implement pan-London integration (Healthy London Partnership)
We will support the aims of the HLP to provide a pan-London signpost to sources of data. We will also work towards simplifying information sharing agreements across SWL and support the review of consent models.

Enable population health capability
Healthcare systems traditionally treat people with illnesses and work on preventative programmes for the population, through education and awareness. As we look to the future, effective healthcare systems require data at a population scale to target cohorts of patients using registries and information that shifts care significantly in favor of prevention or on-going management. The clinical systems we are developing in Kingston will provide live data that will build a symbiotic relationship with future population health developments.

The SWL STP and LDR identifies a future strategic solution that will 'transform the delivery of services' and using a population health approach will help to realise that aim.

The Kingston example :
Our vision at Kingston will see a team approach to providing Maternity care at the location best suited to the woman, her baby and family. Our midwives visiting the woman in her home will be able to access the mother's records held at the hospital and the mother will be able to access her own 'hand-held' record.

3.3   People

Goal: Attract and develop an engaged, skilled workforce.

As technology develops at a rapid pace, and budgets are limited, we require an agile, skilled workforce to both manage day-to-day requirements, and also to develop new systems to support the delivery of our goals. KHFT have to compete with other NHS organisations and commercial companies within London and surrounding regions, to recruit and retain technically skilled staff. KHFT have to be innovative and different to other Organisations to attract staff in the future. We can no longer continue to recruit and retain staff "the same old way", and we must provide attractive packages and development to staff to ensure they want to grow with the Organisation.

Outcomes :

Highly skilled, flexible and responsive IT team, focussed on business requirements

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Attract, develop and maximise retention, through inclusive, effective leadership,

The IM&T Department must provide a holistic approach to every member of staff to ensure we recruit and retain quality people, who will develop and grow with the organisation. This will require effective leadership, which values and nurtures its staff. We will ensure all members of the team have a comprehensive training plan which builds upon their personal development review, and keeps people on a continuous development pathway.

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Increase organisational awareness to deliver a focussed service

IT support is often seen as a "vanilla" service, and this does not meet the needs of the Organisation. We will ensure that staff have organisational awareness and expertise to support the many varying services that are provided. IT staff must be aware of areas such as ED and the particular demands that are placed on IT to support this 24/7/365 service and to respond quickly and effectively to their needs.   IT staff should recognise the positive impact they have on patient care.   This approach will be mirrored across all operational areas (e.g. Outpatients, Cancer services)

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Support organisational development through targeted training.

We have made significant investment in IT software and applications over the past 5 years, and we only exploit around 50% of the functionality due to a lack of knowledge and experience of the potential that the software can provide. We need to empower out Technical experts to experiment with software and solve business issues. This requires protected time for staff to try new things and to stretch their learning. We will provide the time and support to realise this potential.

> **The Kingston example :**
> Our expert IT staff will be assigned to key clinical areas such as ED so that they better understand the department's business need, provide timely support and see at first-hand the impact of their efforts on patient care.

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3.4   Infrastructure

Goal: Harness technology for staff and patients

We will use technology to improve the experience of our staff and patients. Smart devices will enable information to be captured across care settings

Outcomes:

Device agnostic access for all

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Technology for virtual and remote working

The next five years will see a significant shift in the way medical staff interact with patients. As care becomes more community based, patients will manage their conditions using smart devices and will communicate with clinicians using virtual technology (such as Skype). Out-patient consultations and follow-ups will also move towards a virtual experience. This channel shift will require mobility for clinical staff and medical devices for the management of long-term conditions. Technology will be used to manage patients at their home and will aim to prevent Hospital admissions. It is important to note that traditional means of interacting with patients will remain to ensure that one of the core principles of the NHS, that 'it meets the needs of everyone' holds true and that we do not create inequalities in the system.

GP and community referrals will be managed via a Kinesis referral management system.   This provides an advice and triage process to take place to minimise unnecessary referrals.

We envisage that traditional PC's will still be required in the Hospital, but doctors and nurses will use Tablet devices to access clinical information. We will continue to grow the number of workstations on wheels to support ED and in-patients wards

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Wi-Fi for staff and patients (anytime, anywhere)

Wi-Fi access will be available for all clinical staff from any healthcare organisation across SWL. This will liberate access and support mobile working such that care can be provided in any location. This will primarily be delivered via the SWL LDR, and will require a shift in security

models at every healthcare organisation, but will be a key enabler in supporting the SWL STP.

In parallel with this, Wi-Fi access for patients and visitors will be available for free across the Trust. Targeted information will be made available for patients based on their location in the Hospital

In-patients will have access to TV and Internet services via Tablet and Wi-Fi and will be able to bring their own devices in to the Trust.

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Progress against "Universal Capabilities"

Every local health care system is expected to make significant progress against 10 Universal Capabilities (UC) over the first two years of the strategy. KHFT has adopted national systems and standards over the last few years and we will continue this approach in areas such as e-referrals and discharge summaries. Urgent Care settings (such as ED) will benefit from GP data being available for those patients identified as being most likely to present (in urgent and emergency care)

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Innovative Technology to support developments and efficiencies

We have made great strides forward in Vital Signs recording directly into the clinical record, and supporting the drive to reduce admissions into ITU for patients who are at risk of SEPSIS; early detection and treatment leads to better patient outcomes. We will continue to integrate medical devices into our Millennium system, with the focus on completing the roll-out of Welch Allyn devices for in-patient wards and then review the opportunities for syringe drivers, infusion pumps and smart beds.

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The Kingston example :
At Kingston we will support GPs by providing expert Consultant advice and guidance during the referral process, using Kinesis and we will receive the majority of our referrals via the national e-referral service which will require us to appropriately manage clinic slot availability.

3.5   Service Delivery

Goal: Robust, secure and cost-effective service delivery

The Trust provides a 24/7/365 service, and requires a strong, secure underpinning IT infrastructure to support the delivery of patient care and business functions. Whilst we have a strong development function, our priority will be to ensure we deliver business as usual support across the Trust. As we move to an internet of everything and a requirement to embrace social media applications, we must always be vigilant to the Cyber security threats that this will bring; we must be open but resilient.

The IT support service needs a channel shift to focus on supporting the requirements of the business. In line with our people development we need to shape our service so that it is flexible, efficient and responsive.

Outcomes:

Always on, always safe, always supported

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Cyber Secure
The Trust has a reliance on IT to deliver highly available, fault tolerant systems. These systems are under constant threat from sophisticated malicious code that can seriously disrupt services, are a threat to patient care, and can harm our reputation. To counter the evolving cyber security threat to the Trust, IT will review, update and implement new integrated controls and countermeasures to increase our resilience as well as improve our prevention and detection capabilities.

In line with the Executives requirements, its appetite for risk and budgetary constraints, our objective will be to review technical, physical and cultural techniques and then to provide guidance for the Trust Executive to endorse and enforce. We will implement systems, controls and reports to assess the vulnerabilities and minimise the risks relating to the integrity, availability and confidentiality of the Trusts data, its applications and their use.

We will develop an IT Cyber Security Policy that defines relevant standards, governance and procedures as well as Security Incident Management tools and processes. We will take advantage of the security and health sector tools, best practice and guidance where appropriate.

We recognise that the need to use Social Media and internet based services is growing, and that

we must provide a more open network to support these business requirements, however there will always be a tension between being more open and being secure, and we must maintain a good balance between these two competing forces; there will be times when we have to make difficult decisions in respect to this

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Leverage IT system investment, upgrade the core network, protect our data
We will leverage the investment in Active Directory, Microsoft Server and Desktop operating systems to provide the best and most secure user experience. Users will experience a single sign-on system that will help to reduce password complexity and we will develop a fast sign-on process for PC's in clinical areas.

Our core network will be upgraded to meet the growth of business data, improve application response time and ensure efficient backup and recovery. We will keep network equipment and software up to date and within product lifecycle, and take advantage of network hardware refresh to redesign the network using new technologies. We will ensure that our backup systems can support the growth of business data.

As community service provision develops and grows, we will support Kingston Hospital services by providing remote access services that deliver the best user experience.

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Our strategy for Disaster Recovery (DR) will focus on resilience in our data centres such that DR is the last resort. We will be technically resilient by 2020, which will require significant investment in technology to ensure no single points of failure within our networks, and redundancy at our core.

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Deliver excellent user experience upon contact with all aspects of the IT Service Desk
The IT Service Desk will provide multiple routes for users to contact them (e.g. phone, live web-chat, email, online, bleep or in-person), and systems will be implemented to reduce waiting times, prioritise calls and provide regular updates to users.

A high first-time-fix rate is important to us and our users, and we will provide regular technical training to our first-line teams to deliver this.

Service Level agreements will be updated so users know what to expect, and can hold IT to account. We will simplify our service and product catalogues, so users can access the information they require with ease.

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Pro-active Legacy retirement
As we focus on developing our Cerner Millennium system, we will regularly review applications in use and de-commission redundant ones and optimise license (re)allocation to avoid unnecessary purchases. We will review and rationalise legacy applications.

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Collaboration opportunities for services
We will participate in opportunities to centralise services (typically referred to as 'back-office') where they bring greater benefits or standardisation than providing the service in-house.

The Kingston example :
We will enable staff at Kingston to access social media for training and business purposes and provide a 'Sandbox' style secure environment to ensure protection of our network.

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3.6   Other Key Initiatives

There are a number of key initiatives that link to the IT strategy that will require considerable technology input, these are described below.

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Information Management
The Information Strategy describes a programme of delivery to improve data quality, maximise the use of clinical systems and to create an information portal for the Trust. This will require a modern, flexible and scalable set of IT systems, software and tools to deliver their strategy. We will support the development and ongoing management of the new data warehouse.

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Maternity Services
The Trust's Maternity services are highly regarded by patients, and our unit is one of the largest in SWL. The unit was voted best in London for labour care in the 2015 National Maternity Survey. Any development of the service will require a modern integrated Maternity Management System, which also supports "hand-held" electronic patient records.

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Cancer Services
The West London Cancer Vanguard initiative provides an opportunity to drive forward Cancer services for patients in Kingston and the surrounding areas. Whilst there are robust systems in place for managing cancer pathways, we need to review the opportunities that Millennium will present in the future and strive for better IT support which the service requires.

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"Health Apps"
The growth in "Health Apps" for Apple and Android devices has led to a debate around how NHS Organisations will deal with user demand for Health Apps. There are a myriad of Apps that provide support to users, but these are often chargeable, limited to specialist or long-term disease management, and technically poor. The previous wisdom was that "patient portals" would provide the answer, but as thinking moves on, we must take a more open view on how users will choose to consume their information.   Our strategy is to publish and make available the data available, and allow patients to choose how they consume their information.

There will be areas such as Dementia, that require a different use for Apps and we will support this.

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4. Link to NHS and SWL strategic objectives

This I.T. strategy has been developed within the context of South West London (SWL) and national objectives. This section summarises those strategies and identifies how each component of the IM&T strategy supports their achievement.

4.1 Key business strategies

4.1.1 National Strategies

Key national reviews that impact the trust strategy, and hence this IM&T strategy are:

- The NHS *Five Year Forward View* (2014) which sets a clear direction of more integrated care between NHS organisations, and with Social Care; and enabling patients to become more engaged in managing their own care;
- The Independent Cancer Taskforce report *Achieving World-Class Cancer Outcome: A Strategy for England 2015-2020* which described the need for effective prevention, prompt and accurate diagnosis, informed choice and convenient care, and patient access to information;
- The national maternity review *Better Births – Improving Outcomes of Maternity Services in England* (2016) which concluded that women should be in control of their care in partnership with healthcare professionals, with more personalised care, choice and continuity of care, underpinned by accessible electronic records; and
- Lord Carter's report, *Operational Productivity and Performance in English NHS Acute hospitals: Unwarranted Variations* (2016) which set a 10-15% real terms cost reduction target through removal of unwarranted variation and greater back-office collaboration and consolidation.

4.1.2 SW London Sustainability and Transformation Plan

'The success of this plan is built on all services, across all areas of mental and physical health and social care, working together in an unprecedented way' (South West London Five Year Forward Plan). This new approach to joint working is all about collaboration with partners to deliver the changes needed to a health and social care community. The financial case for change articulates a widening gap such that the financial deficit amounts to circa £140m per annum, and is unsustainable.

The plan identifies key challenges for services in SW London, and five strategic themes to address them. These are illustrated below:

Prevention and early intervention
- We must support people to stay well, and identify people most at risk of developing long term conditions using modern technology.
- We must develop proactive care, and better support people at home and in the community

Delivering the right care in the best place
- Transform access to outpatients and reduce ED attendances
- Support people at the end of their life

Building capacity and capability to deliver
- Establish locality teams, and provide an integrated community crisis and intermediate care response
- Transform primary care to provide accessible proactive coordinated care.

Organising acute hospital services

- Improve clinical networking and redesign clinical pathways
- Review specialised services

Productivity

- Operational improvement and cost reduction

'Technology is a critical enabler of many of the recommendations that are being made within our Five Year Forward Plan'

4.2 IM&T link to business strategies

The tables below demonstrate the links between the IT strategy set out in Section 3 above, and the Business Strategies in Section 4.1. Regular review of the alignment of the IM&T delivery programme with business strategies will be a key component of the IM&T Governance process – to ensure that IM&T continues to enable achievement of the Trust Vision.

	Electronic Prescribing & Medicines Administration (EPMA)	Clinical documents for Medical Teams	Electronic Document Management	Millennium Optimisation	Champion User Programme	Share data across Acute Cerner Sites	Acute access to GP records for continuity of care	Support delivery of patient access to health records	Align to and implement pan-London integration (Healthy London Partnership)	Enable population health capability	Technology for virtual and remote working	WiFi for staff and patients (anytime, anywhere)	Progress against Universal Capabilities	Innovative technology to support developments and efficiencies	Cyber Secure	Leverage IT system investment, upgrade the core network, protect our data	Pro-active Legacy retirement	Deliver excellent user experience upon contact with all aspects of the IT Service Desk	Collaboration opportunities for services	Information Management	Maternity Services	Cancer Services	Health Apps'
National Strategies																							
Five Year Forward View																							
Integrated Care across Organisations	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓		✓	✓	✓
Patient Engagement								✓			✓	✓									✓	✓	✓
Independent Cancer Taskforce																							
Effective prevention, prompt and accurate diagnosis	✓	✓	✓	✓		✓	✓	✓	✓	✓												✓	✓
Convenient Care	✓	✓	✓			✓	✓	✓	✓		✓											✓	✓
Patient Access to Information	✓	✓	✓					✓					✓									✓	✓
National Maternity Review																							
Accessible electronic records	✓	✓	✓			✓	✓	✓	✓		✓	✓		✓	✓	✓					✓	✓	✓
SW London Sustainability and Transformation Plan																							
Prevention and Early Intervention	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓		✓	✓						✓	✓	✓	✓
Delivering the right care in the best place	✓	✓	✓	✓		✓	✓			✓	✓	✓		✓				✓		✓	✓	✓	✓
Building capacity and capability to deliver		✓			✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Organising acute hospital services	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	
Productivity	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓

5. IM&T Governance

As we move towards a Kingston, SWL, London and National delivery model, a strong over-arching governance model needs to be in place to ensure that Programmes are defined, delivery is monitored and benefits are realised. The IT Department has a good track record of programme delivery. This is evidenced by the development of the Cerner Millennium system via the National Programme and continuous project delivery year-on-year.

The table below describes the Kingston and SWL committees and groups that will oversee the delivery of the strategy.
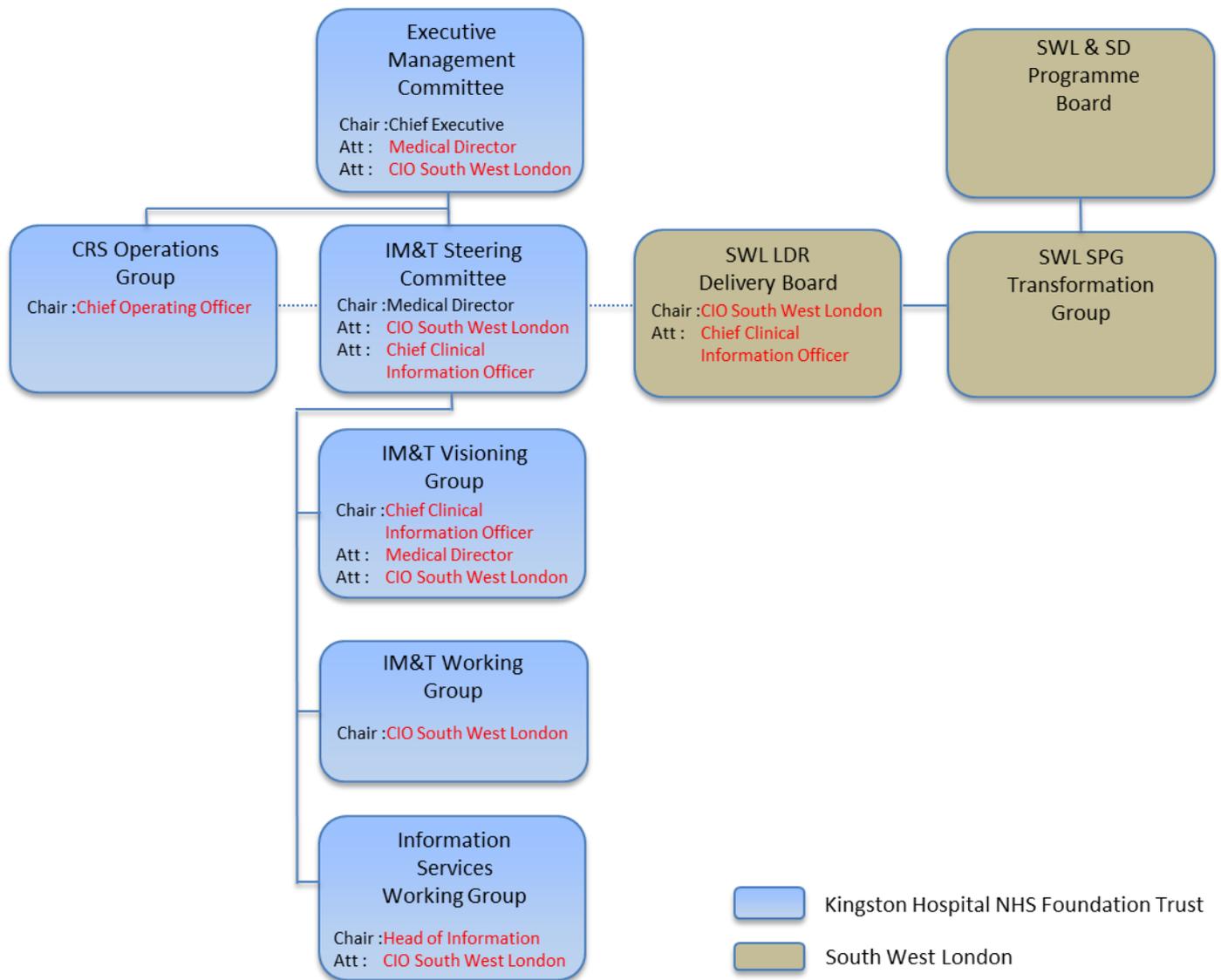
The **IM&T Steering Committee** guides the cost-effective use of IT in the Trust so that investment reflects KHFT priorities and maximum benefits are achieved. The committee will develop, maintain and oversee the delivery of the I.T. Strategy, The committee will approve the IM&T Annual Business Plan and delegates delivery to Programme or Project Boards using MSP &/or PRINCE methodology, with Board Executives accountable to IM&STC.

All significant projects in the annual plan require business cases, setting out an options appraisal with cost, benefit and risk evaluations

The **IM&T Visioning Group** influence the planning and development of clinical systems, the EPR and associated systems and technology in order to extract maximum usefulness and value from deployed systems.

The **IM&T Working Group** oversees the delivery of the Information Management & Technology Business Plan and ensures maximum benefits are achieved.

The **Information Services Working Group** oversees the delivery of the Information Strategy and Information Services business plan and ensures maximum benefits are achieved

The **South West London Local Digital Roadmap Delivery Board** oversee the implementation of the short-term tactical solution, formation of a Programme Management Office function and the development of the long-term strategic solution.

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6. Delivery

6.1   Delivery strategy

The delivery of this IT strategy will be overseen by the IM&TSC and SWL Boards as a number of initiatives span Trust and SWL developments.

The IM&TSC will review the strategy annually (or more regularly if there is significant organisational change or developments) and will undertake an annual business planning exercise. The annual business plan will prioritise the schemes to be delivered taking into account the overall IT strategy, organisational direction at the time, and the prevailing financial climate. It is recognised that the strategy will require significant capital funding and this may not be available from year-to-year.

The IT strategy and SWL LDR will require a cross organisation approach to technology and resources and it is vital that we use the existing experience and skills from the people within organisations across the health economy to deliver this ambitious programme. We must provide development opportunities for people, and retain the knowledge within SWL to ensure we have a strong and sustainable support model going forward.

It is also recognised that the NHS is in a constant state of change and we must flex to the conditions at the time, but we must ensure we maintain our core principles and deliver the key developments outlined in this strategy.

Living our values *everyday*

7. Investment

The IT strategy describes a journey for KHFT of being 'paperless by 2020'. It is recognised that financial ask for IT infrastructure and developments could be almost unlimited and the NHS is in the midst of tight funding controls and significant cost improvement programmes. As previously highlighted, the SWL health economy will require savings of circa £750m over the next five years. It is also recognised that IT is a key enabler to delivering efficiencies and supporting developments in healthcare to improve patient safety and reduce cost.

This strategy requires indicative capital investment of £22.3m over 5 years. This is set against an overall capital allocation for the Trust of £42m over the same period, and that total also needs to encompass both estates and medical equipment requirements.

To better understand the difficult financial choices that will need to be made to deliver this strategy, the investment required has been broken down into the following categories;

- **Infrastructure** – "Keeping the lights on"
  Hardware upgrades and capacity increases to support the day-to-day operations of the Trust; required just to "keep the lights on"
- **Infrastructure** – "Develop and strengthen"
  Technical developments that strengthen our infrastructure and enhance our security.
- **EPR/Clinical System Development**
  Building our EPR, and adding new functionality to our Millennium system. Service Line requests for enhancements.
- **Invest to save**
  Schemes that are cash-releasing, and contribute to revenue reduction; EDM being a prime example.

The financial ask for each of the categories is detailed below;

	2017/18	2018/19	2019/20	2020/21	2021/22	TOTAL
Infrastructure - "Keeping the lights on"	3,938	1,406	2,256	2,241	2,296	12,137
Invest to save	300	1,100	1,000	0	0	2,400
EPR/Clinical System Development	600	550	2,063	2,000	1,350	6,563
Infrastructure - "Develop and strengthen"	160	880	180	0	0	1,220
TOTAL	4,998	3,936	5,499	4,241	3,646	22,320
IT Capital Allocation	2,500	2,500	2,500	2,500	2,500	12,500
Variance	-2,498	-1,436	-2,999	-1,741	-1,146	-9,820
TRUST Capital Allocation	8,400	8,400	8,400	8,400	8,400	42,000
figures in '000						

This negative variance presents significant challenges for the delivery of the strategy.

The approach to these challenges will be;

- Whilst we will focus on 'keeping the lights' on, we will need to make some difficult choices with our IT infrastructure that will require a 'risk appetite' appraisal, and the ongoing development of a risk based approach. We may have to accept that we cannot keep providing additional IT capacity for day-to-day work, and the organisation will need to change the way it works.

Living our values everyday

- Development projects are important to us, and areas such as e-Prescribing must be completed. To delay projects such as these would be detrimental to the organisation.
- A number of programmes will be delivered at a SWL scale and therefore funding will follow, outside of our Trust capital allocation.
- A number of projects will release cash from the organisation and therefore we need to invest-to-save in areas such as EDM.
- The government is keen on "digital exemplars" and "vanguard organisations" as a means to deliver step changes in organisations.. We must be ready to promote both KHFT and SWL as organisations that can deliver at scale and secure central funding. In order to demonstrate this capability we must develop our Clinical and Nursing leaders to be at the forefront of initiatives, and show "readiness" when funding is announced.
- Technology is rapidly evolving and during the life of the strategy there will be further advances which may mean that we will need to be closer to the 'bleeding edge' of developments', which presents a riskier approach, but potentially greater gains.
- The IM&T annual business planning process will balance priorities, funding and strategy such that there will always be good controls in place to ensure we address each area with a considered and measured approach.

8. High-level plan

IM&T Programme	2017/18	2018/19	2019/20	2020/21	2021/22	TOTAL
Infrastructure - Keeping the lights on						
Resource	520	520	520	520	520	2,600
New intranet	150					150
CRS Optimisation/development	50	50	50	50		200
Infrastucture environment	700	95		325		1,120
Networks	490	66	521	21	621	1,719
Servers	489	125	610	65	350	1,639
Desktops	600	250	250	600	500	2,200
Cyber Security	180	200				380
Software/Systems	759	100	305	660	305	2,129
SUB-TOTAL	**3,938**	**1,406**	**2,256**	**2,241**	**2,296**	**12,137**
Invest to save						
Single Sign on		100				100
Electronic Document Management (EDM)	300	1,000	1,000			2,300
SUB-TOTAL	**300**	**1,100**	**1,000**	**-**	**-**	**2,400**
EPR/Clinical System Development						
CRS Outpatient Prescribing	50					50
CRS Paediatric Clinical Documents & Prescribing	100					100
CRS Device Integration (Vitals, ECG, Point of Care+Spacelabs)	100	200	980	100		1,380
CRS Critical Care + Anaethesia + Device Integration	-			500	500	1,000
CRS Maternity Upgrade (inc. patient hand held & fetal link)			733	1,050	100	1,883
Sharing records - HIE/Portal/MIG/VNA/HIEDW		100	100	100	500	800
Departmental Systems & Service Line requirements	250	250	250	250	250	1,250
Voice Recognition and Digital Dictation Solution	100					100
SUB-TOTAL	**600**	**550**	**2,063**	**2,000**	**1,350**	**6,563**
Infrastructure - Develop and Strengthen					-	
Infrastucture environment		570				570
Networks		100	180			280
Servers						-
Desktops						-
Cyber Security	120	135				255
Software/Systems	40	75				115
SUB-TOTAL	**160**	**880**	**180**	**-**	**-**	**1,220**
TOTAL	**4,998**	**3,936**	**5,499**	**4,241**	**3,646**	**22,320**

all figures in '000