King's ICT digital road map and patient records digital strategy

Executive Summary

DRAFT

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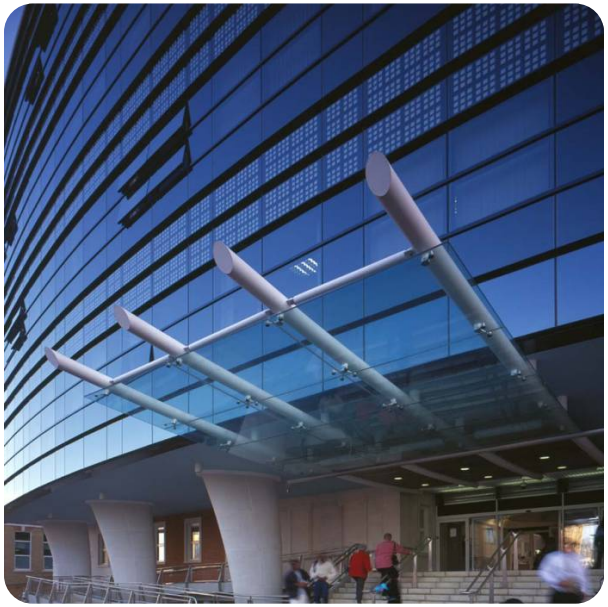
Director of ICT



King's ICT digital road map strategy: Introduction

King's College Hospital NHS Foundation Trust

Introduction

Generally digital healthcare has been evolving rapidly over the past decade and continues to change the way King's delivers care, interact with its patients and changes the way we interact with our colleagues in the wider healthcare economy.

The Trust has successfully embarked on its adoption of a single Electronic Patient Record (EPR) programme across all its sites enabling the core clinical activity to be recorded across King's. Being a digital Trust will impact every aspect of the Trust, from the way we process many administrative tasks, to the way we purchase supplies, down to the way patients interact with King's. Using technology should be the vehicle for King's to evolved as a premier care provider and adopt a model of continual clinical improvements through evidenced based practice supported by Learning Health Systems.

This document sets out many of the components of the digital road map and is an important first step towards taking advantage of being fully digital. For this to work effectively it has to be aligned with other Trust strategies, such as clinical, research, education, business intelligence, estates and finance. These strategies are evolving at different rates across the Trust. King's will need to work hard to ensure being digital is meeting the needs of our business areas, by regularly reviewing and updating its strategy to ensure it supports the clinical and corporate directorates. The health economy is dynamic and government priorities, targets and focus does change. Therefore, the Trusts needs to have the digital agility to respond.

This document sets out the core ICT digital vision, aims, objectives and impact on our key stakeholders. It will outline the key infrastructural programmes which will give the Trust its digital foundations and the core digital projects which will give it its digital capabilities to transform. It makes its recommendation on the key priority projects, governance and implementation approach.

The primary purpose of the digital strategy is to inform the direction and vision of the programme. However it is important to recognise the investment that will need to be made to achieve the vision.

King's ICT digital road map strategy: Key Objectives

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Improve our patients clinical outcomes and care delivery

To provide alerting and digital decision support to care professionals VTE, NACPR, AKI, NEWS2 and other digital means of key early intervention support. To provide speciality functionality support to our internationally recognised specialities. To reduce dependency on paper clinical records which are not easily shared across sites or professional groups, or not always available and interpretable. Provide care professionals across all sites at King's with a central place to access a patients core clinical record.

Improve our patient experience

Improve the overall digital care experience. Improve the outward communication with patient through our internet site, provide accurate and up to date information. To provide patients with a digital means of interacting with the Trust administratively and clinically in a secure environment. Reduce cancelled clinics due to notes not being available, results not having been processed. Provide the option for patients to receive correspondence digitally should they wish to. Provide accurate waiting information to patients in clinics.

Improve the collaboration with our partners and the wider care community

Capture our data in a standard way that can be digitally shared with our key providers, SNOMED-CT, ICD10, OPCS, dm+d medication, use structured display headings from the AoMRC (Academy of Medical Royal Colleges) for letters and discharge summaries. Support the national and London wide interoperable standards. Improve the speed at which information is made available to care providers following treatment at King's.

Improve the operational efficiencies of the Trust

To provide care professionals across all sites at King's with a central place to access a patients core clinical record. To standardise the processes, documentation and good practice across the Trust, To reduce the time care professionals spend looking for notes, drug charts, referral information, test results and doing paper audits. To improve the Trust clinical data capture to allow better income recovery from clinical coding. Allow cross site efficiency and flow of patients between sites. Reduce the number of different systems in use across the Trust and the cost overhead of supporting so many systems.

Improve the resilience and security of the Trusts infrastructure

Provide a reliable, robust and resilient infrastructure connecting all clinicians and services across the Trust. Underpin our infrastructure, operational processes and policies to align to the National Cyber Security Centre (NCSC) 10 steps to cyber security. Reduce the time lost by care professionals dealing with broken and end of life equipment, size our infrastructure capacity to deal with modern traffic volumes and improve our network speed. Improve our network architectural design to facilitate secure third party access to the King's network where appropriate. Improved our compliance with the General Data Protection Regulations (GDPR) and manage our GDPR risks.

King's ICT digital road map strategy:

King's College Hospital NHS
NHS Foundation Trust

The key vision for the ICT digital road map strategy.

" King's ICT digital road map strategy is to provide the foundations, infrastructure and capability to enable the use of modern digital technologies to deliver first class and effective healthcare for our patients and provide staff with tools to continually improve healthcare, research and education outcomes. King's will adopt nationally recognised interoperability standards to co-ordinate better care with our provider organisations. "

King's local and national digital drivers

There are range of national digital drivers ranging from the requirement to adopt SNOMED-CT coding, to being paperless / paper light by 2020, the adoption of the National eRS roadmap to mention a few. Locally King's needs to be able to be able to share its digital patient record with all its clinical staff to support better cross site working. Being digital will enable its clinical services to better respond to clinical needs and improve general patient outcomes. King's are also committed to sharing the patients' record with appropriate external providers and patients themselves in a secure and appropriate format.

King's digital constraints

There are a number of constraints placed on the digital strategy with the key one being the available funds to implement the wide range of programmes in this strategy. Others range from the abilities of the organisation to adopt to new ways of working and working with its existing range of applications. The Trust will need to work creatively in relation to how it funds projects and how it prioritises initiatives by working closely with the OHSEL STP and its partners.

King's digital governance

Key to monitoring the digital strategy and making key recommendations is the established Digital and Technology Programme Board (D&TPB). This should be the key governance for all ICT / Digital programmes across the Trust whether ICT functions sit in the main ICT department or with third party organisations. The rapidly changing digital environment will require King's to continually evaluate and adapt its ICT digital initiatives to respond to changing Trust and Department of Health priorities. The D&TPB with its link to the King's executive group should be one of the key vehicles for this.

King's ICT digital road map strategy: Our stakeholders

King's College Hospital NHS Foundation Trust

What the ICT digital road map strategy will provide to our key stakeholders.

The patient:
They do not have to repeat the same information to different clinical and administrative staff.
They can manage appointments online via eRS, get text and digital correspondence should they wish to.
They can choose to receive correspondence securely digitally should they wish to do so.
They can check-in to clinic appointments digitally and be notified with up to date waiting information.
They can have access to their health records centrally online containing information on their care at King's.
They can have confidences that their care is being co-ordinated by a consortium of relevant health and care providers.
They can be offered virtual appointments from home where appropriate to do so.
They can have confidence in the security of their health record.

The Clinician (doctors/ Nurses, AHP, HCAs, Pharmacist) :
They can access information and services on a range of secure, reliable devices across the Trust.
They can view all a patient's information at the point of care from any site across the Trust, including inpatient, outpatient and ED visits.
They can view the patients information delivered by our partner care providers.
They can spend more time on patient care and less on findings / waiting / interpreting paper notes.
They will have better data on the flow of patients through the hospital and their pathways.
They will have access to key clinical decision support to assist in better decision making.
They will be prescribing, administering and stocking medications aligned to national interoperability standards.
They will have access to key clinical informatics to inform on best practice.

The GPs, Commissioners, STP and KHP partners:
They have confidence in the services they refer to digitally and the advice and guidance provide digitally.
They have the means to communicate digitally with individual specialties at King's.
They receive timely digital discharge summaries and clinic letters in structured formats.
They receive information essential for the continuation of care of their patients.
They can refer to secondary providers using structure data covering medical history, diagnosis and medication history.
Infrastructure, networks, national standards will all be aligned between all partner organisations.

King's ICT digital road map strategy: Key programmes

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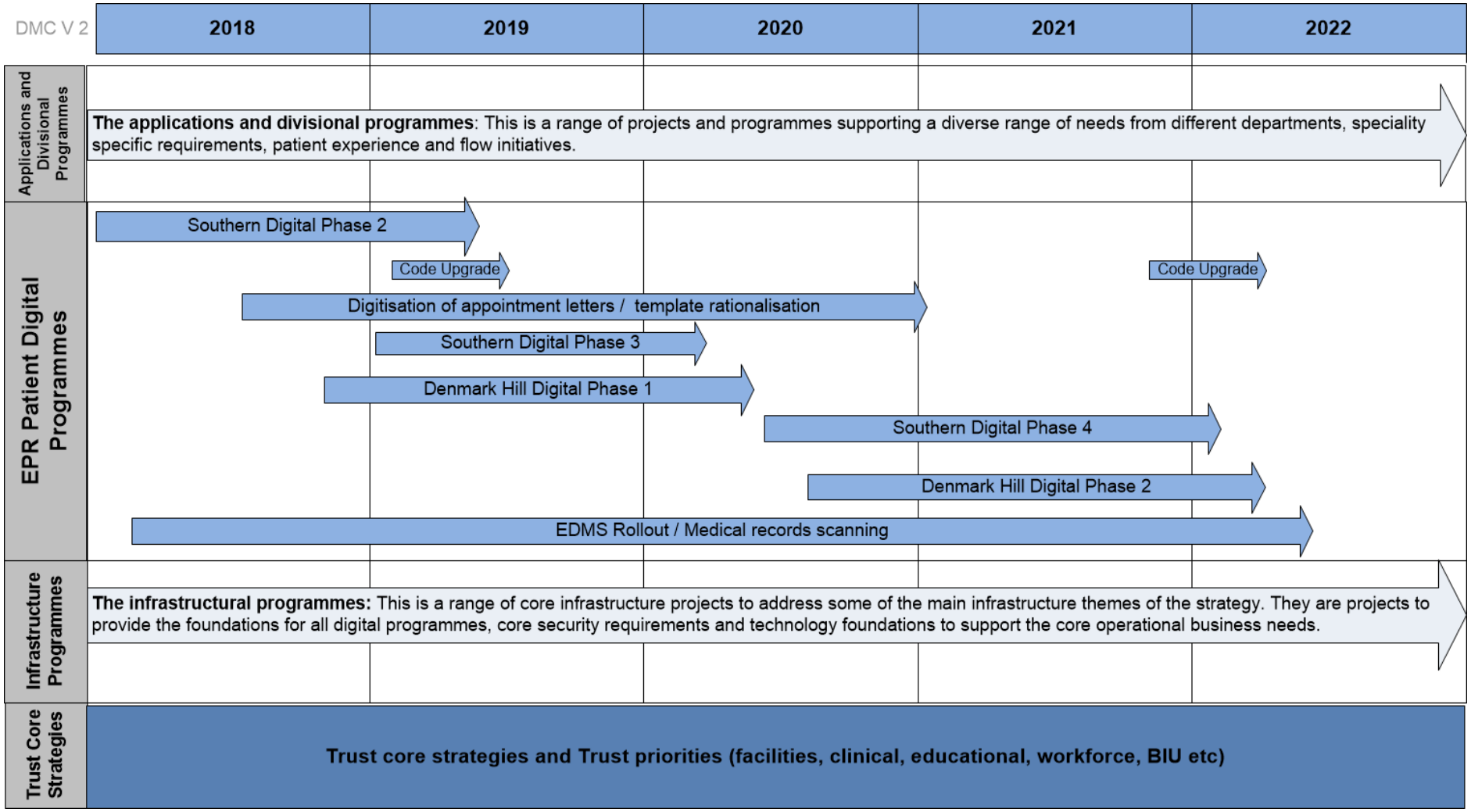

(The digital programmes are detailed further in the main strategy documents , a number of programmes are ROM costs. Plus there is always the need to review divisional and third party arrangements costs as Trust priorities change).

King's ICT digital road map strategy
Strategy: Current digital foot print 1

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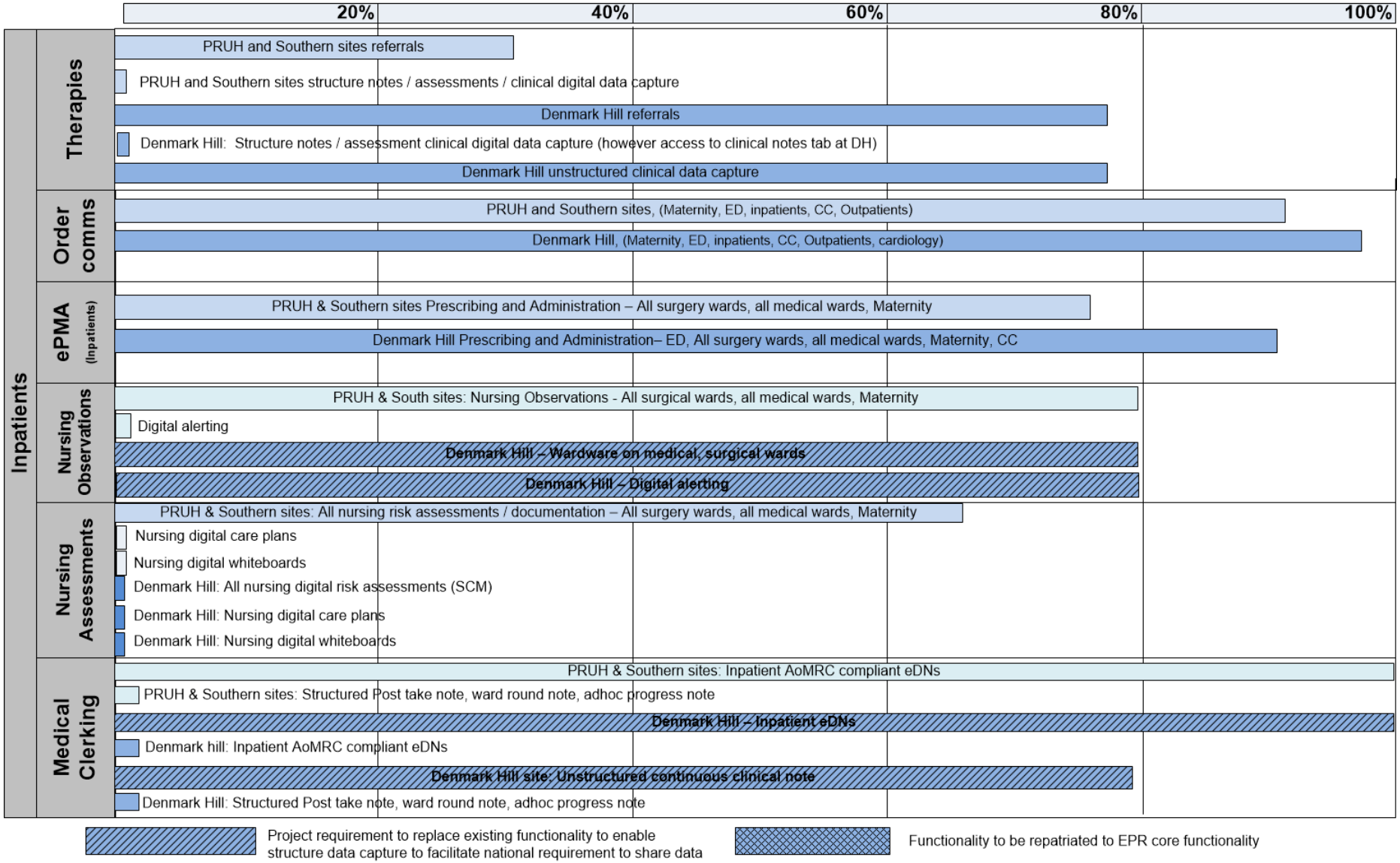

King's ICT digital road map strategy
Strategy: Current digital foot print 2

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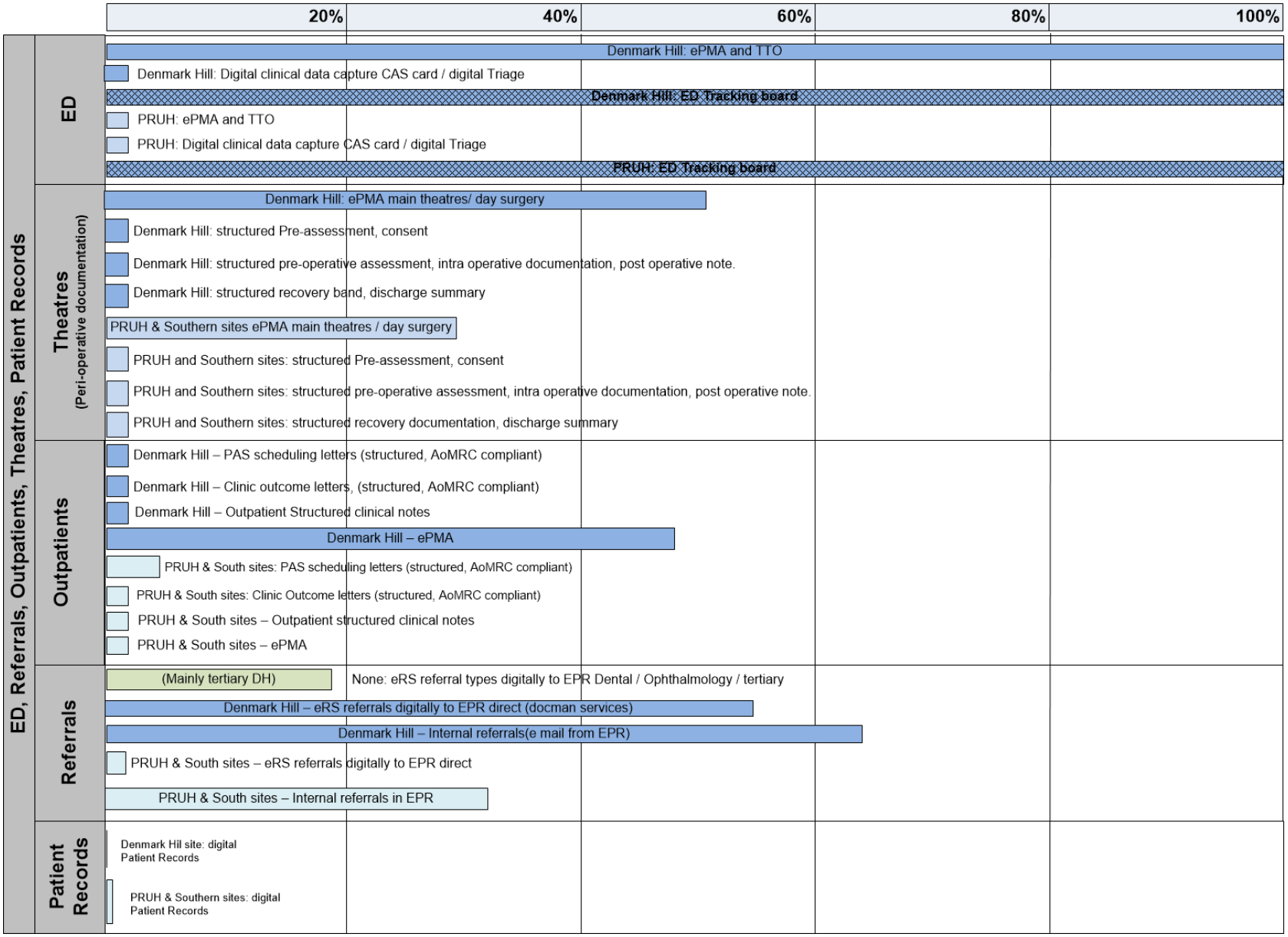

King's ICT: Required Digital Infrastructure projects

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The infrastructure projects and programmes to a achieve our digital vision

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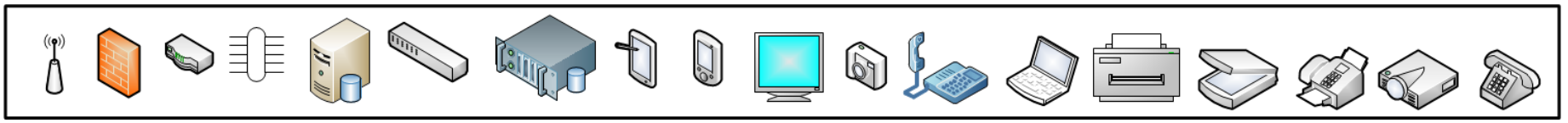
- Trust data centre strategy
- Trust Audio Visual project
- Core switch upgrades across the estate
- N3 replacement HSCN deployment
- Trust Cyber security resilience plan
- Microsoft licensing
- Edge switch upgrades across the estate
- Critical Care unit expansion
- Trust VDI desktop pilot
- Bleep / Pager replacement programme
- Free patient Wifi and Trust network improvement programme
- Data storage infrastructural improvements
- Mitel phone rollout
- Trust TIE FHIR / MESH
- ICT Service desk upgrade
- Isilon upgrade, data storage expansion
- N3 Firewalls internal / external / provider replacement and upgrade
- PC Device renewal Programme
- SQL Farm upgrade and expansion