Maidstone and Tunbridge Wells NHS Trust

Ref: FOI/CAD/ID 3116

Please reply to:
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Trust Management
Service Centre
Maidstone Hospital
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Maidstone
Kent
ME16 9QQ
Email: mtw-tr.foiadmin@nhs.net

21 February 2018

Freedom of Information Act 2000

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

I am looking into how the use of mobile applications for inputting and documenting patient's vital signs can assist in early intervention and prevention of clinical deterioration.

I understand that you use hand held devices within your trust and would appreciate answers to my following questions:

1. Has the trust found the applications beneficial?

Maidstone and Tunbridge Wells NHS Trust is unable to answer this part of the request as the question requires the Trust to have carried out an analysis of data received since the implantation of the use of mobile devices. The Trust has not carried out this piece of work and therefore the data is not held.

2. Are the mobile observation applications used throughout the hospital? If not, which areas are the devices used in?

All inpatient areas

3. Does your hospital use the National Early Warning Score (NEWS) system or your own trust wide Early Warning Score (EWS)?

Mixture dependant on speciality area

4. Do nurses find that the application supports their decision-making skills?

Maidstone and Tunbridge Wells NHS Trust is unable to answer this part of the request as the question requires the Trust to have carried out an analysis of data received since the implantation of the use of mobile devices. The Trust has not carried out this piece of work and therefore the data is not held.

5. What is the response from patients when clinicians use the device in front of them?

No complaints to date.

6. How did the clinicians initially respond to the use of hand held devices for documenting?

Maidstone and Tunbridge Wells NHS Trust is unable to answer this part of the request as the question requires the Trust to have carried out an analysis of data received since the implantation of the use of mobile devices. The Trust has not carried out this piece of work and therefore the data is not held.

7. Did the hospital encounter any resistance from any stakeholders? If so, please expand.

No

8. Have you got any hospital statistics since the devices were used? Such as changes in readmission rates, length of stay, avoidable death rates.

Maidstone and Tunbridge Wells NHS Trust is unable to answer this part of the request as the question requires the Trust to have carried out an analysis of data received since the implantation of the use of mobile devices. The Trust has not carried out this piece of work and therefore the data is not held.

9. How much have the mobile devices cost the hospital?

Falls within the total IT budget which was £???????

10. How much have the applications cost the hospital?

As above

11. Which company delivers the mobile systems?

Nervecentre

12. Which companies participated in tender?

The solution was provided as direct award via CCS framework.

13. Is the hospital paperless? If not, do you have any near future plans for this?

Please find attached a copy of the Trust Health informatics strategy

Would I be able to use the name of your company within my assignment? If not, then I can keep the hospital name anonymous.

Yes.

Maidstone and Tunbridge Wells NHS
NHS Trust

Health Informatics Strategy

INSPIRE

delivering INtegrated systems to Support our Patients In REal time

Donna-Marie Jarrett
Director of Health Informatics
September 2013

Status: Final
Version: 1.0

C O N T E N T S

Executive Summary

The Trust, in common with the rest of the NHS is at a tipping point in the development of IT and information to support the delivery of safe, economic and reliable health care. Recent controversial issues in health including the Mid Staffs and Francis reports, all evidence the need for good quality, reliable, and available information to support the delivery and management of patient care. Clinical professionals, carers, patients, managers, Trust boards, regulators, and national bodies are all crying out for information (not data) and IT to ***help*** them do their jobs, ***not prevent*** them from caring but ***enabling*** them to deliver a modern responsive and affordable healthcare service..

This strategy sets out how the Trust can maximise the benefit from the investment already made and exploit it further to enable staff to care for patients in a more responsive, safer way and support the wider Trust's clinical strategy and business plans.

The strategy provides an opportunity to develop a road map for all stakeholders to see and share, that begins to harness that investment and transform systems into ones that genuinely support our patients, and their carers enabling our staff to deliver modern safe and reliable healthcare services as described in the Trust's vision.

Health Informatics is a key element and foundation to supporting the delivery of the Trust's vision. Through the creation, shaping, sharing and application of patient data and the deployment of appropriate technologies, health informatics will support service planning, the delivery of our clinical strategy, and decision making to achieve desired outcomes for the quality of treatment and patient experience.

Our strategy is a simple one –

delivering **In**tegrated systems **S**upporting our **P**atients **I**n **RE**al time –

INSPIRE

The success of INSPIRE will be the impact that it has on key stakeholders, health professionals, patients and their carers. Presented below are a number of scenarios that show how it will impact key stakeholders when fully delivered.

The Patient will-

Feel in control of my own care

Understand the procedure I am about to undergo with online access to further information

Have access to information about me, my health and treatment plans available through a portal

See and understand where I am on the care pathway.

Be able to communicate and obtain reassurance with my health care providers by e-mail, text or video conference.

Through this I will be fully involved in looking after myself.

The healthcare professional will -

Have immediate access through the ASPIRE portal to all of the information I need for my day, including:

My patients and all their data from trusts different systems,

Order tests and see results.

Access my patient's care pathway, refer to external sources like the Map of Medicine, view best practice, view the pathway contracted for.

I have the ability to communicate with the patients via different media

There has been a significant reduction in paper forms and repetition of documentation,

Communication is much easier with easy to use Teleconference with colleagues and other health professionals; we can hold a virtual Multi Disciplinary Team meeting to decide the next steps in the integrated care plan.

INSPIRE

The Manager will -

Access real-time data about the current operational state of the organisation,

Understand the costs and the outcomes of decision, with real patient feedback as it happens. I

Have an ability to predict hot spots in advance so that I have more freedom to deal with them.

I feel empowered to change and adapt the service to meet patient's needs.

I can model capacity management in real time

I am better able to be part of a team and better able to look after my patients and my staff.

The Commissioner will-

See what I have contracted for, each care pathway - an integrated suite of costed interventions tailored to each individual patient

Know how much money has been committed and the expected cost of what is planned.

I can view information on each healthcare professional/provider's track record and I can see feedback from patients and their carers about the services that they have used and their experience.

I can see the referral decisions being made by local GP's and I can see the outcome of treatments and therefore have an understanding of the dynamics of the local health economy.

All of this information I can see in near real-time - as it is happening.

Background to the Trust

Maidstone and Tunbridge Wells NHS Trust (MTW) is a large district general hospital serving the population of South West Kent.

Our Staff: We employ a team of approximately 4,750 whole time equivalent staff.

Our Hospitals: The Trust primarily currently works from two clinical sites: Maidstone Hospital and the new Tunbridge Wells Hospital at Pembury.

Our Values: The way the Trust works is essential to the whole patient and staff experience and the principles by which we will deliver the vision is set out in our values:

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

Our Statistics: The Trust has approximately 750 beds across both sites with the Tunbridge Wells Hospital at Pembury the first all single room hospital to be opened in the NHS.

Annual A&E numbers	120,000
Annual Inpatient numbers	84,000
Annual Outpatient attendances	387,000

The Trust provides a full range of general hospital services and some areas of specialist complex care, serving a population of around 500,000 people living in the South West of Kent and parts of North East Sussex.

The Trust provides specialist cancer services to 1.8 million people for the whole of Kent, from its flagship cancer centre at Maidstone as well as at the Kent and Canterbury Hospital, Hastings and Rother. Ophthalmology services are also provided at Medway Hospital. The Trust is at the forefront of developments in minimally invasive Laparoscopic Surgery and is increasing the range of other highly specialised services available to local patients through its clinical strategy.

In 2011-12 the Trust fully opened the first NHS hospital in the country to provide all inpatients with single rooms with en-suite facilities. It is also creating centres of expertise in its hospitals for planned and emergency surgery and women and children's care.

Strategic Context and Drivers

The Informatics strategy is driven by multiple factors and influencers, the following diagram reflects the input into the development of the INSPIRE health informatics strategy:

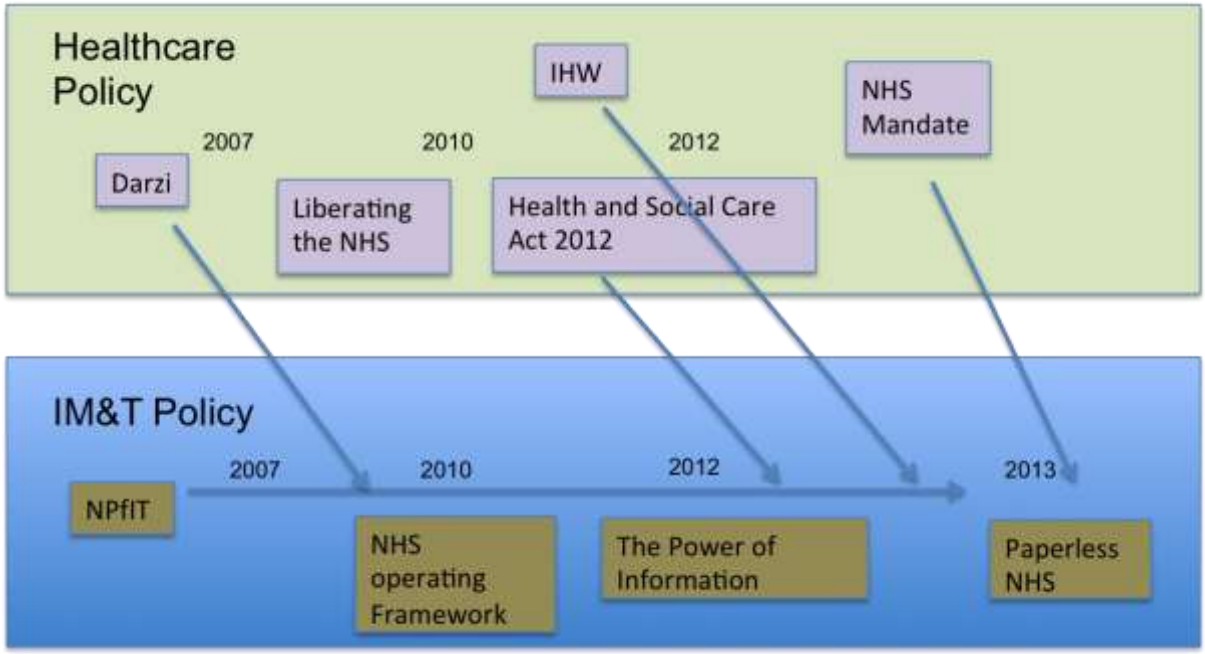
Healthcare Policy Drivers

Drivers	Commentary
The Power of Information	In May 2012 DH issued the report "The Power of Information: putting all of us in control of the health and care information we need". The strategy set a ten-year framework for transforming information for health and care and stated the following ambitions: Information used to drive integrated care across the entire health and social care sector, both within and between organisations; Information regarded as a health and care service in its own right for us all – with appropriate support in using information available for those who need it, so that information benefits everyone and helps reduce inequalities; A change in culture and mind-set, in which our health and care professionals, organisations and systems recognise that information in our own care records is fundamentally about us – so that it becomes normal for us to access our own records easily; Information recorded once, at our first contact with professional staff, and shared securely between those providing our care – supported by consistent use of information standards that enable data to flow (interoperability) between systems whilst keeping our confidential information safe and secure; Our electronic care records progressively become the source for core information used to improve our care, improve services

	and to inform research, etc. – reducing bureaucratic data collections and enabling us to measure quality; A culture of transparency, where access to high-quality, evidence-based information about services and the quality of care held by Government and health and care services is openly and easily available to us all; An information-led culture where all health and care professionals – and local bodies whose policies influence our health, such as local councils – take responsibility for recording, sharing and using information to improve our care The widespread use of modern technology to make health and care services more convenient, accessible and efficient; An information system built on innovative and integrated solutions and local decision-making, within a framework of national standards that ensure information can move freely, safely, and securely around the system.
Francis Report	The Francis Report emphasised the need for and impact of not having access to real-time information to support clinical services
Mid-Staffs Report	The outcome of the Mid-Staffs findings demonstrated the need for all stakeholders to have access to relevant information and feedback at all stages of care delivery. The subsequent recommendations have placed a corporate duty of care on Trust Boards not to mislead patients, carers and the public. The demands of the health reforms to commissioning and to public choice have placed a need to publish and to produce information to enable people to makes choices about where they get their care. The requirements of regulation and monitoring will change to reflect the perceived inability to spot problems and deal with them as witnessed in Mid Staffs.
Caldicott2	The latest Caldicott guidelines ensures that data is shared securely and that that policies are not used as reasons to block the appropriate sharing of data to support clinical delivery.
The Digital Challenge - Paperless by 2018	Digital First is a Department of Health initiative which aims to reduce unnecessary face-to-face contact between patients and healthcare professionals by incorporating technology into these interactions. 'Unnecessary' would include, for example, attending a hospital appointment to receive a test result that says everything is OK; or a visit to an outpatient clinic for something that could be discussed on the phone or via email or video-conferencing, eg SKYPE. Digital First is not about replacing doctors or nurses with technology. Patients will still be able to get an appointment with a doctor or a healthcare professional if they choose to. Instead, it is about using technology in healthcare where it can deliver the same high standards in a way that is more flexible and convenient for patients, and at a lower cost.
Patients First and Foremost March 2013	This is the Government's initial response to the Mid Staffs findings. It commits health and social care to a 5 point plan: 1. To prevent problems 2. To detect problems

	3. To take prompt action 4. Ensuring robust accountability 5. Ensuring staff are trained and motivated Reducing the burden of paper on clinicians and box ticking are seen as key to achieving the plan. Our INSPIRE Strategy will help the Trust discharge its obligations in this respect as we transition away from paper records to digital and from retrospective analysis of what we've done to proactive and predictive analysis of what we are doing.

The following diagram shows the drivers from a health and informatics perspective:



In meeting and delivering on these policy drivers and strategic imperatives Health Informatics will have to rise to the challenge and enable, through the appropriate use of technology, the capture of real time patient information on which clinicians will, in consultation with their patient, make decisions about their care.

The Department of Health (DoH) has recognised that Health Informatics has a major role to play in ensuring safe, successful treatment of patients and empowering them to make decisions about their care by allowing the sharing and visibility of the medical record. The DoH has established a number of funding opportunities to support technology developments in health. These include:

- Safer Hospitals Safer Wards Technology Fund - £260m
- Nursing Technology Fund - £100m
- Southern Acute Programme (SAcP) - £165m

Local Drivers

The Trust has set out its plan for the five years 2014 -19 in its Integrated Business Plan. It is the job of this strategy to enable and support delivery of the objectives set out in that plan.

The Trust's mission is "***our focus is our patients***" and the vision of the Trust is "***To be a successful integrated healthcare provider in the top 20% of Trusts nationally for the quality of services that we deliver***".

This is further developed in the strategic objectives: -

- To become a truly patient and customer centred organisation
- To deliver services that are viable and sustainable
- To take the system leadership role to deliver integrated care in our locality
- To operate at high levels of quality and efficiency to support long-term financial sustainability.

The values espoused in the plan should be reflected in the way that deliver services including health informatics, so that:

- We will always put the Patients First
- We respect patients, visitors and staff
- Innovation - we take every opportunity to improve what we do
- Delivery - we will deliver high quality efficient services to all of our users
- Excellence - we will take every opportunity to enhance the Trust's reputation.

Impact of Health Informatics

Health informatics is an enabler to change and must be seen as a core 'tool' for all stakeholders to use. It is only through this approach that the Trust will deliver on its key challenges and enable and support the delivery of the Clinical Strategy through service redesign; as well as meet the wider policy drivers and imperatives.

Health Informatics must engage with the transformation and service design work within the Trust to enable the benefits of IT-enabled change to be truly realised. Through the implementation of INSPIRE, Health Informatics will provide good quality information and analytical tools to inform the process of redesigning services; it will respond with agile and speedy development and implementation of systems and applications to support clinical transformation. The INSPIRE Strategy seeks to do this.

There is also a significant opportunity for Health Informatics to be used to support the extended reach of services and enable care to be delivered in a variety of settings outside the hospital - a good example is the use of telemedicine to support the redesign and improvement of stroke services in the area.

Some examples include:

- A single source of all relevant patient care data for the healthcare professional where and when needed
- The provision of applications on mobile devices can significantly facilitate the provision of care in a variety of settings,
- the use of radio frequency identification (RFID) can significantly reduce data collection costs and make savings in the costs of providing equipment
- the application of electronic prescribing can significantly reduce the chance of prescribing errors and make savings in the costs of providing drugs
- the development of electronic document management can significantly reduce the physical storage costs of the paper records that we have and significantly improve access to information at the point of care,
- moving data from the multiple systems that we have into a single data repository with improved access through a single integrated view is an innovative way of enabling improved access to information for all of our patients, carers, GPs, and all of the staff involved in caring for patients,
- improved availability of information and faster access to it in order to predict and detect problems quickly to enable action to be taken quickly.

The Trust has made a significant investment in Health Informatics to support the delivery of cancer services - one of our key specialist services in which the Trust has identified growth as a priority. There is an opportunity to review current clinical systems and support services to ensure that they support the positioning and provision of excellent cancer services and that they enable patients and their carers to successfully participate in treatment.

Similarly the provision of health informatics to support the delivery of cardiology services is an opportunity to innovate with systems, device technology, and remote monitoring in order to help develop first class services that enhance the reputation of the Trust.

Options for Delivering an Electronic Patient Record

Introduction

This Strategy has demonstrated the need for Informatics to develop and deliver a clear roadmap to deliver an Electronic Patient Records (EPR) that is available both internally and externally to the Trust. The question of how this can be achieved is addressed within this options appraisal section.

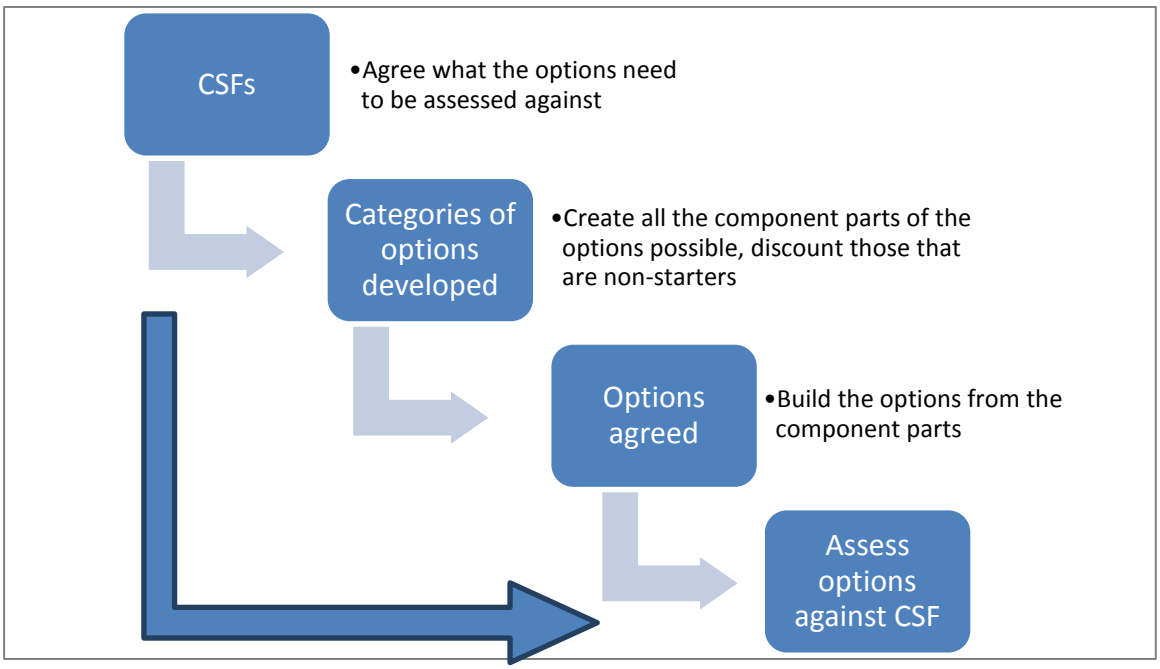
Options Appraisal

This section of the strategy explores and assesses a series of options for meeting the needs of the internal and external drivers, resulting in identification of the best value for money option that is subsequently the basis for the delivery of the Strategy.

In accordance with the Department of Health guidelines for IM&T investment, the process adopted was as follows:

- Step 1: generate a list of critical success factors (CSFs) against which the options will be assessed.
- Step 2: develop the options available
- Step 3: undertake a SWOT analysis
- Step 4: identify and evaluate against the CSFs the remaining options for satisfying the investment objectives.
- Step 5: undertake a full value for money appraisal of these shortlisted options in order to identify a preferred option that forms the basis of the remainder of the business case.

This can be seen as:



The outcomes of this process will be described further in this document.

Step 1 – Generate Critical Success Factors

The following set of critical success factors was generated through reference to the Treasury IM&T guidelines: -

Critical success factors	How evaluate?
CSF1: strategic fit	Degree to which proposed option meets Trust policy targets How well proposed option supports Trust strategies Degree to which proposed option is compatible with other NHS initiatives How well proposed option integrates with other NHS developments
CSF2: investment objectives	Degree to which proposed option meets investment objectives stated in the Strategic Fit Section
CSF3: value for money	Extent to which lifetime costs and risks are minimised and benefits are maximised
CSF4: supplier feasibility	Capability of supplier to undertake the development work Capacity of supplier to supply services within the agreed timescales
CSF5: potential affordability	Ability of the NHS as a whole to meet the required total capital and revenue costs, including via any anticipated cash releasing benefits and new financial contributions
CSF6: organisational achievability	Capability and capacity of NHS programme and project management to deliver the service to the allotted timescales Extent to which the service users can assimilate, adapt and respond to the change brought on by the solution within the allotted timescales

Step 2 – Develop the Options Available

The high level options were developed through a workshop based approach with representatives from the Trust and the wider set of stakeholders and including external expertise.

This process confirmed that there are two main options for the delivery of an EPR:

1. Best of breed – reusing and augmenting existing investment with a clinical portal and interfacing
2. Using a single system vendor who has over 90% of the functionality required.

The following options were developed and considered:

Option	Description
1: Best of Breed with portal	To continue to build upon the investment already made by the Trust, replacing and adding new systems as required. The systems are then presented to the end users through a single portal that allows the user to see all data they require from the underlying systems
2: Single vendor	To replace the majority of the current systems with a new single vendor system that can provide 90%+ of functionality required. This would be a single system for the majority of the users across the Trust.

Step 3 – Undertake a SWOT Analysis and Test Options against Drivers

These options were then tested against the ability of that option to meet the drivers identified.

Option	Brief Description	Strength	Weakness	Opportunity	Threat	Outcome
1	Best of Breed	Is not a major change but re-uses existing investment and allows clinical staff to choose their system of choice	Rewire interfacing and development of a data warehouse and clinical portal deployment	Can be phased in over time, no major change, reuses existing systems	Significant interfacing, need for multiple vendors and contracts	Carried forward
2	Single Vendor System	A single system used by the majority of the staff – limited training ongoing	Very limited choice for the clinical staff, typical systems are US based and seen as high cost	Removes the need for significant interfacing, ability to have only one main supplier.	The need to rip and replace all current systems, significant investment in a short time window	Carried forward

Step 4 – Identify Options Against Critical Success Factors

The final list of potential option elements are set out below and their assessment against the CSFs where:

'✓' indicates a poor match against the critical success factor.

'✓✓' indicates a medium match against the critical success factor.

'✓✓✓' indicates a good match against the critical success factor.

Option Ref.	Option	CSF1 – Strategic Fit	CSF2 – Investment Objectives	CSF3 – Value for money	CSF4– feasibility	CSF5 – potential affordability	CSF6 – Organisational Achievability	Comments / conclusions
1	Best of Breed	✓✓✓	✓✓✓	✓✓✓	✓✓	✓✓✓	✓✓	The best of breed option allows the trust to reuse its existing investment, minimising the expenditure and maximising the benefits. This is the recommended option
2	Single Vendor System	✓✓✓	✓✓✓	✓	✓	✓	✓	Whilst this option meets the drivers its cost and viability at the Trust result in it being discounted at this stage.

Outcome

The outcome from the options review is that a strategy built upon a best of breed model with portal would maximise the Trusts investment already made and delivery the clinical and operational benefits required. The best of breed model will form the basis of the Strategy.

INSPIRE Strategy

Strategic Statement

It is the role of Health Informatics to support and enable the delivery of the Trust's Clinical Strategy; from procurement to go-live, all clinical and corporate systems must ensure that the focus is on supporting our patients on their care pathway.

Our strategy is a simple one –

delivering **In**tegrated systems to **S**upport our **P**atients **I**n **RE**al time –

INSPIRE

It will be through the deployment of appropriate technologies that INSPIRE will enable :

- enable the creation, shaping and the secure sharing of patient data across care settings;
- enable the application of health and corporate intelligence to inform service reform and delivery;
- allow us to reduce the burden of paper on clinicians by transitioning away from paper to digital records

Health Informatics has a major role to play in ensuring safe, successful treatment of patients and empowering them to make decisions about their care by making their medical record visible to them.

One of the major challenges to achieving this will be to collect patient data in real time and present it back to the clinician and the patient so that it can be used effectively and appropriately to manage care.

Strategic Rationale

Through the delivery of the INSPIRE Strategy, the Trust will ensure that it achieves the ambitions set out nationally and locally. The strategy will enable the Trust to realise the objectives of the NHS Information Strategy – The Power of Information[1] in May 2012 that set a number of clear ambitions.

One of these ambitions outlines the need to record patient information once at the first point of contact with clinical staff and to be able to share that information with those who provide care across organisational settings. It will be through the consistent use of information standards that enables data to flow between systems safely and securely that this ambition will be realised.

These ambitions were cemented in the speech 'From Notepad to iPad: technology and the NHS' given by Jeremy Hunt MP on 16th January 2013. An additional ambition was announced - that by 2018 the NHS is to become paperless. The expectation is that interactions between the NHS and Social Care will be paperless and that with patient consent, their full medical history will be able to be shared seamlessly, securely and safely.

[1] The NHS Information Strategy – The Power of Information can be accessed at: http://informationstrategy.dh.gov.uk/about/main-ambitions/

The key to delivering these ambitions is the development of an Electronic Patient Record (EPR) that captures meaningful clinical activity about a patient. In Appendix 4 of the 2010/11 Informatics Planning document, the DoH confirmed that after consulting clinical stakeholders, a minimum specification of clinical functionality was defined with the intention of creating demand from clinicians to use the information collected in conducting day-to-day business – a basic EPR. There are 5 key elements, known as the Clinical 5, that comprise a basic EPR; taken directly from Appendix 4 of the 2010/11 Informatics Planning document, these are:

- A patient administration system with integration with other systems and sophisticated reporting;
- Order Communications and diagnostics reporting (including all pathology and radiology tests and tests ordered in primary care);
- Letters with coding (discharge summaries, clinic and A&E letters);
- Scheduling (for beds, tests, theatres, etc);
- e-Prescribing (including 'to take out' medicines).

Whilst the Trust has an existing PAS and Order Communications, not all of the Clinical 5 have been procured or deployed. This lack of basic EPR functionality is seen as a major constraint to achieving the ambitions set by the Government and also the Trust in delivering its new Clinical Strategy as outlined in the Integrated Business Plan.

With the demise of the National Programme for IT and access to central funding, Trusts have had to realign their Health Informatics strategies and move away from a 'replace all' to a 'connect all' systems strategy. Trusts are now looking to maximise the use of existing functionality, replace end of life systems only where necessary and procure new functionality where it is required to fulfil patient, clinical and corporate requirements.

To deliver an EPR and achieve a state of being paperless, the Trust has identified the need to explore portal technology and real time integration of back-end systems to provide a contextual and single view of a patient's medical history. It is expected that using portal and integration technologies will enable a contextual patient record to be created that will deliver the core functionality of an EPR and allow easy, safe and secure access to it by patients, their carers and clinical staff directly involved in the delivery of care.

This is the bedrock of our INSPIRE Strategy – Integrating systems to Support our Patients in Real time

<u>Strategic Principles of INSPIRE</u>

Initial meetings with the Trust's clinical and corporate leadership has identified a number of principles underpinning our INSPIRE Strategy, as follows:

- Safety - Give the Trust confidence and the evidence to demonstrate that the best possible care is being delivered
- Empower - Empowering our patients to better manage their own care by giving them online access to their medical record
- Context - Enabling our clinicians to easily see the clinical context of what is happening to a patient
- Easy - capture of clinical activity at the point of care so it becomes second nature
- Usability – ensuring every clinical and corporate system has the following attributes: natural, supportive, consistent, flexible

- Mobility – having the capability to access patient information required through any suitable device from any location
- Decision Making – Improve our shared decision making across care settings by enabling the easy and secure sharing of patient information
- Best of Breed – procure and implement the right systems
- Compliance with IT Standards – this will help to enhance and preserve clinician choice of clinical systems and enable innovation within an agreed standards framework
- Reduce the burden of paper/manual processes – transitioning away from paper to digital record; automating clinical administrative processes, eg using workflow, eForms, eSignature technologies
- Single version of the truth – one clinical and corporate repository for our patient and information reporting requirements
- Development - of our clinical and corporate capabilities to interpret our information and continue our journey away from retrospective analysis of data to pro-active, predictive modelling and real-time intelligence
- Working smarter – exploring and exploiting opportunities for greater efficiency through appropriate use of technology
- Sweat current assets - clinical and corporate applications and infrastructure to achieve maximum return on investment
- Improvement – manage our suppliers more effectively to better value from existing and new contracts and to fully exploit emerging opportunities with their products and services
- Competence + Capacity - Ensuring that Health Informatics has the right skills and competencies to deliver INSPIRE over the next 5 years
- Business as usual – the day job still needs doing during the implementation of new systems and services

INSPIRE Solution

INSPIRE is the Health Informatics Vision that will maximise the investment already made into technology and information through the delivery of a best of breed electronic health record. The concept is based upon a centralised portal to access and manage all patient and corporate data. INSPIRE will take data from existing best of breed clinical and corporate IT systems including structured (contained within a database) and unstructured (e-mail, scanned documents) from multiple systems and constructed to form a contextual real time and unified view of our patients.

Our portal will be called INSPIRE.

The user, depending on their role, will be able to view the multiple data sources as a virtual patient record accessed by a search portal specifically tailored to them and their work patterns. For example, patient administration system data (demographics) can be seen with ECG images, PACS images, clinical letters, discharge letters, encoded episode (eg theatre procedure and notes) data. Access to the INSPIRE portal will be available from anywhere within the Trust and secure access from outside using any device, with any ownership.

Multiple views will be required and will include, but not limited to:

- Patient View – accessed by secure password, allowing input of pre-admission and pre-assessment data

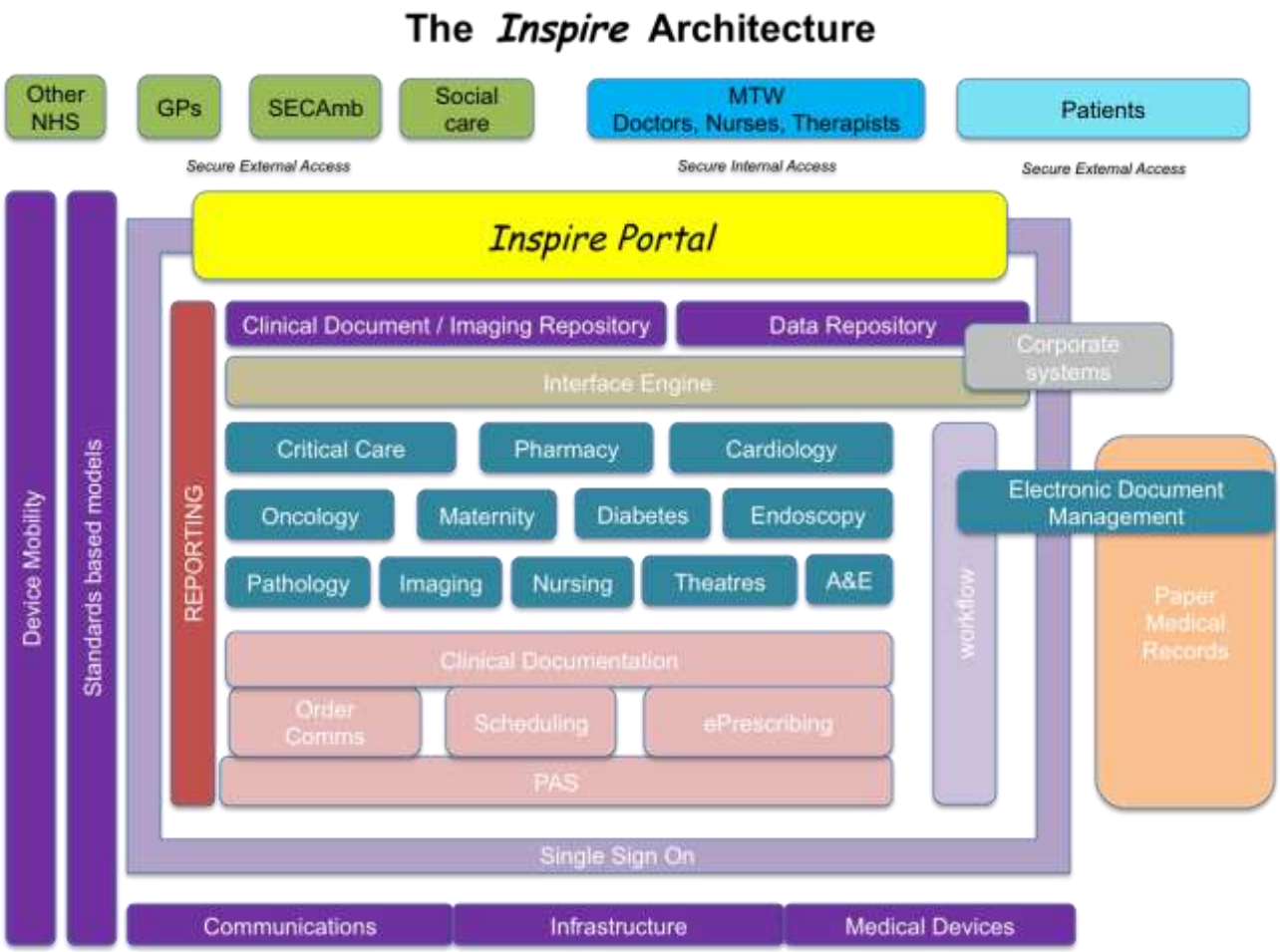
- Clinical View – access based on role: Doctor, Nurse, Therapist etc
- Operational View – real time bed availability, referral to treatment, dashboards, patient flows
- Performance view – CCG, Monitor, CQC, Outcomes, Scorecards
- Multi-Agency View – access for GPs, SECamb, Social Services, other NHS providers to results, clinical correspondence and case management

Should any changes to patient data be required, the original source legacy system will be launched from within the INSPIRE Portal to make those changes.

A single data warehouse is required as a data repository and associated interfacing/integration engine that will support the construction of a unified integrated view of our patients; the data repository will also be the Trust's source for all health and corporate intelligence reporting.

Access to the INSPIRE Portal for Trust staff be via Single Sign-On, thereby reducing the requirement from many logins to just one.

The INSPIRE architecture is shown below.



INSPIRE Benefits

The anticipated organisational gains of delivering INSPIRE are:

- A virtual electronic patient record constructed from existing best of breed source systems enabling a holistic view of our patients to be achieved.

- The removal of the need to login to multiples systems enabling improved clinical productivity and patient experience, ie enabling our clinicians to spend more time with the patient and less time using IT.

- Accessing patient data and enabling data entry to become more efficient.

- Multi-disciplinary teams to have access to a real time or near real time view of a patient's journey along a pathway(s).

- The end-user will become familiar with using a system that has the same look and feel.

- Access can be extended to GPs, Community Services, SECamb and Social Services.

- Our Patients will be able to see their medical history.

- Training becomes easier as clinicians will not need to learn multiple systems.

- Real time or as near real time Operational Dashboards will be able to be created that alerts managers to bottlenecks in patient flows and provide information on capacity and staffing.

- Unconstrained systems integration through using existing and new integration engine interfaces, eg Cloverleaf, Mirth and other communication technologies such as HL7, ODBC, web services.

- Enable a significant degree of resilience and service continuity by establishing a clinical and corporate repository for patient administration, e.g. digital dictation, e-Mail

- Provision of 'warm' standby in the event of failure of any system within the Trust's technical environment

- Creation of a research database sourced from the clinical and corporate repository

- The ability to deliver service line reporting and patient level costings.

Technical Architecture Principles

The purpose of defining a set of common technical architecture principles is that it allows the Trust to make strategic decisions about clinical systems and technologies without the need for revisiting the fundamentals of what is trying to be achieved.

The aims of these principles are to enable:

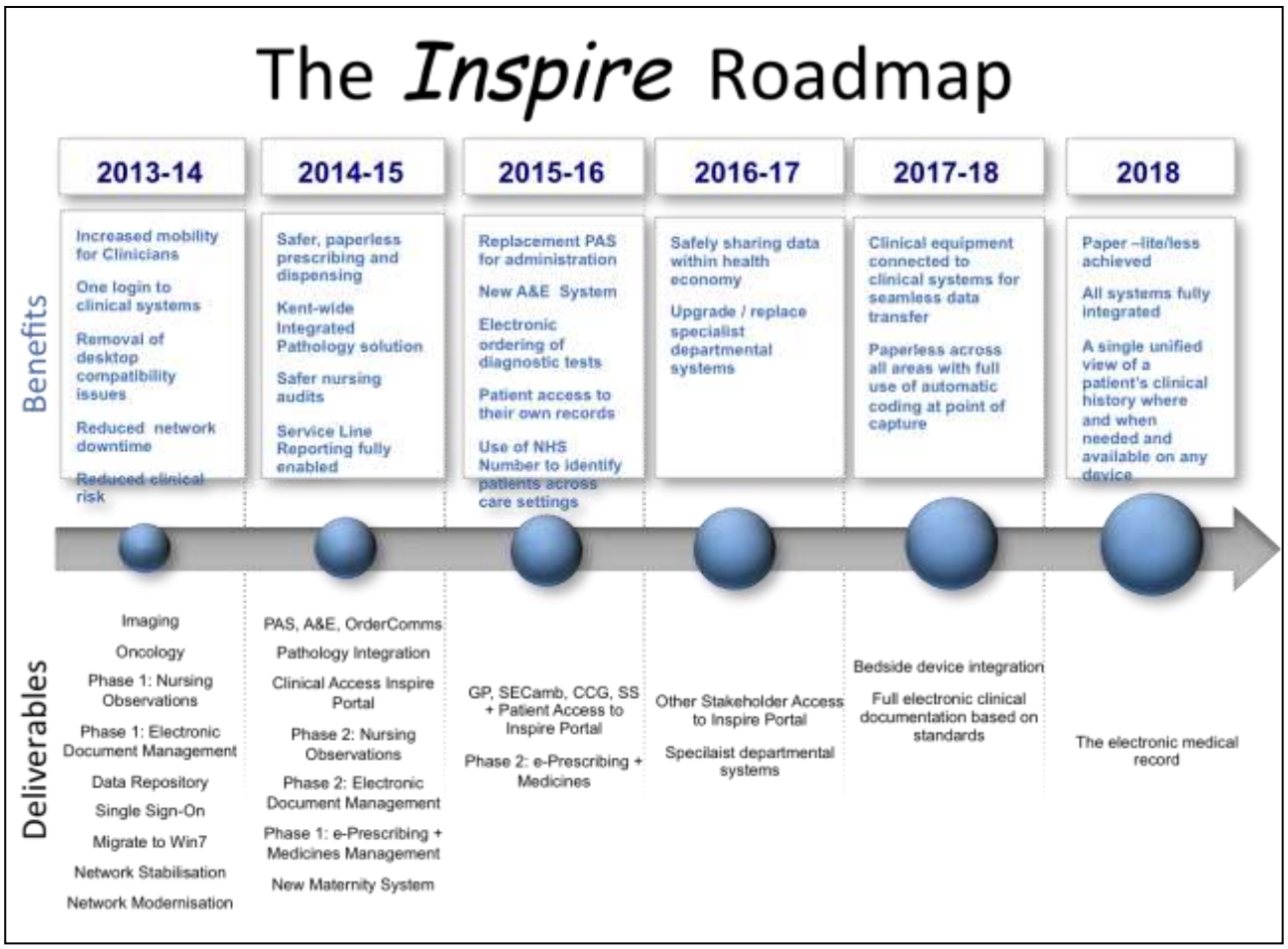
- The Trust to build a cohesive technical architecture that will enable the appropriate, easy and safe sharing of patient information across care settings
- A consistent approach to the development and maintenance of the technical architecture to facilitate easier and faster decision making about technologies and solutions

Principles	Description + Requirement(s)
Compatible and Interoperable	The Trust has adopted a 'best of breed' and 'modular' approach to delivering functionalities. It is critical that compatible and interoperable solutions and technologies are deployed to enable the seamless delivery of patient information across care settings and organisational boundaries. They must be capable of being delivered to any type of end-user device and be operating system agnostic, including but not limited to: ♦ Desktop pc ♦ Laptop ♦ Tablet ♦ Smartphones
Agile and Flexible	Reusable modular components and services based on open standards, ensuring interoperability and compatibility with current Trust environments
Compliance with Standards	A full list of required standards is available upon request
Leveraging existing applications	Look at any opportunities to increase the content, usage and coverage of existing applications when designing solutions and services to meet emerging operational requirements
Accessibility	Easy, safe and secure access to information for patients and clinicians across care settings
Security	Adherence to the Trust's Information Security Policies to prevent unauthorised access, modification or loss of patient and confidential information.
Common Vocabulary	Data is defined consistently, is understandable and available to all users and systems.
Application Usability and Delivery	Relevant, natural, supportive, consistency and flexibility is applied to presentation mechanisms for delivering and presenting applications and information to end-users.
Cost Efficient	Existing solutions and technologies will be considered and assessed for reuse. The preference being 'reuse over buy' and where they cannot be reused, the preference is 'buy over build'.
Controlling Technology Diversity	Minimise the variety of technology platforms used to drive down the total cost of ownership and simplify maintenance requirements.
Critical Services are maintained	Solutions and technologies to be designed to reflect their criticality to the Trusts operational requirements for the delivery of patient care. Business continuity and disaster recovery are considered when designing the solution and service.
Compliance with Laws and Regulations	Solutions and technologies will comply with all UK laws, and regulations and NHS guidance that are issued.

Principles	Description + Requirement(s)
	The capability of systems to respond quickly to changing laws, regulations and guidance is essential.

INSPIRE Roadmap

The following diagram shows the INSPIRE roadmap and benefits of the programme:



Impact of not achieving the Roadmap

The Roadmap is an ambitious and demanding plan for the Trust, however without all elements of the plan being delivered there is a serious risk that the Trust will not achieve short term or long term objectives it has set within the wider context. The following would not be achieved and benefits not realised:

A single source of patient information – will impact service growth and efficiency gains

Delivery of national objectives – such as patient access to their records, paperless by 2018 – missed national objective

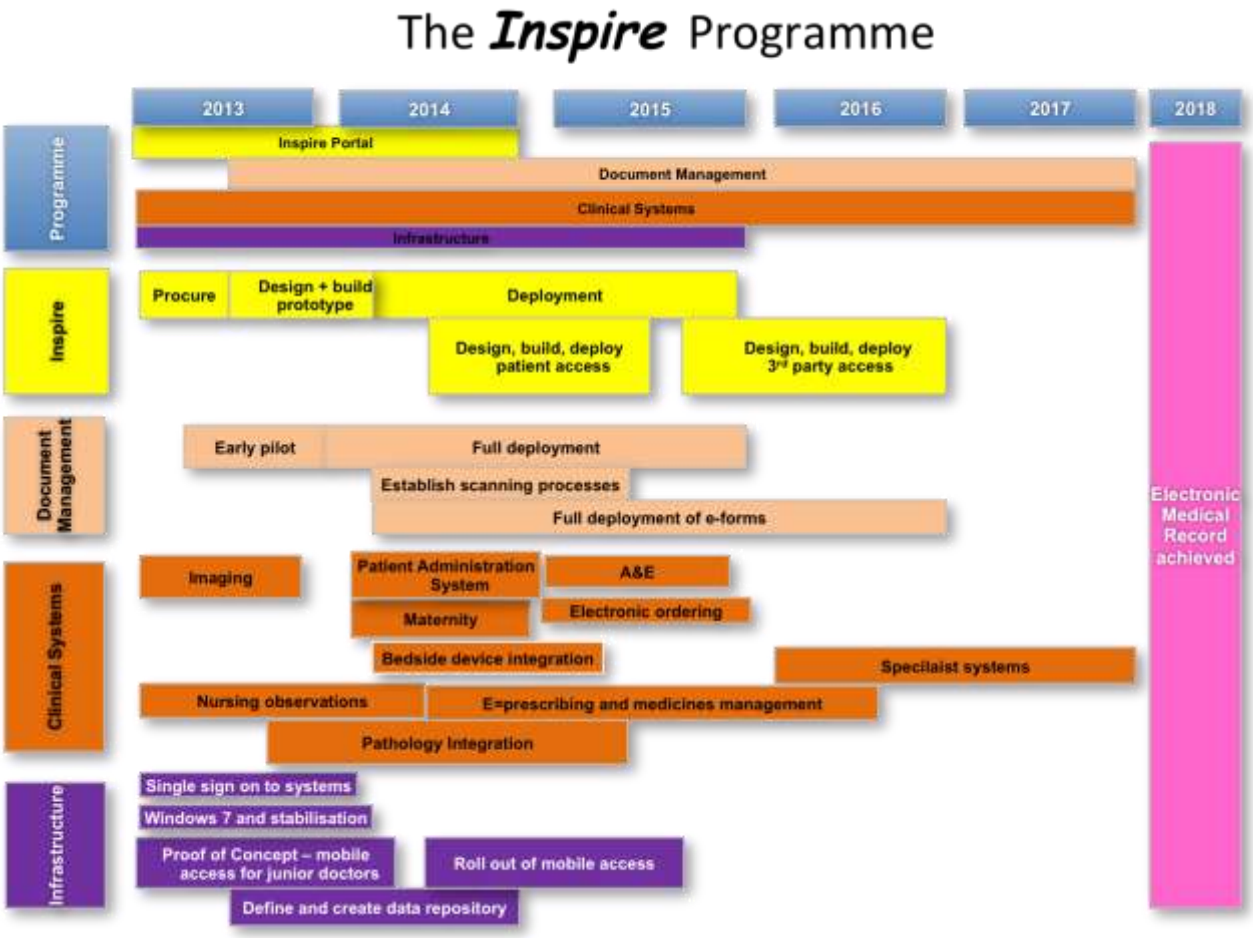
Service level reporting and patient level costings – unable to truly manage costs

An integrated service for the trust – disparate systems within increased clinical risk and costs

The ability to ensure that the Trust can compete in the local economy against private and other competition – loss of revenue income and reputation

INSPIRE Programme

The following diagram shows an overview of the INSPIRE programme to deliver the roadmap:



The Programme covers multiple workstreams and is managed over a number of years to ensure that the underlying change programme is achievable. The Programme is also aligned to the wider Trust strategy and local health economy (examples would include the pathology programme and the Southern Acute Collaborative Programme).

The Programme will be managed through the principles and frameworks of Managing Successful Programmes (MSP) and for the individual projects through PRINCE2; both recommended by the OGC. These would include for example:

- Business cases
- Project initiation Document
- Project plans
- Benefits realisation plans
- Risks and Issues logs

Sources of Funding and Indicative Investment Required

Sources of Funding

The Trust has identified the following sources of funding:

NHS England - Safer Hospitals, Safer Wards Technology Fund £260m

The Technology Fund is borne out of:

- "The Power of Information" published in May 2012, sets the vision for use of IT in the NHS
- The Francis Inquiry Report into Mid Staffordshire, Recommendation 244 highlighted the need for digital systems to support information sharing

NHS England is committed to "Transparency - the safe sharing of data and information between clinicians and with patients – and Participation – supporting patients and the public to take more control of their health and care. Both depend on making the best use of digital technologies that have transformed so many other parts of our lives."

The funding available nationally is:

- £260m of Public Dividend Capital (PDC)
- £90m for 2013-14 and £170m for 2014-15

The eligibility for funding is:

- All NHS Trusts/Foundation Trusts in England can apply
- Trusts can bid on their own or in partnership
- No maximum amount and multiple applications are allowed
- Trusts bidding MUST match fund (capital or Revenue) any award
- Trusts responsible for own capital charges, depreciation, capital run-on costs and consequential revenue
- Expressions of Interest MUST be supported by Trust Board and Local Commissioner Organisations
- Expressions of Interest have to be submitted by 31st July using the on-line Expression of Interest form. Form will be removed after 17.00 on 31st July
- Receipt confirmation e-mail within 48 Hours
- Award funding will be notified by the end of October 2013

The Trust has applied for the following:

Project	**Amount (000k)**
Gladstone	816
Electronic Document Management	801

INSPIRE Portal	1,900
ePrescribing	2,600
Kent Pathology Partnership	1,415
Total	**7,532**

A further £240m has recently been announced and the Trust will be preparing bids against this fund when details are published.

Nurse Technology Fund £100m

In October 2012, the Government announced £100m in funding for nurses and midwives to spend on new mobile technology. This funding is part of a £140m investment promise to ensure nurses can spend more time with patients by making essential patient details instantly available on the ward.

The funding will be made available in the form of loans to hospitals; paying the loan back will depend upon feedback from patients and demonstrating that the technology has improved services.

The details of the eligibility criteria and how to apply for funding are due for imminent publication.

The Trust intends to apply for the funding to procure and implement a system that provides the capability of capturing, sharing and alerting Nursing Observations.

Southern Acute Programme (SAcP) £7m

The Trust is part of the SAcP and has been awarded the following funding to support two projects:

Project	**Amount (000k)**
PAS, A&E, OrderComms	6,900
Maternity	624
Total	**7,500**

Of the £7.5m, £1.5m is to cover the support costs over the first 4 years; £6m is for deployment and licensing costs.

Trust Capital Programme (£2m)

The Trust has a Capital Resource limit of £14.5m for 13/14. The Trust is currently committing £2m capital each year for Informatics which is key as the central funds which have either been awarded or being bid for require a level of match funding and local commitment.

Indicative Investment Required

The Trust has already made considerable investment into IT and technology which has provided a strong foundation on which to build the platform that will allow all stakeholders to access what they require when they require it.

The INSPIRE Strategy is an investment to position the Trust in the top 20% of trusts in England over the next four years and will set a standard for Health Informatics.

The current indicative estimated investment for the strategy is shown over the next four years below:

Programme	2013/14	2014/15	2015/16	2016/17	2017/18
Infrastructure Refresh	£1.2m	£1.2m	£1m	£0.9m	£1.5m
Clinical Systems	£1.2m	£8m	£4m	£1.6m	£1.4m
Document Management	£0.3m	£0.6m	£0.6m	£0m	£0.2m
INSPIRE Portal	£0.2m	£2.3m	£0.1m	£0m	£0m
Total	**£2.9m**	**£12.2m**	**£5.7m**	**£2.4m**	**£2.9m**

The detailed profile of indicative sources of funds and investment required is shown below:

- Table 1 page 26 shows sources of funds and profile of investment
- Table 2 page 27 shows the only source of funds being Trust Capital

It can be seen from the table on page 27, that not all IT-enabled change will be able to be completed added to which, it will take a significant number of years to implement some elements of the INSPIRE Strategy if only Trust Capital is made available.

Trust Approvals Process

The programme of work will be subject to the Trust's internal business case process to ensure that any investment is sound with clearly defined deliverables and benefits. For years 2014-15 and 2015-16 the Trust will be required to provide matched funding for the Safer Hospitals, Safer Wards Technology Fund projects out of its capital programme.

Table 1

Indicative Profile of Investment + Source

Source of Funds	Yr 0 2013/14	Yr 1 2014/15	Yr 2 2015/16	Yr 3 2016/17	Yr 4 2017/18	Yr 5 2018/19	Yr 6 2019/20	Yr 7 2020/21	Yr 8 2021/22	Yr 9 2022/23	Total
Trust Capital	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	20000
Assumed Trust Matched Fundin	0	3519	1736	0	0	0	0	0	0	0	5255
SACP	0	2000	2000	1000	1000	0	0	0	0	0	6000
SHSW Tech Fund	970	4512	0	0	0	0	0	0	0	0	5482
Nurse Technology Fund	0	200	0	0	0	0	0	0	0	0	200
Total	**2970**	**12231**	**5736**	**3000**	**3000**	**2000**	**2000**	**2000**	**2000**	**2000**	**36937**

Programme	Project	Source of Funds	Yr 0 2013/14	Yr 1 2014/15	Yr 2 2015/16	Yr 3 2016/17	Yr 4 2017/18	Yr 5 2018/19	Yr 6 2019/20	Yr 7 2020/21	Yr 8 2021/22	Yr 9 2022/23	Total
Infrastructure Refresh	Single Sign on	Trust Capital	35	100	0	0	0	0	0	0	0	0	135
	virtualistion	Trust Capital	300	300	0	0	0	0	0	0	0	0	600
	Storage	Trust Capital	0	200	200	100	100	100	0	0	0	200	900
	Departmental IT Updates	Trust Capital	120	120	120	120	120	120	120	120	120	120	1200
	Business Applications	Trust Capital	66	100	100	100	100	100	100	100	100	100	966
	PC Replacement	Trust Capital	100	100	200	200	200	200	200	200	200	200	1800
	Data Centre updates	Trust Capital	430	300	300	300	1000	0	300	300	300	300	3530
	Telecoms	Trust Capital	170	0	0	0	0	450	0	0	0	0	620
		Sub Total	**1221**	**1220**	**920**	**820**	**1520**	**970**	**720**	**720**	**720**	**920**	**9751**
Clinical Systems	Imaging	Trust Capital	200	0	0	0	0	0	400	0	0	0	600
	PAS +	SACP +Trust Capital	91	3205	3345	1200	1000	0	0	0	0	0	8841
	Maternity	SACP +Trust Capital											
	Medical device integration	Trust Capital	0	0	0	100	100	0	0	0	0	0	200
	Nursing Observations	Nurse Technology Fund + Trust Capital	0	200	0	0	0	0	0	200	0	0	400
	e-Prescribing	SHSW Tech Fund +Trust Capital	24	2362	70	0	0	0	0	0	0	0	2456
	Pathology	SHSW Tech Fund +Trust Capital	415	1415	0	0	0	0	0	0	0	0	1830
	Project Gladstone	SHSW Tech Fund +Trust Capital	204	570	310	0	0	0	0	0	0	0	1084
	Theatres	Trust Capital	0	60	0	0	0	0	150	0	0	0	210
	Pharmacy	Trust Capital	30	0	0	0	0	600	0	0	0	0	630
	Other Departmental Systems	Trust Capital	230	200	300	300	300	300	300	300	300	300	2830
		Sub Total	**1194**	**8012**	**4025**	**1600**	**1400**	**900**	**850**	**500**	**300**	**300**	**19081**
Document Management	EDM	SHSW Tech Fund +Trust Capital	341	638	688	0	20	0	60	0	20	0	1767
		Sub Total	**341**	**638**	**688**	**0**	**20**	**0**	**60**	**0**	**20**	**0**	**1767**
Inspire	Portal	Tech Fund +Trust Capital	214	2361	103	0	0	0	0	0	0	0	2678
		Sub Total	214	2361	103	0	0	0	0	0	0	0	2678
		Grand Total	**2970**	**12231**	**5736**	**2420**	**2940**	**1870**	**1630**	**1220**	**1040**	**1220**	**33277**
	Variance		0	0	0	580	60	130	370	780	960	780	3660

Table 2

Indicative Profile of Trust Capital

Source of Funds	Yr 0 2013/14	Yr 1 2014/15	Yr 2 2015/16	Yr 3 2016/17	Yr 4 2017/18	Yr 5 2018/19	Yr 6 2019/20	Yr 7 2020/21	Yr 8 2021/22	Yr 9 2022/23	Total
Trust Capital	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	20000
Assumed Trust Matched Fundin	0	0	0	0	0	0	0	0	0	0	0
SACP	0	0	0	0	0	0	0	0	0	0	0
SHSW Tech Fund	0	0	0	0	0	0	0	0	0	0	0
Nurse Technology Fund	0	0	0	0	0	0	0	0	0	0	0
Total	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**20000**

Programme	Project	Source of Funds	Yr 0 2013/14	Yr 1 2014/15	Yr 2 2015/16	Yr 3 2016/17	Yr 4 2017/18	Yr 5 2018/19	Yr 6 2019/20	Yr 7 2020/21	Yr 8 2021/22	Yr 9 2022/23	Total
Infrastructure Refresh	Single Sign on	Trust Capital	35	100	0	0	0	0	0	0	0	0	135
	virtualistion	Trust Capital	300	300	0	0	0	0	0	0	0	0	600
	Storage	Trust Capital	0	100	0	0	100	100	0	0	0	200	500
	Departmental IT Updates	Trust Capital	120	120	120	120	120	120	120	120	120	120	1200
	Business Applications	Trust Capital	32	75	75	75	50	75	75	75	75	75	682
	PC Replacement	Trust Capital	100	100	200	200	200	200	200	200	200	200	1800
	Data Centre updates	Trust Capital	318	430	250	250	250	250	250	250	250	250	2748
	Telecoms	Trust Capital	170	0	0	0	0	450	0	0	0	0	620
		Sub Total	**1075**	**1225**	**645**	**645**	**720**	**1195**	**645**	**645**	**645**	**845**	**8285**
Clinical Systems	Imaging	Trust Capital	200	0	0	0	0	0	400	0	0	0	600
	PAS +	Trust Capital	91	0	0	300	700	700	500	500	500	0	3291
	Maternity	Trust Capital		200	0	0	0	0	0	0	0	0	200
	Medical device integration	Trust Capital	0	0	0	0	0	0	0	0	0	0	0
	Nursing Observations	Trust Capital	200	0	0	0	0	0	0	200	0	0	400
	e-Prescribing	Trust Capital	0	0	0	0	0	0	0	456	854	1000	2310
	Pathology	Trust Capital	0	175	855	630	0	0	0	0	0	0	1660
	Project Gladstone	Trust Capital	124	0	0	0	0	0	0	0	0	0	124
	Theatres	Trust Capital	0	0	0	0	0	0	150	0	0	0	150
	Pharmacy	Trust Capital	30	0	0	120	480	0	0	0	0	0	630
	Other Departmental Systems	Trust Capital	230	200	200	255	100	105	305	199	1	155	1750
		Sub Total	**875**	**575**	**1055**	**1305**	**1280**	**805**	**1355**	**1355**	**1355**	**1155**	**11115**
Document Management	EDM	Trust Capital	0	0	0	0	0	0	0	0	0	0	0
		Sub Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Inspire	Portal	Trust Capital	50	200	300	50	0	0	0	0	0	0	600
		Sub Total	**50**	**200**	**300**	**50**	**0**	**0**	**0**	**0**	**0**	**0**	**600**
		Grand Total	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**2000**	**20000**

Delivery and Clinical Engagement

For a programme of this size and complexity it is critical that all clinical, medical and other stakeholders are engaged from inception to delivery and for them to "own" INSPIRE. The aim is to ensure that colleagues are actively involved in key strategic decisions, are involved from the outset in the planning and deployment of new and existing solutions and are also kept up to date on the status of the programme and individual projects.

Health Informatics will engage with clinical and corporate colleagues, understand how we can help them redesign services, support the delivery of clinical excellence and develop with them the criteria to judge both progress and success.

The achieve this; the following activities will be undertaken:

Communications Channel	Activity
Stakeholder Analysis	A stakeholder analysis will be undertaken to determine key interests and the amount of influence they will have in the delivery of the strategy, key projects and subsequent deployment plans. The output of the analysis will be used to inform how health informatics engages with colleagues.
Engagement events	A programme of quarterly events specifically related to the Health Informatics Strategy as a whole will be held across both sites. These sessions will be short presentations detailing the current status of each project and highlighting future projects. They will be awareness raising sessions and will be a means of identifying potential procurement evaluation panel members and end user champions.
Senior Management Meetings	The meetings listed below will be attended on a quarterly basis: • ***Divisional General Managers Meetings*** • ***Divisional meetings*** • ***Service Managers Meetings*** The aim will be to provide a briefing of current and upcoming projects and gather input to future projects and direction of travel. In addition, the meetings may be the result of "Task and Do" actions from Project Boards or Project Team meetings where a project is approaching go-live and more wide-scale involvement is required from end users. Requests will be made for support with cascading information to teams and in identifying members of staff for required training for specific upcoming projects. Support in ensuring these staff members attend their training and access their usernames and passwords is a large requirement of any large-scale project, and it is hoped that by speaking directly with senior managers will give strength to this message.
Patients	Patients will be engaged through the patient forum as well as working with key regular service users such as cancer or diabetes to work with and monitor how the changes improve their experience.
Clinical Groups and Meetings	The meetings listed below will be attended on a quarterly basis: Grand rounds • ***Senior Nursing Staff Meetings*** • ***Educational Half-days*** The aim is to provide a briefing on current and forthcoming projects, and to gather input into future projects and direction of travel. Interested staff will be encouraged to volunteer to be further involved in projects, either providing input to the procurement exercise, or acting as champions for current or upcoming projects.
One-to-one Meetings	The aim will be to ensure the stakeholders have a direct relationship with Health Informatics to ensure their views are taken into account in any key decisions.
Other Staff Groups Meetings	Other meetings of staff groups such as the Appointments Centre, Medical Secretaries or Central Booking Office will be identified and requests made to attend these meetings on a bi-annual basis. The aim will be awareness raising, as many projects affect these staff groups.
Trust Management Executive meetings	A monthly project update report will continue to be provided to the TME.
Poster Campaigns	With the help of the Trust's Communication Team, poster campaigns will be considered as a medium for communicating projects, timescales etc.
Walkabouts	"Walkabouts" are a useful means of communication. These can be targeted at wards or clinical offices. They do require a specific focus/purpose to justify interrupting colleagues, but can be effective in reaching members who staff who may not read emails or any of the e-bulletins that are circulated.
Email	Emails can be sent to all staff, or targeted to specific group (e.g. consultant's distribution list) and a distribution list for the champion users of a specific project may also be created. However, email will not be relied on as an effective method of communication to all staff, as it is known that a number do not check emails regularly.
Staff Intranet	The IT Projects website will be fully populated with up-to-date project information, with each individual project manager responsible for their own

Communications Channel	Activity
	pages.
Trust Bulletin	Periodic updates on the progress of the project will be published through this medium. A series of articles will be programmed to reflect progress on projects.
Screen Saver	In the lead up to the go-live of Trust-wide projects, a corporate screen saver can be forced to appear with salient information. For example, this may include information regarding the go-live date and reminders for users to complete their training.
Chief Executive's Team Brief and weekly message	Although traditionally not used for IT Projects, it is envisaged that for any large-scale project, the Chief Executive's communications forum can be utilised.

Governance and Accountability

Patient information is a key resource for the Trust; it is created, used, shaped, kept, disclosed and destroyed at appropriate times.

The INSPIRE Strategy aims to provide value from IT-enabled investments and to deliver the Trust's clinical strategy; realising the benefits along the way.

INSPIRE is a challenging strategy and programme of work. Delivering value, ie achieving the clinical strategy, for the Trust requires robust governance and management of information and IT assets.

To create the right environment for INSPIRE to succeed, there needs to be a clear distinction between governance and management:

- Governance sets the direction of travel through prioritisation and decision making; monitoring the delivery of performance and compliance against the direction set.
- Management undertakes the design, build and run functions to achieve the direction set and monitor activities to ensure alignment.

The INSPIRE Strategy provides an opportunity to review the adequacy of current arrangements.

<u>Current Governance and Management Arrangements</u>

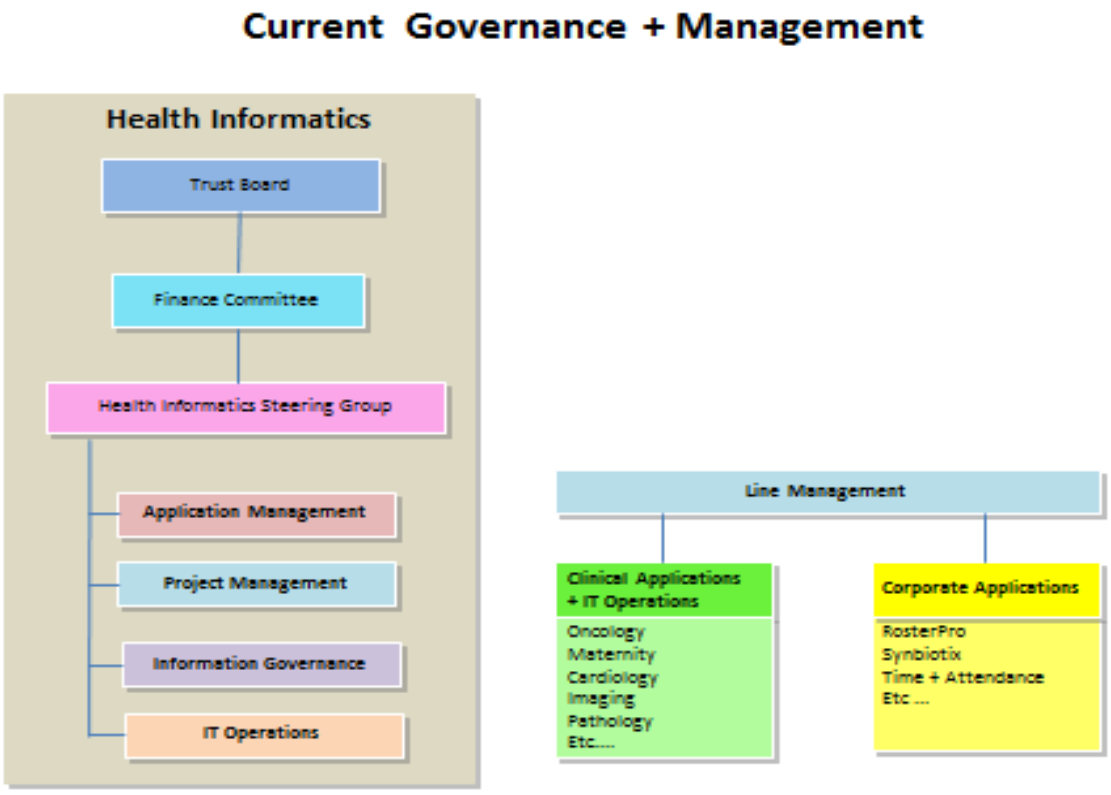
The Trust has a mixed economy of governance and management – centralised and decentralised.

The Health Informatics function has a clear line of reporting, monitoring and accountability. Not all Information and IT functions reside within its direct management. The Information and IT functions outside of its management include, but are not limited to the following areas:

- Oncology
- Imaging
- Pathology
- Maternity
- Corporate, eg Q-Pulse, Synbiotix
- Kent and Medway Health Informatics Service (KMHIS)
- Other departmental IT systems, eg Cardiology

Governance and management arrangements for those functions outside of Health Informatics is not clear or non-existant.

The diagram below illustrates the current mixed economy of governance and management.



The current arrangements are fragmented and suffer from the following perceived weaknesses:

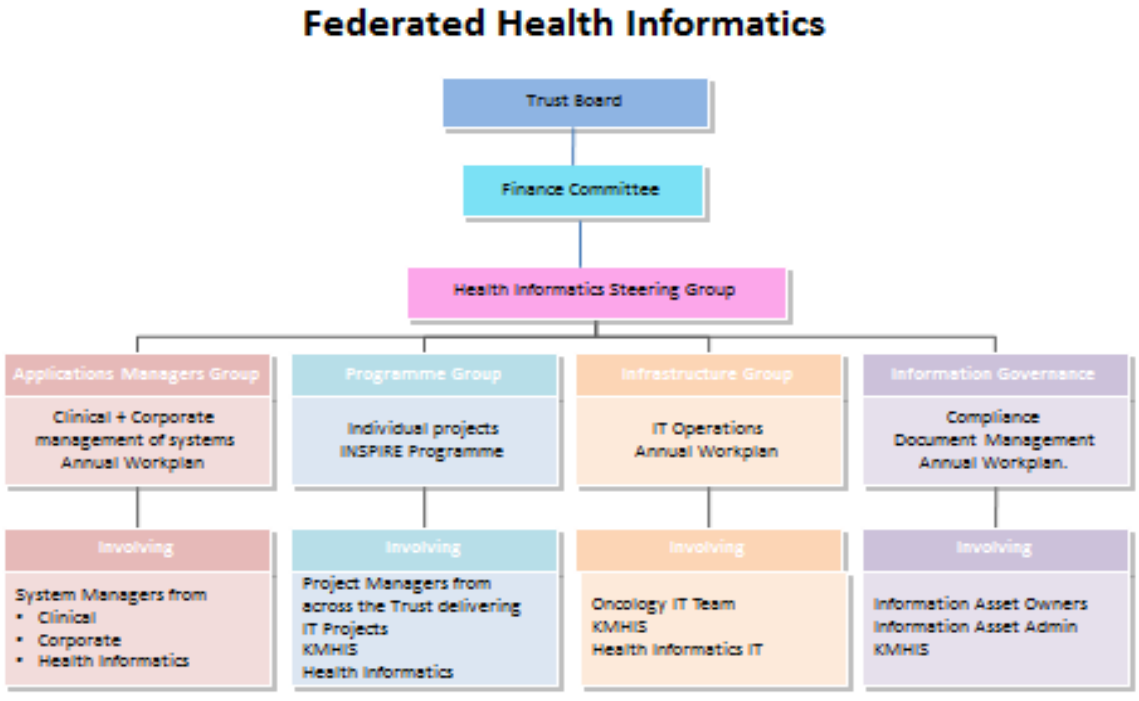
- Architectural diffusion and variability in technical and information standards leading to difficulties in sharing patient data and increased costs because systems are not fully integrated
- Reinvention of wheels leading to duplication of costs
- Uncontrolled change and workarounds, ie too many fingers in the IT pie, causing operational issues which in turn affects clinical productivity
- In some areas there is a lack of leadership, synergy and co-ordination through not being involved with other IT colleagues and having a clear 'enterprise' Health Informatics Strategy that all are signed up to
- Variability in skill and competency levels

If INSPIRE is to succeed, then the governance and management arrangements for all Information and IT functions will need to be reviewed and current weaknesses addressed. Outlined below is a proposed approach to address these weaknesses and ensure that all Information and IT resource in the Trust is appropriate focussed on supporting the delivery of the Trust's Clinical Strategy through the implementation of INSPIRE.

<u>Proposed Governance and Federated Management Arrangements</u>

A federated service model for the governance and management of Health Informatics and those Information and IT functions outside of its direct management, is proposed. The federated model takes the best from centralised and decentralised functions.

The diagram below illustrates the proposed Federated model for Health Informatics.



The Health Informatics Steering Group will be responsible for governance, developing the vision, strategic direction, deciding the priorities, managing the budget and monitoring the delivery of the set direction. The role will be to ensure alignment and focus on supporting the delivery of the Trust's Clinical Strategy through the implementation of INSPIRE. This steering group will be accountable to the Trust's Finance Committee.

Health Informatics will be responsible for the management of the delivery of the direction set by establishing a set of principles covering:

- Technical Architecture
- Common infrastructure and services
- Technical and Information Standards
- Robust Planning and Change Control
- Management of risks, issues and interdependencies to ensure that no system is compromised

These principles will facilitate easier and faster decision making about technologies and solutions being brought into the Trust and deliver consistency in how systems are managed day to day.

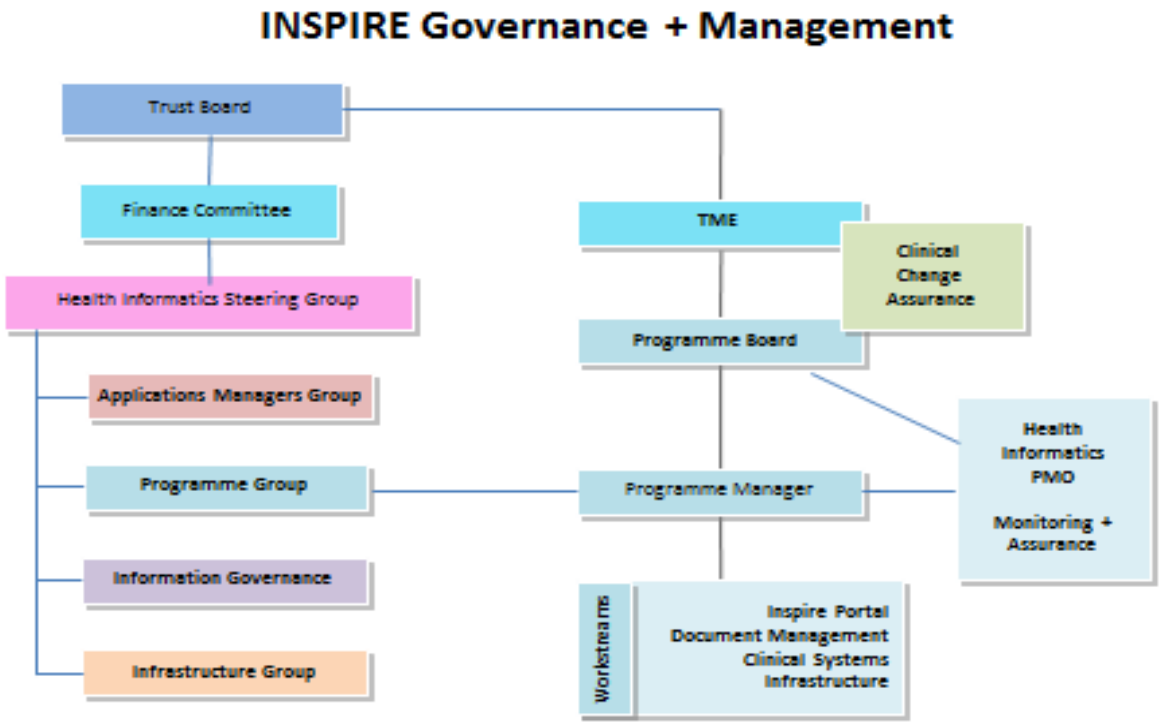
Health Informatics will be responsible for bringing together all Information and IT functions from across the whole organisation and establishing robust, consistent and safe systems and operational management.

It is not proposed to change current line management arrangements.

INSPIRE Governance and Management Arrangements

It is essential that INSPIRE dovetails into the new Federated Health Informatics model to achieve consistency of approach and to ensure alignment Trust-wide.

Below is a diagram illustrating how the INSPIRE programme will dovetail into the federated Health Informatics.



Because of the sheer size and complexity of the INSPIRE Programme, it will be necessary to have a Programme Board. The Programme Board will be responsible to the Health Informatics Steering Group for managing the delivery of the INSPIRE Strategy. The clinicians who are on the INSPIRE Programme Board will provide assurance about clinical change to the TME.

Support for the INSPIRE Programme will be achieved by establishing:

- the role of Programme Manager to manage the day to day delivery of the programme;
- a Programme Management Office (PMO) to monitor the management and delivery of the programme and provide assurance to the TME and Finance Committee (via the federated service model) that the projects in the programme are managing the risks, issues and interdependencies and delivering to time and budget.

It is critical to the success of INSPIRE that the right focus on delivering the Trust's clinical strategy and corporate objectives is maintained. To ensure the right level of leadership, input and participation, the following key roles and responsibilities are proposed:

Role	Responsibility
Senior Responsible Officer *Director of Finance*	Board level responsibility for the delivery of Health Informatics Service and Programme
Chief Clinical Information Officer *Medical Director*	Chief Clinical Information Officer and overall lead for clinical change management
Clinical and Corporate Champions *Nominations required from:* • *each Clinical Division* • *Nursing* • *Quality* • *Corporate*	To support the delivery of the clinical strategy, taking personal responsibility for: • Ensuring clinical and corporate engagement and adoption of existing and new technologies • Developing and championing the use of clinical and corporate information that enables patients to better manage their care; supports clinical decisions; drives service improvements
Director of Health Informatics	Senior Supplier, Strategic Lead and Service Director, responsible for developing and delivering the strategic direction, programme management and IT operations
INSPIRE Programme Manager	Providing programme management for all Health Informatics projects, including, the design, delivery and support of processes and activities required to achieve the benefits and process changes
IG Manager	Ensuring effective management, accountability, compliance and assurance for all aspects of Information Governance

<u>Programme Costs.</u>

The embedded cost model shows the resource and costs required to deliver the programme of work. The resources will be a combination of in-house staff and external flexible resources for specialist areas. This model allows for maximum flexibility across the programme and ensures the Trust can adapt the model as required.