

Information Management & Technology Strategy

2015 – 2020

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Executive Summary

Information Management and Technology (IM&T) plays a central role in supporting the achievement of strategic change in the way health and social care services are delivered. This document outlines the IM&T Strategy 2015-2020 for Lincolnshire Partnership NHS Foundation Trust. It provides a framework for the local and national review of progress so far and for the focus of development over the next five years.

It is essential that investment in Informatics is driven by operational plans in order that information and technology is fully and effectively developed; this strategy highlights the organisations IM&T work programme which will facilitate delivery against national and local targets and operational requirements in order to achieve the principle aim to provide access to the right information at the right time.

The strategy links IM&T developments into the Trust's strategic objectives and is underpinned by the operational need for information at the point of care delivery. The strategy will enable LPFT to be in a strong position by the end of 2020 to harness information and use this effectively to improve the delivery of care through the advent of digitalisation and the transformative impact of big data.

The Trust covers a wide geographical area and this has expanded with the contracts it has obtained in Derbyshire and North east Lincolnshire. The landscape is primarily rural with denser pockets of population. There is poor public technology infrastructure with limited 3G and 4G coverage and sporadic availability of superfast broadband. The Trust has a large mobile workforce as well as a range of dispersed operational bases. Its focus needs to be on becoming more efficient and effective through changes in service delivery that cut cost and deliver efficiencies whilst still providing a quality service.

The organisation needs to become more agile both in its delivery of services as well as its business processes, with the IM&T Strategy playing a key role as an enabler. This will help to keep the Trust in a strong position and a significant care delivery market contender with increasing service market testing and any qualified provider contracts in the future.

With a challenging financial situation over the next few years it is vital that this strategy also focuses on getting the basics right and that there is strong and well managed engagement from all staff in embracing technology and making it work.

To meet the challenge

- *We need to recognise the key issues and change what we do – which means altering how we do some things*
- *Recognise the world is changing; embrace the digital revolution to transform healthcare delivery before it is changed for you*
- *Systematise how patients can be part of the care system, interacting differently*

Sir John Oldham

Chair of Independent Commission on
Whole Person Care 2014

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Glossary of Terms

AQP	Any Qualified Provider
CCG	Clinical Commissioning Group
COIN	Community of Interest Network (a high speed network that the health community shares)
CPA	Care Programme Approach
CQC	Care Quality Commission
ESR	Electronic Staff Record
EWA	Microsoft Enterprise Wide Agreement
FOI	Freedom of Information
FT	Foundation Trust
HSCIC	Health and Social Care Information Centre
IGSoC	Information Governance Statement of Compliance
IM&T	Information Management and Technology
iPM	Integrated Patient Management (a CfH PAS product)
IT	Information Technology
LPFT	Lincolnshire Partnership NHS Foundation Trust
PACS	Picture and Archiving Communication System
PAS	Patient Administration System
PCT	Primary Care Trust
RBAC	Role Based Access
SLA	Service Level Agreement
SLM	Service Line Management
SLR	Service Line Reporting

1. Introduction

The IM&T Strategy provides a road map for information management and technology (IM&T) development within Lincolnshire Partnership NHS Foundation Trust (LPFT). It describes the Trust's current position, the drivers for change and the systems and processes that will allow action to be taken to support the Trust's aims and strategic objectives. The Strategy will support the delivery of the Trust's Clinical Strategy, Integrated Business Plan and Quality Strategy whilst informing in part the OD Strategy and the Estates Strategy.

This Strategy has been developed with significant input from operational services, managers, executives and other key stakeholders, underpinned by external reviews and audits that have highlighted opportunities for change and areas for development. It also embraces the changes that the Lincolnshire Health and Care (LHaC) will undoubtedly bring over the life of the strategy.

Drivers for change

As with all public sector organisations, the Trust has been experiencing the impact of the economic downturn for some time. The Trust has a requirement to identify cost improvement savings of circa 4% of turnover per annum without a reduction in the quality of service; undoubtedly this will mean that the Trust will need to do things differently, making processes smarter, more streamlined and efficient with IM&T as a key enabler.

How the Trust services are commissioned and measured is continuing to change with the introduction of payment by results (PbR) for mental health and the shift of commissioning responsibilities to Clinical Commissioning Groups (CCG's). This has created new challenges for the Trust. Understanding how big data can support these challenges is central to having a fit for purpose Informatics service to underpin service delivery and support operational services, to have the right information available to the operational services when they need it to inform patient assessment and care. Additionally this supports the need to respond to key stakeholder demands including improved outcomes, accessibility, communication and information in response to findings of recent reviews that have highlighted issues with availability of information and data quality. The Trust must use information to drive service delivery and change, and utilise technology to give frontline services the tools that they need to do their job wherever it is required to be undertaken.

Technology already plays a vital part in the delivery of services and the experience of patients, carers, staff and the public. Having a good infrastructure to support data capture, storage and data security is paramount. The Trust data is recognised to be an essential asset required to provide appropriate patient care, this asset needs to be held securely. Information Governance (IG) is the overarching rules and regulations that allow the organisation to hold, store and utilise patient data through a legal framework governed by legislation.

On an annual basis the organisation has to complete the IG toolkit (IGT) which is an assessment of how well it is performing against key IG standards including data

security, data protection and resilience. The strategy will reflect the work that the Trust needs to undertake to achieve Level 2 in all IGT standards with the intention to develop in all areas to achieve Level 3 and sustain this in subsequent years. This will evidence that operational and support services have the right safeguards to protect our patients and staff.

The Trust also needs to be part of the “digital revolution” and be at the forefront of technology solutions in supporting the delivery of care. Patients and carers use technology on a daily basis and expect to be able to access information online, book and change appointments and in the near future have access to their care record. The Trust must move towards being an organisation that enables its staff and patients to be able to access the web in any of its buildings whilst ensuring that the appropriate security safeguards are in place to protect all whilst making access easy.

In order to continue to achieve this, the Trust needs an effective IM&T strategy with a detailed plan of delivery, to include capacity and expenditure requirements going forward. It will need to provide a vision for what the Trust’s IM&T infrastructure will look like over the next 5 years’ as it evolves and the expected outcome at the point of delivery of the strategy with an indication of what is expected post 2020.

2. Background and context

There is a growing appetite with most staff wanting to embrace technology and use it to improve their working practice, quality of care given and help address some of the challenges they face. However the strategy must provide solutions that win the hearts of the workforce and avoid the frustrations of inadequate or unreliable technologies. The new strategy and plan needs to have a clear focus on quality, improvement and efficiency, whilst ensuring that security, safety and business continuity are maintained.

The geographical characteristics of Lincolnshire provide a number of challenges and impact on the focus and delivery of the IM&T strategy. The number of dispersed operational bases provided to deliver local services, is central to those challenges. A lack of good quality 3G and 4G connectivity across the County and a lack of good connectivity to the Community of Interest Network (COIN) in some areas have brought additional challenges. There are also further critical elements of service delivery and the external environment that impact on the Trust and its IM&T Strategy including:

- An increasing mobile workforce that needs to balance good quality care with an effective and efficient service
- The paramount importance of data quality and completeness and timely recording to support service delivery and manage clinical risk.
- The importance of communication and information sharing between the Trust and all stakeholders in care, including its partners in the health and social care community, ensuring compatibility and interoperability with local and national systems.

- The ability to respond and move quickly in a competitive market to operationalise and deploy services, particularly under such contracts as any qualified provider (AQP)
- The importance of immediate access to a wide range of information relevant to the enhancement of care and administration, together with analysis tools.
- The potential impact of information availability and analysis on enhancing the effectiveness of management and planning.
- Increasing implications of regulatory compliance, particularly concerning information storage and availability (e.g. the Data Protection Act and Freedom of Information Act) in the more general context of archiving and records management;
- Increasing requirements for internal and external reporting to Monitor, Health and Social Care Information Centre (HSCIC), Commissioners, Care Quality Commission (CQC), Trust Board and Board of Governors. Increasing emphasis on the exploitation of information. The recognition of the pace of technological change relating to devices, storage, governance and presentation of information;
- Diversity of information access devices with associated deployment, support and management issues.
- The need for engagement from staff to ensure that system and software potential is maximised and benefits realised.

National context

Over the period of the outgoing Strategy the national IM&T agenda has been dominated by the national programme for IT (NPfIT). Many of the products were developed for the acute and community sector with mental health being offered limited products in latter waves of development. This meant that mental health trusts in particular, needed to progress their own interim solutions as the national offerings were under developed. Lorenzo (the Trust's regional care record offering) was poor and not fit for purpose at the time the Trust chose to initially to stay with McKesson until it was "sunsetting" at which time it procured the Maracis Electronic Patient Record (now Silverlink) which is still in use in the Trust. At this time RiO emerged as a strong alternative system for mental health and many Trusts procured it. RiO also became a national system as part of NPfIT but not in the Trust's region.

Choose and Book was underdeveloped during this period and remains so today within mental health with an indirect, partial booking system which is in use in LPFT. A replacement for Choose and Book is being developed nationally, the eReferrals programme, but has been delayed in its rollout.

Under the Transferring Community Services programme the Trust obtained units of the National Programme SystemOne solution; these are still in use within LPFT in the Prison Service and within one of the organisations'; Learning Disabilities teams that is based in the local Acute Trust. However the national programme is being scaled down and the contract on SystemOne ends nationally in July 2016.

The focus of the government's strategy is now on local solutions and interoperability to support information sharing and greater access to care plans across a range of services. Moreover there is a drive to give patients more say in their care with a

target for 2018 to give patients access to their own electronic care record. This enables patients to become partners in their care and to easily share information with their care team and any other persons that they wish to be involved in their treatment and care. This is a challenge for systems that traditionally did not support access outside of the Trust's network and will need to be developed within the strategy.

Another theme that has dominated the national agenda over the last five years is the Microsoft Enterprise Wide Agreement (EWA). The Government at the time top sliced £60m from NHS IM&T monies to procure a national enterprise wide agreement with Microsoft. This effectively gave Trusts access to bundles of Microsoft software for free or at significantly reduced rates. LPFT maximised the use of the EWA and also purchased software assurance that allowed it one further upgrade for free. This has been of significant benefit for systems such as SQL Server, SharePoint and Office Communicator as well as Microsoft Office packages. However the agreement ran out around two years ago and the government chose not to renew it leaving Trusts to pick up the cost and manage the legacy of the EWA.

Over the last two years the Trust has managed this effectively renewing its SQL servers and software and moving to Windows 7 and 8 when renewing and refreshing devices and has had a programme to address the older desktops and laptops to upgrade from Windows XP. However it does have ageing servers and software licenses that are due to expire over the life of the strategy that are part of the delivery plan to address and the Trust needs to develop an exit strategy from Microsoft or look to develop a new EWA.

Local context

Much has changed locally over the last five years. The Trust has strengthened its position as a Foundation Trust. It has used its greater flexibilities to successfully bid for services in Derbyshire and North East Lincolnshire. It has developed a sound track record for quality, financial management, governance and performance over this time much of it started prior to it becoming a Foundation Trust. There have also been many changes in the structures of organisations within Lincolnshire, most notably the demise of the Primary Care Trust (PCT) and the emergence of CCG's. Out of this came Lincolnshire Community Healthcare Services Trust and also the Greater East Midlands Commissioning Support Unit (GEM CSU) the latter are providing the Trust's IT technical support as well as Registration Authority services.

Increasingly the Trust has looked for innovative ways to provide services and drive out waste, duplication and cost, often turning to technology for the solution.

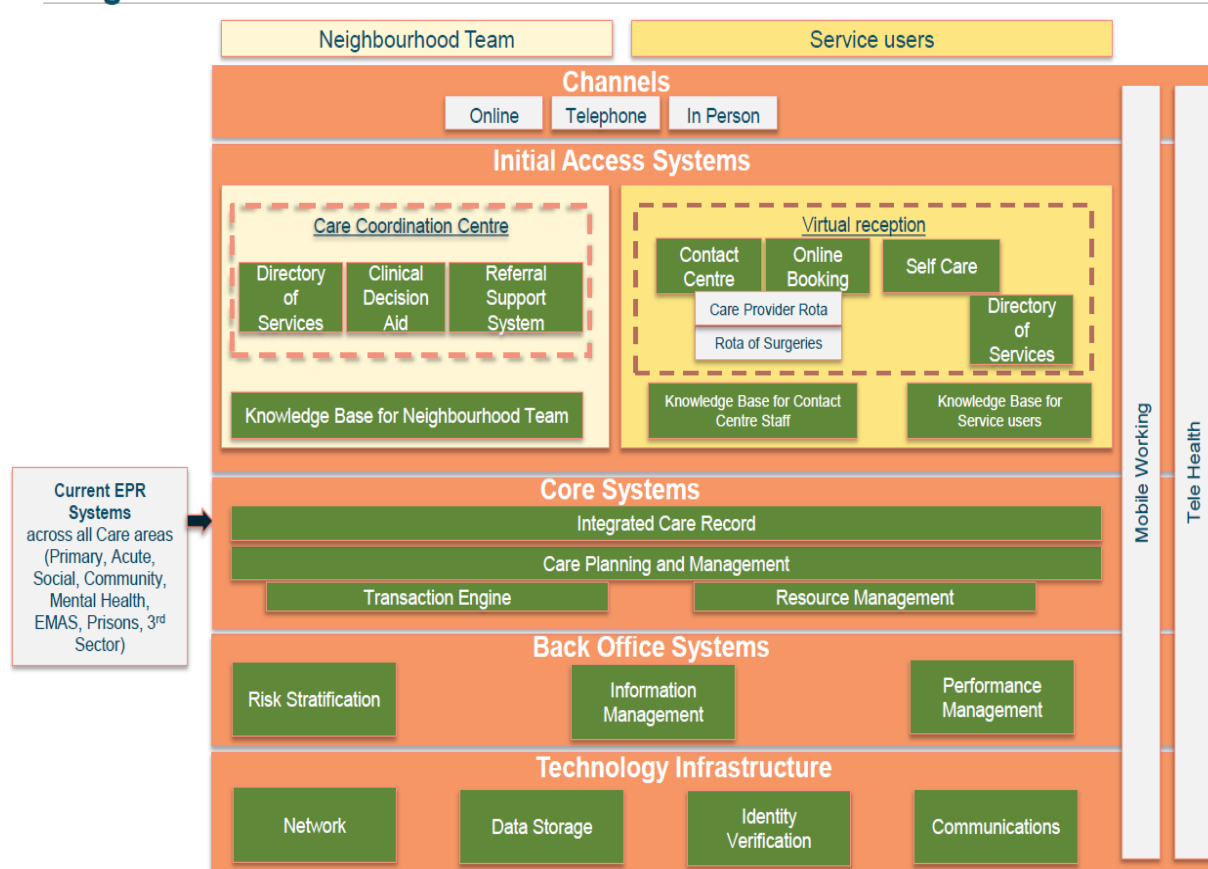
Examples of these can be found in Appendix 1.

Across Lincolnshire, demand for services continues to increase across the health and social care community and with a finite resource available; resources are expected to be in significant deficit within the next 3 to 5 years. The Lincolnshire health and care community have recognised this and commissioned a sustainability review to address a projected minimum £100m shortfall in resource by 2019. Initial findings from the first stage of the review have suggested savings can be found through integration of services, closer working between organisations, reduction in duplication and working smarter. This will be done through the development of

neighbourhood teams that work across organisations with the focus on the service user. Several pilot sites have already emerged with more planned.

Technology development is seen as central in supporting these developments and this will be a key element of the IM&T plan over the life of the new strategy. A new operating model is emerging and is highlighted below focusing on de-duplication of technology and processes, an integration layer for systems to support organisations to continue to use their bespoke system but with a portal being a gateway to allow systems to speak to one another, to share patient level data to support decision making, and a summary of the care record available to all who have a legitimate right to access it.

Integrated Care IM&T Model



Positioning the Strategy

Whilst this strategy is a large and detailed document, it represents a functional delivery programme that underpins and enables much of what the Trust is planning to implement over the next 5 years.

It has a number of key themes that are covered in this document and in the associated plan in more detail including:

1. **Interoperability of systems** – developing systems that interact with each other and that are intuitive so that new views of information can be created by the user. That data and information is in one place and can be found and viewed easily.
2. **Staffing needs** – using technology to support staff in the way they need to and wish to work. Making technology simple and easy to use and available when it is needed.
3. **Patient access** - encouraging patients to take a more active part in their care giving them access to their electronic records and providing the facilities for elements of self-care and regular feedback. Creating systems that give patients and carers the information they need and the ability to self-refer where service pathways allow.
4. **Systems to support managers** – access to systems that provide managers with the tools and information to manage their services better. Turning data and information into intelligence and bringing information into one place and providing reports that are intuitive and timely.

3. **Supporting key objectives and alignment of strategies and plans across the Trust**

Any supporting strategy must align with the key strategic objectives and aims of the Trust. The Integrated Business Plan and Clinical Strategy are seen as the main drivers of the Trust's business over the next 5 years and a clear vision, expectations and aspirations have been developed.

Our vision

'Enabling people to live well in their communities'

This means putting the people who use our services at the very centre of decision making and working with them and their communities to shape and deliver care that achieves the best possible outcomes and experience.

Our expectations

We will meet the terms of our licence as an NHS Foundation Trust and fully meet the requirements of the Monitor and Care Quality Commission regulatory frameworks.

We will meet the NHS Constitution and the Rights set out in that document for all of our patients and service users.

Our aspirations

Putting Patients & Quality First

- * Delivering safe, effective and responsive clinical and support services, which:
 - are compassionate, person-centred & focussed on dignity, privacy & shared decision making
 - Improve the health and quality of life outcomes for our service users and promote independence and resilience
 - Are closer to people's homes and within their own communities whenever possible.
- * Doing what is best for the people of Lincolnshire
- * Providing care closer to home and care that is integrated around the patient
- * Increase income and profitability to reinvest in local services
- * Investing in community and self-care services

System Integration

Lincolnshire Partnership NHS Foundation Trust aims to be the system leader of integrated community care in Lincolnshire.

We will contribute strongly to the Lincolnshire Health and Care initiative to develop new models of service delivery and unprecedented levels of collaboration that will ensure sustainable and resilient health and social care for the future.

- * Integrating teams and co-locating services to create joint up care
- * Lead where we can, collaborate where it benefits the people of Lincolnshire

Alignment of strategic objectives and delivery plans will ensure that the Trust has a common purpose and direction. This will also ensure that there is consensus with a reduction in duplication, recognition of dependencies and an avoidance of conflict across each of the plans. Essentially the IM&T Strategy supports in part the function of the Trust and needs to demonstrate how it will align with other associated strategies in supporting them. Below is a summarised view of how the IM&T Strategy and plan will support the delivery of the Trust's associated strategies demonstrating the solutions that will assist in delivering key strategic intentions.

Alignment with the Clinical Priorities within the Clinical Strategy

Clinical Priority 1 – Working with our stakeholders	Informatics
<i>We believe that collaboration and coproduction with our stakeholders, including, patients, staff, commissioners, other providers and members of the local</i>	<ul style="list-style-type: none"> • Use technologies to collect feedback and ideas • Provide ways to communicate through different mediums such as web portal, social media and video conferencing

<i>community, is the key to successful service design and delivery. We will take everyone opportunity to engage, involve and coproduce the services we provide.</i>	<ul style="list-style-type: none"> • Provide solutions to collect data and information to support quality and innovation and demonstrate outcomes
Clinical Priority 2 – Lead on service integration	Informatics
<p>Lincolnshire Health and Care is a multi-agency initiative which is looking to design better ways of providing essential health and social care services in the county.</p> <p>Currently health and care services are not working together as effectively as they could and with a growing and ageing population, the current approach will not be sustainable in the long run.</p>	<ul style="list-style-type: none"> • Take a leading role in the development of IT integration • Lead the development of a county wide health and social care IM&T delivery plan • Through technology identify and implement quick wins to join up care and allow neighbourhood teams to function effectively • Use technology to support the development and implementation of new services within LPFT.
Clinical Priority 3 - Improving access to our services	Informatics
<p>Enhancing stakeholder experience of our services through improved access is a key priority for LPFT. This focus is supported by the government's new standards for access to mental health services, set out in the NHS England's Achieving Better Access to Mental Health Services by 2020</p>	<ul style="list-style-type: none"> • Use contact centre and communications technologies to create a single referral hub to improve ease and speed of access. • Provide different technological solutions to allow the sharing and collecting of information. • Provide a means for turning data into intelligence to support community health surveillance and 7 day working • Use technology to support mobile and integrated working and collaboration across clinical departments and communities • Provide data and information to support the reduction in waits across LPFT services • Develop a service user portal to allow greater involvement in individual and communication with service provider

Clinical Priority 4 – Improving pathways of care	Informatics
<p>As part of our continuous drive for quality improvement and maximising resources, patient experience and system outcomes, we have identified a number of development opportunities to enhance our pathways of care.</p>	<ul style="list-style-type: none"> • Develop systems to support electronic pathways of care including decision support • Identify data flow requirements and solutions to support care • Development of automated solutions to reduce paperwork and free up time to care
Clinical Priority 5 - Enhancing our clinical environments	Informatics
<p>Our ten year Estates Strategy provides an analysis and evaluation of the implications of the clinical service strategy for the physical assets owned and leased by Lincolnshire Partnership NHS Foundation Trust (See full strategy document for more information).</p>	<ul style="list-style-type: none"> • Provide technology solutions to support mobile and virtual working • Provide enterprise solutions for connectivity and communications
Clinical Priority 6 - Developing our people	Informatics
<p>Our people are the organisation, their training and development is essential for good clinical governance and to the future success of the trust. An appropriate balance between management and strong clinical leadership is a core principle of our service design.</p>	<ul style="list-style-type: none"> • Deliver technology solutions that support work/home lifestyle balance • Use technology solutions to support the delivery of the knowledge and skills development programme • Use technology to support the “virtual college” program
Clinical Priority 7 – Enhance Innovation, Research and Effectiveness	Informatics
<p>The Trust’s Research, Innovation and Effectiveness Department is committed to ensuring that LPFT has a strong and vibrant research culture.</p>	<ul style="list-style-type: none"> • Provide solutions to capture and collate ideas and innovation • Provide data and information solutions to support research • Provide solutions for the safe storage and transfer of data and information in support of research • Provide solutions to support the early detection of risk.

Clinical Priority 8 – Maximising IM&T for clinical delivery	Informatics
<p>Our IM&T Strategy provides a road map for information management and technology (IM&T) development within the Trust (See full strategy document for more information).</p>	<ul style="list-style-type: none"> • Automate processes wherever possible to reduce staff time spent on administration and improve access to clinical and management information; • Further development of Service Line Reporting- providing effective information in a format that meets and supports the needs of services; • Allow service users to access information or to communicate through the web, accessing self-help services on-line, elements of their records and completing secure online assessments prior to initial appointments; • Further develop solutions for mobile and flexible working to allow staff to access systems and information whilst on the move; • Create a care portal environment to integrate systems to provide a summary record for operational/clinical staff to access on and off-line.
Clinical Priority 9 – Embed Service Line Management	Informatics
<p>Create and embed a devolved clinically-led management structure through the Service Line Management (SLM) approach.</p>	<ul style="list-style-type: none"> • Developing the right Data Quality systems to capture all the data we need to inform service line management; • Ensure systems have the capability to support new operational management structures • Develop the required performance management tools (balanced scorecards); • Ensuring comprehensive and accurate clustering for Payment by Results.
Clinical Priority 10 – Expand the Managed Care Network (MCN)	Informatics
<p>With and 67 member organisations providing 72 projects at 83 sites across the county and around 30 different types of activity for people to choose from, the Managed Care Network is an essential component of our future service model and our offer to the people of Lincolnshire.</p>	<ul style="list-style-type: none"> • Provide technologies to support the development and delivery of the managed care network • Provide mediums for communication across and between the Managed Care Network

Alignment with the Trust's Quality Strategy priorities

Information and technology can play a fundamental role in supporting the delivery of quality services. The Trust's 9 quality priorities that describe a range of delivery targets for the coming years are outlined below with a summary of the IM&T solutions that could support delivery:

Quality Priority 1 - Patient Safety	Informatics
<ol style="list-style-type: none"> 1. Achieve quarterly targets set within the LPFT <i>Safety Improvement Plan (Sign Up to Safety National Initiative)</i>. LPFT's identified target areas are: - 7 day follow-up, risk assessment in CRHT; and reduction in medication issues and incidents in in-patient areas. 2. Production and dissemination of a <i>Learning Lessons</i> bulletin bi-monthly throughout the Trust. 3. Audit sample of closed serious incidents reports (1-2 years post closure), evidencing minimum 90% actions remain embedded in practice. 4. Heat Map (early warning indication of risk) completed and disseminated widely from ward / team to board bi-monthly. 5. Case records audits evidence patient and / or carer involvement in a minimum of 80% of cases (evidenced through the healthcare records audits). 	<ul style="list-style-type: none"> • Create monitoring reports that are detailed and provide an early warning system • To support the need to collect incident related data with the ability to feed this information back in a useable format to ensure lessons are learned • Implement an electronic pharmacy system • Create a means for collecting intelligence to automate the production of the heat map • Include user and carer involvement as an audit point in the care records audit • Access to data and information to support research with the sharing of benchmarking data to support the development of quality care and service provision processes. • The production of information to support the lessons learned process and the ability to extract data from systems and transform this into meaningful reports and intelligence • Ensuring that staff understand their responsibilities in respect of data quality, information governance and data completeness through access to focussed and targeted training and awareness raising.

Quality Priority 2 - Patient Experience	Informatics
<ol style="list-style-type: none"> 1. Improvement in community and in-patient survey results (as compared to previous year). 2. Minimum 80% recruitment panels evidence service user and / or carer involvement (direct or indirect). 3. <i>You Said: We Did</i> evidence of responsiveness to service user and carer feedback displayed in a minimum of 80% of ward / unit / service user community waiting areas inspected as part of the 15 Steps / mock CQC visits. 4. Evidence of responsiveness to feedback, including from Healthwatch. 5. 90% responses to complaints and PALS achieved within the agreed timelines. 	<ul style="list-style-type: none"> • By allowing service users and carers to become more involved in the development of services through the use of the Trust Website and social media. • To provide a means of collecting views and feedback from all key stakeholders on issues relating to the Trust. • Providing more self-care opportunities for patients as part of their overall care package. • Development of a new website to promote greater service user and carer involvement with the ability to be able to communicate more effectively with staff and other users through the use of instant messaging and chat. • To provide a platform for regular feedback to service users and carers on the actions the Trust has taken and in relation to feedback that has been provided.
Quality Priority 3 - Clinical Effectiveness	Informatics
<ol style="list-style-type: none"> 1. Improvement in Cultural Barometer results (as compared to previous year). 2. Improvement in staff survey results (as compared to previous year). 3. 95% minimum compliance with mandatory training. 4. 95% minimum compliance with annual appraisals. 5. Evidence of staff engagement in LPFT Leadership Programmes 6. Evidence of active Equality and Diversity Link nominated staff, working closely with the Trust's Equality and Diversity Lead, with representation from across all specialities within in-patient and community services. 7. LPFT achievement of top 100 ranking in the Stonewall Workplace Equality Index (<i>links to Equality Delivery system 2</i>). 	<ul style="list-style-type: none"> • Providing staff with the technology and training to do their work more efficiently and effectively and supporting the way services need to operate. • Ensuring that action is taken to address technology issues in a timely manner. • Ensuring that there is a fit for purpose technology support service to front line staff that meets their needs.

Quality Priority 4 - Clinical Effectiveness	Informatics
<ol style="list-style-type: none"> 1. AIMS accreditation (or equivalent) achieved and maintained within all in-patient areas. 2. Increase in AIMS accreditation (or equivalent) within community services (as compared to previous year). 3. Evidence an increase in benchmarking in incident reports (as compared to previous year). 4. Evidence of continued active participation in research and audit (internally and externally led). 	<ul style="list-style-type: none"> • To provide the ability to audit records electronically and monitor care and record keeping compliance remotely due to the introduction of electronic patient records. • To be able to provide prompts for staff within the systems to ensure compliance with pathways of care and support complete and timely record keeping through mobile and offline working. • To provide compliance reports for staff and managers to support continuous improvement.

Alignment with the OD principle aims

Principle	Informatics
Remove waste in the organisation	<ul style="list-style-type: none"> • Technology will support the reduction in duplication of effort by allowing tasks to be completed once; by also allowing staff to work whilst on the move reducing travel and freeing up time to care.
Prevent errors rather than correct them (getting it right first time)	<ul style="list-style-type: none"> • Technology will support decision making with decision support tools and by also guiding staff through pathways of care. It will also prompt staff to take particular action when certain decisions have to be made. • Systems will also collect data that can be turned into information and intelligence to support learning and mitigate risk.
Streamline processes (and remove variation)	<ul style="list-style-type: none"> • Automation of systems and admin tasks will streamline processes both in frontline services and business support services. • Mandating tasks within pathways will reduce variation and drive through best practice.
Continuously improve processes or services	<ul style="list-style-type: none"> • The analysis of information will allow lessons to be learned and highlight areas of good and poor practice which will support continuous improvement going forward.

Principle	Informatics
Focus on added value activities i.e. those that add value to the patient experience of care	<ul style="list-style-type: none"> Using technology to streamline processes and reduce activities such as travel and administration will increase the time available for direct care for patients.
Reward those that thrive and drive the organisation forward in improving the patient experience and provide “no harm” care	<ul style="list-style-type: none"> Supporting the development of service line management through meaningful and accurate service line reports will help to underpin the move to more autonomy and freedom for services and service managers through rewards for good performance.

4. Where are we now

The Trust published its IM&T Strategy 6 years ago with a refresh 4 years ago. The focus was on infrastructure, corporate and clinical systems, communications and governance with much being achieved over this period (see appendix 1). However there have been a number of actions that were planned but have not been delivered to date caused by issues including, capacity, funding or fit for purpose solutions. There has also been a number of higher level additional actions that have been identified over the period of the Strategy that need to feed into the Trust’s plans going forward (see appendix 1).

Currently the organisation benefits from a shared Community of Interest network (COIN) infrastructure across all the 3 NHS Trusts in Lincolnshire and the CCG organisations. This network is under review and there are opportunities to extend its use and the organisations it serves.

LPFT currently uses 4 Clinical Systems:

- Silverlink Mental Health System is the main Electronic Patient Record for secondary care services and is used across all services with the exception of IAPT, DART and SystmOne services. Silverlink is an internally hosted bespoke mental health system that captures information and data for internal and external reporting including the Mental Health Minimum dataset, Commissioner Datasets and Hospital Episode Statistics for the Health and Social Care Information Centre; Silverlink is also used for the submission of the new Mental Health and Learning disabilities dataset which was introduced in September 2014. Silverlink captures the complete patient record which can be accessed by all staff with access across all care settings; this includes activity, notes, letters, care plans and assessments including risk.
- IAPTus was introduced to the Trust in December 2013 as a bespoke web based system for the Trust’s IAPT service. IAPTus provides treatment pathway focussed clinical information that can be shared across the IAPT

service for all staff involved in the patient's treatment and care. IAPT also collects all required data for the national IAPT dataset.

- WebBomic is a web based bespoke substance misuse and alcohol system that supports the delivery of relevant pathways and captures the required data for the National Drug Treatment Monitoring Service dataset.
- SystmOne is a primary care based system that has bespoke units for Prisons (Secure SystmOne) and a community unit for the Learning Disability Health Liaison service which has close ties with primary care. The national contract for SystmOne expires in July 2016 and there is a requirement for a decision to be made regarding its replacement.

An external review of the Trusts clinical systems was undertaken in 2013 with the recommendation to maintain and develop these to meet the needs of the organisation. A clinical care portal as a gateway for clinical staff to see joined up information between these systems is a clear requirement for the organisation moving forward to manage patient safety and risk.

In addition to these systems clinicians have access to technology provided by partner organisations:

- Cayder; capacity monitoring system
- WebV; pathology results system
- IMPAX; patient imaging results

Informatics service

Information services and Clinical Systems development and support have traditionally been managed as separate teams with a close working relationship. In order to streamline processes and align functions there has been a merge of functions into a single Informatics service with single line management. This will ensure that information processes are developed to meet clinical and business needs and will increase resilience between the teams to meet the needs of operational services.

This development of the Informatics service supports the development of the use of big data technologies and techniques:

- Through the availability of real-time data across multiple datasets
- Through the use of automation to support accurate, timely reporting
- Through the delivery of treatment pathways to support operational services in decision making and use of best practice
- Through the use of analytic technology and predictive modelling

5. Where do we want to get to?

The Trust values technology as a solution to some of the challenges it is facing. It continues to invest in technology and information development both directly through

the procurement and development of solutions, but also in its specialist workforce that provide the business support function within Information, finance, performance clinical systems, workforce and procurement services. Having the expertise within the Trust provides both a value for money service as well as flexibility and control over direction. The strategy recognises that value for money from investment and realising the benefit of change, is a measure of success. Having a well-developed plan that is prioritised and recognises dependencies and also quick wins will also be a measure of success. There needs to be a balance between the must do's and the developments that will bring about positive change (see appendix 2). There also needs to be recognition that projects and developments need the time to be delivered, finished and benefits realised before moving onto the next.

In addition to the “must do's” and through the running of two workshops within the last 24 months; key stakeholders were able to articulate developments that they would value and want to see delivered (see appendix 2). Not all of the developments can be completed within the first year and for different reasons some may have less of a priority than others. Requirements identified within this document that relate to the alignment with other Trust strategies need to be included. Over the life of the strategy some may even fail to be delivered as priorities and ideas change over time.

Key factors in the delivery of the Strategy cut across both service provision, receipt of care and demonstrating quality and efficiency. The Trust aspires to be the service of choice and will utilise technology to support:

- Quality provision of care
- Fast and efficient service delivery
- Choice of care delivery
- Inclusion of service users in their care and decisions about their care
- Provision of self-care options to service users where possible.
- Access to accredited information to empower service users
- The provision for staff to access and input information into the care record more flexibly
- More effective services delivering significant efficiency gains

6. IM&T management and Governance

As part of the delivery of the strategy and plan and also the day to day management of the service, there needs to be a support infrastructure. This is split between the people needed to support and manage the service, the specialist services the Trust may contract in, the infrastructure to make it happen and the policies and procedures to provide governance of the process. These need to be fit for purpose and monitored and maintained as part of the overall delivery plan.

Service Level Agreement (SLA) for ICT services

Currently GEM CSU is responsible for the maintenance and support functions of the ICT delivery service and this is managed through an SLA. Currently the SLA for ICT service support is not fit for purpose. As part of the work plan of the strategy the Trust needs to identify its current needs for technical ICT support. The Trust is currently reviewing its contract with GEM and developing a new SLA to support the strategy going forward with clearer requirements, volumes and performance monitoring processes. This will be developed as a matter of priority as this is fundamental to the delivery of the strategy and the day to day support of the Trust.

Service Level Agreement (SLA) for Information Governance (IG) services

Currently GEM CSU is also responsible for the specialist support functions of the IG service providing Registration Authority and SmartCard deployment and support and this is managed through an SLA. Information Governance Services have already been brought back in house and an overall review of the ICT SLA will be completed in the first year.

Data Quality

Data quality and completeness is increasingly important and in order to provide an accurate measure of operational performance, quality information is needed. The Trust is committed to the delivery of reliable information to support service user care and in the management of its services.

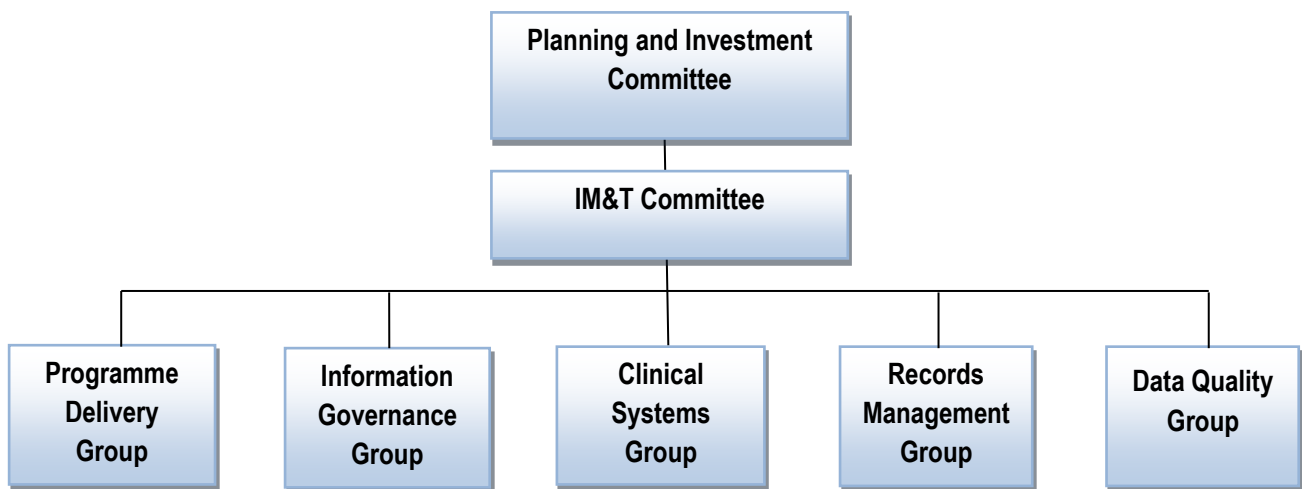
Poor quality information will limit the capability of clinicians and managers to make operational decisions about the way care is planned, managed and undertaken. Poor quality information leads to poor decision making, an inability to define strategy for the organisation and an inability to enable service improvement. All these can impact on the delivery of quality care and the management of risk. The Trust has been subject to external reviews that have highlighted data quality issues particularly accuracy and completeness.

Procurement

There is annual round for agreeing the capital programme for the Trust. The IM&T plan is supported by an annual budget for tangible and intangible products that meet the capital requirements with further projected costs for a further four years. Where projects require recurrent monies or non-capital set up costs these are approved through the presentation of a business case as part of the project management process with IM&T Committee providing final approvals. Where possible the Trust will use the framework process for procuring goods as this provides a managed and streamlined approach to procurement.

Governance Framework

There is an agreed governance framework for IM&T within the Trust that is supported by projects, groups and committees that are defined below. Reports are provided through to the IM&T Committee which provides assurance through to the Planning and Investment Committee, a sub-committee of the Trust Board of Directors.



NOW

YEAR 1

SILVERLINK APP
DIGITAL PEN
PATIENT MASTER INDEX

INTERMEDIATE

YEARS 2-3

SINGLE SIGN ON CONTEXT MANAGEMENT
PHARMACY SYSTEM
CLINICAL PORTAL
TELE-HEALTH
ONLINE SELF HELP

AMBITION

YEARS 3-5

PATIENT PORTAL
ONLINE BOOKING
PAPERLESS

CLINICAL
SYSTEMS

CORPORATE
SYSTEMS

PEOPLE

COMMUNICATIONS

GOVERNANCE
AND SECURITY

TELEPHONY STRATEGY
REMOTE DESKTOP
COMPLETE REFRESH OF DATA CENTRES
ESTATE HUB DEVELOPMENT

CONTEXT MANAGEMENT
NEW NETWORK SOLUTION
VIRTUAL DESKTOP INFRASTRUCTURE
UP TO DATE DEVICE SOLUTIONS TO
SUPPORT SERVICES

VIRTUAL ENVIRONMENT IN THE CLOUD
CLOUD NETWORK

CURRENT SOLUTION ADOPTION
CHANGE MANAGEMENT
TRAINING
IT EXPO
GUEST/PATIENT WIFI ACCESS
AGILE WORKING SOLUTIONS
VIRTUAL MEETINGS

CURRENT SOLUTION ADOPTION
CHANGE MANAGEMENT
TRAINING
BRING YOUR OWN DEVICE
HOME/HUB WORKING
IT EXPO
OFF-LINE AND ON-LINE CONNECTIVITY

CURRENT SOLUTION ADOPTION
CHANGE MANAGEMENT
TRAINING
FULLY AUTOMATED WORKFORCE AND
HR PROCESSES

DEVELOP SECURE FLEXIBLE E-MAIL
DEVELOP A SPECIFICATION FOR NEW WEBSITE
DEVELOP SHARON FUNCTIONALITY
VOICE OVER INTERNET

NEW WEBSITE
AUTOMATED APPOINTMENTS PROCESSES
VIRTUAL COMMUNICATIONS BETWEEN STAFF &
PATIENTS
SOCIAL MEDIA USE IN CARE AND STAFF
COMMUNICATIONS
FOLLOW-ME TELEPHONY AND IM

VIRTUAL COMMUNICATION PORTALS

PROCURE NEW ICT SLA
ACHIEVE LEVEL 3 IG TOOLKIT
DEVELOP FIT FOR PURPOSE ASSET REGISTER
FULL IMPLEMENTATION OF SLR/PBR REPORTS

LEVEL 3 IG TOOLKIT
VIRTUAL SECURITY ON DEVICES (RFID)
FULL SELF SERVICE REPORTING

VIRTUAL SECURITY ENVIRONMENT WITH
DEVICE RECOGNITION LINKED TO
CONTEXT MANAGEMENT
LEVEL 3 IG TOOLKIT

Appendices

Appendix 1

Summary of systems that have been delivered in the last 5 years

Infrastructure and Governance		
Replacement of the CoIN Network	New VPN solution	New Gateway to N3 National NHS Network
2 new data centres utilising Hyper V technologies with full disaster recovery and copied over every 15 minutes	Closing of smaller data centres with savings on maintenance and power costs	Web Filtering to control access to undesirable sites
Latest antivirus protection	Monitored and certificated destruction processes for old hard drives to government standards	Recycling of old “kit” to third world countries through nationally approved schemes
Use of Bit Locker and mobile device management to secure and control portable devices	Upgrade to windows 7/8 on all portable devices	Printer server with smartcard access
Communications		
Patient/Guest Access (will be completed by March 2014)	Deployment of Office Communicator to all individual accounts for voice and instant messaging	Use of Live Meeting
Introduction of Skype	Use of VOIP (voice over internet protocol)	Availability of secure Wi-Fi in all applicable Trust buildings
SmartBoard and Smart TV technologies linked to the network and servers	New mobile phone contract with 4G	Successful pilot of Digital Pens with further funding for roll out from Nurse Tech Fund
Deployment of Digital Dictation solution	Development of a new website	Utilisation of SharePoint as Intranet solution
Clinical Systems		
Move from McKesson to Maracis (now SilverLink)	Introduction of Dynamic Window functionality.	Move from Bomic to Web Bomic
Deployment of SystmOne	Deployment of IAPTus	Deployment of Web V
Deployment of PACs	Move to full Electronic Patient Record in SilverLink	Visual ward pilot with follow on deployment
Corporate Systems		
Deployment of Datix risk and complaints system	Deployment of Project Vision (PMO)	Full implementation of Electronic Staff Record (ESR)
Deployment of E-Rostering	Deployment of Membership Database	Deployment of Single Point of Access with Cloud Contact Centre
Deployment of Synergy costing system	Development of the X and H drives	Introduction of Map Point to geographically map data and information

What remains outstanding from the outgoing Strategy	5 year plan
<u>Pharmacy system</u> LPFT currently gets its Pharmacy ordering and storage monitoring services from the hospital Trust in Lincolnshire. The Trust has limited control and would wish to develop a fully integrated service linking the ordering and storage system for the management of pharmaceutical drugs with the in-house pharmaceutical service.	Year Two
<u>Single Sign-on</u> LPFT has many systems for the collection, storage and reporting of data and information. A number are linked to Active Directory (individuals log in and password for computers) but not all have this functionality. This therefore requires staff to remember several passwords for different systems. Having a single sign-on solution will link all systems to Active Directory resulting in one log-in and password.	Year One
<u>Current solution adoption</u> Many of the Trust's systems have greater potential and functionality. Not all staff utilise the system capabilities. By offering training and advice to staff to maximise the use and functionality of existing systems will ensure these systems are used to their full potential.	Year One and Two
<u>Automation of processes</u> There remain many manual processes within LPFT that could be simplified and automated. These can be found in both operational and corporate services. By automating processes wherever possible will reduce manual intervention and cut down time, freeing up resources.	Year One and Two
<u>Configuration management</u> Configure systems to their optimum and ensure there is interoperability between systems wherever possible	As part of the LHAC enabler work stream
<u>Change management</u> Ensure change management processes are embedded and robust and that projects are completed and benefits realised.	As part of project delivery
<u>Organisational Development</u> Ensuring current solution adoption and change management processes are linked and that desired behaviours are adopted and managed to ensure the change remains embedded.	As part of project delivery

Appendix 2

5 year plan Headlines

Central must do's over the next 5 years	5 year plan
Procure a new CoIN Network utilising latest technologies as the current network will be out of contract by the end of 2014/15	Year two
Agree a new SLA for ICT technical support and back office management as the current agreement is not fit for purpose	Year One
Develop and implement a new telephony strategy considering new technologies such as Voice over Internet protocol as the existing infrastructure is old and will be out of contract by the end of the year	Year One
Develop Microsoft Exchange (Outlook) as a secure mail platform utilising Sophos (security and virus protection) security module	Year One
Complete the refresh of the two data centres and server licenses to ensure business continuity going forward	Year Two
Maintain a refresh programme for out of warranty devices to ensure the workforce has reliable and up to date technology to support their work.	Year One and beyond
Develop a fit for purpose asset register of all devices and software with a robust "starters and leavers" process	Year One
End of LSP contract and review of SystemOne	Year One

Key stakeholder development requirements for the next 5 years	5 year plan
Develop a care portal for professional users across health and social care, accessing a range of systems, providing a summary care record	As part of LHAC
Develop a patient portal where service users/patients can access information about their medication and care, message their key worker and access their appointment times.	As part of LHAC
Update the Trust website platform to offer a range of new facilities including self-help, self-service information, and instant communications	Year One
Develop SharePoint to enhance its functionality and communications capabilities in relation to collaboration, business processes and work-flows with a clearer strategy for delivery.	Year Two
Roll out tele-health solutions including consultations on line	Year One
Develop more electronic forms and workflow for a range of functions including ordering and staffing requests	Year One and beyond
Develop industry standard methods for an "Amazon" type approach to procurement	Year Two
Develop a resource for Mobile and flexible workers with "how to" information and a calendar facility with availability and booking of hot-desks	Link to delivery of Estate Strategy
Development of a wider range of solutions for greater flexibility and access to systems whilst on the move including inputting of assessments, updating the care record and the development of electronic observation monitoring.	Year One and Two
The provision of a wider range of training for staff to be able to use technology better	Year One and Two
Development of better connectivity whilst away from base using a range of solutions	Year One and Two
Continued development of service line reports to support care delivery and the business functions	Year One and Two
Further development of self-service and automation of reports	Year One and Two
Electronic care pathway and algorithm development for SPA	Year One and Two

Appendix 3

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Supporting the delivery of the Trust's Strategic priorities – 2015/20

