Health Informatics Plan
2014 to 2019

Status: v1.0
18 June 2014
1. Executive Summary

This report is the third annual update to the health informatics plan, originally agreed by the Trust Board in October 2011. The annual update translates the clinical, business and quality requirements of both the Care Groups and Corporate services; into health informatics priorities.

This paper provides an update to the Trust Board; proposing the updated health informatics programme 2014-19. The paper covers the following areas:

a) Review of strategic direction  
b) Governance and ownership  
c) Informatics capital programme  
d) Prioritised health informatics work programme

Tom Hunt, Commercial Director

Dr Paul Peter, Associate Medical Director – IM&T
2. Background

2.1 Review of strategic direction

The health informatics strategic direction has been verified against the clinical, quality and business objectives of the Trust; and the currently identified requirements of the Care Groups and the Corporate Services. The health informatics plan has been devised to be strategically consistent and fully supportive of the Trust strategy and objectives. The key strategic requirements for health informatics are as follow:

- Use digital health records by 2016-18
- Collect information at the point of care by 2016-18
- Use technologies to support and enhance the safe and efficient delivery of care
- Use secure digital communications by 2016
- Increase the digital maturity index to 9+ by 2018
- Keeping the show on the road

2.1.1 NHS England Digital Maturity Index

NHS England has developed an informatics maturity model that supports the strategic direction of delivering an Integrated Digital Care Record across the NHS. The current status of the digital care record systems in County Durham and Darlington are shown in Appendix 1; this plan shows how the Trust will close the gaps and realise the benefits to patients and clinicians.

2.1.2 Project prioritisation and approval

The health informatics team manages the delivery of the health informatics plan across the organisation, supporting the services to understand the technologies available to them; and enabling them to own and realise the benefits that are possible from these.

The annual business planning process undertaken by the Care Groups and Corporate business managers describes the development requirements of the services. The impact of these requirements on informatics is assessed and where additional informatics work is required this will be prioritised by Informatics Strategy Sub Committee (ISSC) through the programme planning. The process to agree the health informatics plan 2014 – 2019 is as follows:

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Requirements gathered from:
Existing Informatics Programme
Capital Programme
Care Group Business Plans
Corporate Business Plans

Review:
‘Right First Time 24/7’ event – 14 February
Informatics Strategy Sub Committee – 5 March
Executive & Clinical Leaders – 20 March

Prioritisation:
2014-2017 Health Informatics Plan agreed
Informatics Strategy Sub Committee – 7 May

Health Informatics Plan 2014-2019 Approval:
Informatics Strategy Sub Committee – 4 June
Executive & Clinical Leaders – June
Trust Board – 25 June
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The proposed prioritised health informatics plan 2014-2017 was agreed at ISSC (7 May) with the extended health informatics plan 2014-2019 agreed at ISSC (4 June) and is included in section 4.2.3. The formal management of the work programme will be undertaken by ISSC, with assurance provided through Planning and Workforce Committee; and strategic alignment provided by the Portfolio Management Committee. Individual projects boards report directly into the Care Group management structures; with the nominated Project Executive being ultimately responsibility for the delivery of the project. Any deviations from project plans outside of agreed tolerances are escalated to ISSC.

Throughout the year, additional requirements from the Care Groups and Corporate functions will arise; ISSC oversee these requests and utilises the approved processes through the Cross Informatics Group that give clarity and structure to any requirement identified. These requirements will be escalated through the Health Informatics Leadership Team and onto ISSC depending on the scale of work and resources required.

To secure organisational commitment to the health informatics programme of work, the Executive and Clinical Leads will undertake an engagement and quality assurance role. Supporting the delivery of this complex programme of work is a live programme plan detailing the resources applied to each project, ensuring visibility and accountability to any staff involved in the delivery of the programme.

ISSC also has a clear role in managing risk, and maintain a combined programme risk, assumption, issue and dependency (RAID) log that, where appropriate, feeds through into the overall corporate risk register; thereby ensuring transparency of informatics risk throughout the organisation.

2.1.3 Communications and Engagement

Critical to successful delivery of any project is the Project Executive, they are ultimately responsible for the project success; owning the business case and delivery of the benefits. Every project in the informatics work programme has an appropriate Project Executive who ensure that their project is delivered. The majority of projects will have an impact on clinicians in the Trust; as such there will also be a clinical owner for these work streams.

Supporting this is a detailed stakeholder engagement and communication plan, at both a project level; and the overall programme level. These communications have to support and sell the clinical and business benefits of informatics across the organisation.

Informatics continue to support ‘what’s possible’ events across the Trust looking at informatics progress, particularly focussing on the business benefits that can be delivered by better use of new and currently available technology. Best practice cases are being developed with clinicians to document and evidence the benefits individual teams experience through the use of technology.

2.1.4 Governance and ownership

ISSC ensures the effective development, management, co-ordination and implementation of the Trust’s health informatics strategy and work programme. The group also has a key role in prioritising the informatics work programme including project approval and scheduling. This group is chaired by the Associate Medical Director – IM&T and is overseen by the Commercial Director with a Non-Executive Director in attendance; providing assurance into the Planning and Workforce Committee.
3. Informatics Background

It remains our strategic goal across the organisation to deliver an integrated care records system, with the capability of connecting all accredited clinical stakeholders with the right clinical information. The strategic approach agreed by the Trust Board during 2010 was ‘to deliver an integrated care records system using a “Best of Breed” approach, with a phased implementation over 4-5 years’. The diagram below, consistent from 2011 demonstrates this.

In simple terms, the core of the integrated care records system is built from a number of key strategic systems and operational departmental systems. Although technology is available to simplify access into the range of systems in place across the Trust, this doesn’t make it simple for a clinician who may require access to several different systems. To resolve this and deliver a single electronic integrated care record for each patient, the patient data from all of the organisations clinical record applications (and potentially beyond) needs to be assembled into a Clinical Portal. This single best record can be:

- Presented to clinicians across the Trust and potentially to colleagues in Primary and Social Care
- Presented to patients empowering them to interact remotely in their care
- Presented to service managers through operational dashboards providing live service information to support their day to day management
- Extracted to feed into planning, contracting and performance management systems

This will all be undertaken within the Information Governance, Caldicott, Data Protection, Freedom of Information and Clinical Governance principles.
3.1 Key Strategic Systems

CDDFT has a number of key strategic systems in operation to support administrative and clinical practice; CaMIS, i.Clinical Manager, TPP SystmOne, PACS and ECDM; plus a large number of departmental and support systems. Generally these systems are stand alone and do not dynamically share data, although the majority of the acute systems utilise a single master patient index. This multitude of patient databases created at many stages across a patient journey; from initial assessment through to discharge and transfer of care; leads to duplication of data collection and ultimately significantly increased clinical risk.

There are five major systems with large numbers of users in the Trust as follows:

**CaMIS** – The commercial arrangements for the CaMIS PAS system were extended in March 2012, with the contract running until March 2016.

**i.Clinical Manager** – National application, currently funded by centrally until 7 July 2016. The proposed annual cost is £184K pa (inc VAT).

**TPP SystmOne** – National application, currently funded by centrally until 7 July 2016. The proposed annual cost is £903K pa (inc VAT).

**PACS/RIS** – The PACS contracts were awarded in 1999, 2001 and 2002 and were extended with Board approval until 2014/15 and will require replacement or a demonstration of current value for money.

**ECDM** – Fully implement Trust wide by December 2013; 10 year contract awarded in January 2013

This plan is based on the intention that CDDFT will continue to operate these key strategic systems until 2016 (at a minimum) and that any re-procurement would demand at least as much functionality and connectivity as that provided at present. Any re-provision of these systems would involve a major procurement due to their scale; and once procured each would take over 12 months to implement.

Alongside this, there is a strategic intention to reduce the range of systems in use across the Trust, through the amalgamation of services into these key systems where appropriate. All new business requirements will be assessed to see if they can be delivered using existing systems before any procurement activity is progressed.
3.2 Best of Breed - departmental and support systems

Over the last two years, the Trust has made significant investment in systems to support individual departments and the Trust as a whole; including the implementation of the following:

3.2.1 New systems implemented

<table>
<thead>
<tr>
<th>Project</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECDM</td>
<td>Live Dec 2013</td>
</tr>
<tr>
<td>Emergency Department replacement</td>
<td>Live Jul 2013</td>
</tr>
<tr>
<td>Digital Dictation</td>
<td>Live Jul 2013</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>Live Jan 2014</td>
</tr>
<tr>
<td>Sexual Health</td>
<td>Live Jun 2013 (P1)</td>
</tr>
<tr>
<td>Cardiology</td>
<td>Live Jun 2014 (P1)</td>
</tr>
<tr>
<td>Stroke system</td>
<td>Live May 2012</td>
</tr>
<tr>
<td>Paediatric Diabetes</td>
<td>Live April 2012</td>
</tr>
</tbody>
</table>

The diagram below shows a selection of the current informatics systems; those in orange signify those systems which have been recently implemented. The sub systems highlighted in red, relate to enhancements that have been undertaken as business as usual within those systems (see section 4.2.6)
3.3 Strategic Direction – December 2016

The following diagram describes the strategic informatics elements required to deliver an integrated care records system using a “Best of Breed” approach. The diagram adds in the concept of the clinical portal which pulls together the underlying systems into a ‘Single Best Record’.

![Diagram of strategic elements]

The diagram also highlights a number of strategic investments that are all included in the overall work programme; Patient Flow, Electronic Prescribing and Mobile working – the current status of which is shown below:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Status</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Portal (including access to GP data)</td>
<td>Under consideration by Trust Board</td>
<td>Integrated Digital Care Fund bid – 14 July 2014</td>
</tr>
<tr>
<td>Patient Flow, Handover and eObservations</td>
<td>Under consideration by Trust Board</td>
<td>Match funded by NHS England</td>
</tr>
<tr>
<td>Electronic Prescribing and Drug Administration</td>
<td>FBC approved by Trust Board – Feb 2014</td>
<td>Match funded by NHS England</td>
</tr>
<tr>
<td>Mobile Working</td>
<td>Care Group developing business case</td>
<td>Nursing Technology for Modern, Safe and Compassionate Practice bid – 14 July 2014</td>
</tr>
</tbody>
</table>
3.4 ICT Infrastructure

The ability to present the integrated care records system to the clinician from the location they are seeing the patient is crucial to the Care Groups clinical strategy. This requirement means the clinical record system will need to be available in the patient’s home, in the GP practice, in Children’s Centres and in other NHS buildings. Enabling this level of access requires us to work across the Local health community, opening up networks to ensure that access to the systems is not a barrier to patient care.

To enable the delivery of highly available systems that meet the needs of the organisation, the current virtual environment has been enhanced to provide limited levels of access. The technologies to support data availability requirements and archive will be reviewed and expanded if necessary to ensure they are also fit for purpose for the developing organisation.

This approach will be extended to the desktop, with a strategic intent to move to thin client, remote access and agile working. This strategy will include a review of the devices to ensure that clinicians use the appropriate device for the care setting in which they are operating, whether that device is a tablet, mobile phone or other mobile technologies.

The data centre and networking investment over the last two years has been significant. The Trust has commissioned a fully serviced Tier 3 data Centre that significantly reduced the risks of catastrophic systems failure. Unfortunately this does not remove the risk around the loss of critical systems; as evidenced with the water ingress into the Darlington server room; the root cause can be addressed through the implementation of a second tier 3 data centre. The re-provision of the Community of Interest Network has enabled greater bandwidth and resilience across all sites reducing performance and support issues on these remote sites. There still remains the on-going network replacement and resilience programme that continues to provide the foundation for delivering high speed, reliable and fit for purpose data communications essential for delivering the strategic components of the architecture.

The authentication systems have been improved with log in performance significantly improved, that coupled with the completion of the single sign-on, password self-management and the new service desk implementation has delivered the infrastructure ready to support the significant projects identified in this paper.

3.5 Information Governance

Information governance provides a framework to bring together all the requirements, standards and best practice that apply to the handling of information and has four fundamental aims:

- To support the provision of high quality care by promoting the effective and appropriate use of information.
- To encourage staff to work closely together, preventing duplication of effort and enabling more efficient use of resources.
- To develop support arrangements and provide staff with appropriate tools and support to enable them to discharge their responsibilities to consistently high standards.
- To enable organisations to understand their own performance and manage improvement in a systematic and effective way.

The Trust must meet its legal, ethical and confidentiality responsibilities pertaining to information held about its patients', staff and other members of the public. To ensure this occurs the Information Governance Steering Group is a sub-committee of Planning and Workforce Committee
providing assurance through to Trust Board on the detailed Information Governance Strategic Objectives, Annual Report and Improvement Plan.

The Clinical and Quality Strategy requires the way we deliver care to change. Through this change the Care Groups will enable integrated working across boundaries and the requirements of good information governance must be considered in all cases. We will provide advice and support to the Care Groups to ensure corporate responsibilities are met. As engagement with the Information Governance team in initial stages is key to the efficient development of services and processes the team, once fully established will develop a proactive approach to engagement.

There is a contractual requirement for the Trust to demonstrate its compliance with all information governance requirements at least once per annum. The Trust will use the Information Governance Toolkit as the prime means of meeting this requirement and to develop and measure the required year-on-year improvement plan. The standards contained within the toolkit will be scored and a realistic action plan for each year will be developed, in conjunction with all relevant areas. Progress against this action plan will be reported quarterly to the Information Governance Steering Group and three times per annum to the Planning and Workforce Committee, seeking approval of the Toolkit submissions.

During the life of this plan the key work streams are:

- Information Governance Toolkit completion – contracts and service level agreements maintain that the Trust must meet level 2 or above on all standards of the Information Governance toolkit each year.
- Information Risk Management (IRM) compliance – all aspects of IRM must be fully compliant across the Trust for all areas. Information Asset Owners in each specific area are responsible for delivering the planned work by ensuring their information asset registers, assessments, data flows, risks, records management and actions are fully completed annually.
- Health and Social Care Integrated working – IG support the various Care group work streams ensuring all integrated working requirements meet legislation where information is shared, transferred, stored and appropriate disposal.
- Data Protection Act 1998 compliance – Continued compliance against legislation must be adhered to. Subject access requests must be completed within the legal framework and all incidents with potential breaches to the Act must be investigated and reported on promptly following the Trust and HSCIC reporting processes.
- Registration Authority Monitoring and Governance – to support the trusts Registration Authority via monitoring compliance to policies and procedures and advise any new work through project teams.
4. Health Informatics Work Programme

4.1 Health Informatics Draft Capital Programme Forward Plan

The table below shows the current health informatics capital forward plan; separated into general maintenance and replacement schemes (keeping the existing systems operating); specific schemes – approved (approved business cases); and strategic priorities (not yet approved - essential and desirable schemes).

Included in the approved business case line is the capital allocation of £823,000 over two years from NHS England for the Electronic Prescribing and Medications Administration project. The NHS England capital allocation of £1,665,000 for Patient Flow is included in the essential schemes - strategic priority line as it is currently awaiting Trust Board recommendation. It should be noted that no funding has been allocated or planned for any project or business case classed as ‘Awaiting Approval’ – see section 4.2.4.

<table>
<thead>
<tr>
<th>Forecast Spending Aspirations</th>
<th>Forecast</th>
<th>Plan</th>
<th>Plan</th>
<th>Plan</th>
<th>Plan</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£ 000’s</td>
<td>£ 000’s</td>
<td>£ 000’s</td>
<td>£ 000’s</td>
<td>£ 000’s</td>
<td>£000’s</td>
</tr>
<tr>
<td>General Maintenance &amp; Replacement Programmes</td>
<td>1,661</td>
<td>1,632</td>
<td>1,500</td>
<td>1,500</td>
<td>1,500</td>
<td>8,296</td>
</tr>
<tr>
<td>Specific Schemes - Approved</td>
<td>729</td>
<td>301</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,030</td>
</tr>
<tr>
<td>NOT YET APPROVED Essential Schemes</td>
<td>6,367</td>
<td>1,820</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8,187</td>
</tr>
<tr>
<td>NOT YET APPROVED Desirable Schemes</td>
<td>2,387</td>
<td>1,892</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6,092</td>
</tr>
<tr>
<td>Total</td>
<td>11,144</td>
<td>5,645</td>
<td>1,500</td>
<td>1,500</td>
<td>1,500</td>
<td>23,605</td>
</tr>
</tbody>
</table>

The capital plan has been developed taking into account the requirements identified in this plan (section 4.2.3), however it explicitly excludes the cost of continuing or replacing those systems delivered under the National Programme for Information Technology by the HSCIC (iSoft Clinical Manager, TPP SystmOne). The revenue elements of these systems are beginning to be understood and will be considered fully over the coming months.

Any changes to the informatics capital programme will follow the current process of capital prioritisation and as such will come to Trust Board, having been reviewed by Capital Planning Group and ECL.
4.2 Health Informatics Programme 2014 – 2019

This section describes the existing health informatics programme, together with prioritised detailed work programme covering the next 2 years; and the wider strategic plan for the coming 5 years. It describes additional current developments and the future proposed and potential developments. This is planned on the basis that health informatics retains the existing post establishment and there are minimal vacancies.

4.2.1 Project Lifecycle Delivery

To support project delivery and management, a standardised project lifecycle is in place. The lifecycle assists the board to determine which stage and how near to completion each project is, enabling scheduling of new work and re-allocation of resources. The standard project lifecycle for those within the current health informatics programme is:

4.2.2 Current Health Informatics Programme

The diagram below represents the current delivery stages of each of the approved projects.

Further detail on these projects is available but is reported to ISSC each month with exceptions reported to Planning and Workforce Committee.
4.2.3 Health Informatics Programme 2014-16

The following prioritised projects all have either approved (those in green) or notional capital allocations (blue) included in the Trust Monitor Capital Plan; with the exception of the strategic projects marked by a *. The strategic projects are key elements of the informatics plan, ensuring the systems enable the strategic objectives of the organisation; these are all subject to full business case and capital allocation.

<table>
<thead>
<tr>
<th>Care Group</th>
<th>Project</th>
<th>Next Steps</th>
<th>Planned Closure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise</td>
<td>ECDM Phase 2 - e-Forms and Results Acknowledgement</td>
<td>Detailed planning (Jun 14)</td>
<td>Nov 2014</td>
</tr>
<tr>
<td>Enterprise</td>
<td>MAPS for Doctors (Nurse upgrade)</td>
<td>Go Live with hosted Nurse system (Sept 14)</td>
<td>Dec 2015</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Medical Appraisal &amp; Revalidation</td>
<td>Implementation (Jul 14)</td>
<td>Jul 2014</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Digital Dictation</td>
<td>Project Closure (Jul 14)</td>
<td>Jul 2014</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Pager replacement</td>
<td>Go Live (Jul 14)</td>
<td>Oct 2014</td>
</tr>
<tr>
<td>* Enterprise</td>
<td>Patient Flow / eObs – Procurement &amp; Implementation</td>
<td>Final business case (Jun 14)</td>
<td>Oct 2015</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Email replacement</td>
<td>Final business case (Sept 14)</td>
<td>Dec 2015</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Network replacement</td>
<td>Outline business case (Jun 15) Final business case (Oct 15)</td>
<td>Jul 2017</td>
</tr>
<tr>
<td>* Enterprise</td>
<td>Second Tier 3 Data Centre</td>
<td>Outline business case (Jul 15)</td>
<td>Jul 2016</td>
</tr>
<tr>
<td>Acute &amp; LTC</td>
<td>Cardiology</td>
<td>Go Live DMH (Jul 14)</td>
<td>Sept 2014</td>
</tr>
<tr>
<td>Acute &amp; LTC</td>
<td>Electronic Prescribing &amp; Medications Administration</td>
<td>Detailed planning (Jun 14)</td>
<td>Nov 2015</td>
</tr>
<tr>
<td>CCHT</td>
<td>Sexual Health EPR</td>
<td>Go Live (Jul 14)</td>
<td>Nov 2014</td>
</tr>
<tr>
<td>CCHT</td>
<td>Maternity Upgrade &amp; H/Ware</td>
<td>Detailed planning (Jun 14)</td>
<td>Dec 2014</td>
</tr>
<tr>
<td>* CCHT</td>
<td>Call Centre &amp; Switchboard Exchange</td>
<td>Final business case (May 15)</td>
<td>Feb 2016</td>
</tr>
<tr>
<td>Surgery &amp; Diag</td>
<td>Pathology Upgrade &amp; H/Ware</td>
<td>Final business case (Sept 14)</td>
<td>Jun 2015</td>
</tr>
<tr>
<td>Surgery &amp; Diag</td>
<td>Radiology H/Ware</td>
<td>Go Live (Jul 14)</td>
<td>Oct 2014</td>
</tr>
<tr>
<td>Surgery &amp; Diag</td>
<td>Endoscopy /Colposcopy replacement</td>
<td>Final business case (Jan 15)</td>
<td>Sept 2015</td>
</tr>
<tr>
<td>Surgery &amp; Diag</td>
<td>PACS Procurement &amp; Implementation</td>
<td>Procurement outline business case (Jun 13)</td>
<td>Jun 2015</td>
</tr>
</tbody>
</table>
4.2.4   Additional requirements identified

The Care Groups are responsible for the development of the business cases to support Care Group departmental projects. The corporate teams are responsible for ensuring the business cases for the Enterprise projects are developed. Every business case will consider the benefits and risks of the project; the impact of the change on the organisation by month and department; and the resources required to implement the project successfully to deliver the planned outcomes and benefits. The proposed dates are indicative, especially for those projects where procurement is required, full implementation details and timescales will not be known until the preferred solution is identified.

The Care Groups have identified a number of further priorities to be considered, none of which have proposed allocations in the revised informatics capital plan; the proposed next steps for each of these are described below. The priority of these projects on approval in principle (and subsequent final business case) will assessed to determine which project, if any within the programme of work in the health informatics programme 2014-16 could be delayed.

<table>
<thead>
<tr>
<th>Care Group</th>
<th>Project</th>
<th>Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise</td>
<td>Child Protection Information System</td>
<td>Mandated requirement to share safeguarding information</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Digital Dictation reconfiguration</td>
<td>Dependency for the Admin Review</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Spine 2 migration</td>
<td>Workforce led project linked to ESR driven by National system update</td>
</tr>
<tr>
<td>Acute &amp; LTC</td>
<td>Emergency Care P2 (UCC)</td>
<td>Requires clarity from commissioners</td>
</tr>
<tr>
<td>CCTH</td>
<td>Digital Dictation CCTH</td>
<td>Expansion of the system to support new users</td>
</tr>
<tr>
<td>CCTH</td>
<td>Ultrasound – Viewpoint</td>
<td>Requires a final business case</td>
</tr>
<tr>
<td>Surgery &amp; Diag</td>
<td>Health Improvement Hosted system</td>
<td>On hold pending re-commissioning of services</td>
</tr>
<tr>
<td>Surgery &amp; Diag</td>
<td>Lab to Lab Links</td>
<td>Requires final business case and prioritisation</td>
</tr>
<tr>
<td>Surgery &amp; Diag</td>
<td>Outpatient management</td>
<td>Requires Strategic Outline Case to define problem</td>
</tr>
</tbody>
</table>
4.2.5 Health Informatics Programme Plan 2014 - 2019

The plan shown below draws together an indicative timetable covering the next 5 years; it includes the current capital plan section (including service continuity and approved business cases); the key strategic projects and any significant additional projects awaiting business case and approval.
This high level plan has been expanded to focus on the following four Trust Board prioritised projects. This plan examines the critical path in relation to implementing the systems, focussing on Design/Build; Test/Pilot; and finally Rollout.

- ECDM Phase 2 – Results Acknowledgement
- Electronic Prescribing and Medications Administration (ePMA)
- Patient Flow
- Clinical Portal

This approach enables the implementation resources, both clinical and informatics to be planned; but also to understand when systems are being implemented across the organisation; and the deployment approach e.g. ward by ward; site by site etc. This plan will be expanded to cover the whole programme as part of the resource management plan.
4.2.6 Ongoing systems enhancements and ICT delivery

There a number of system developments and enhancements; and infrastructural ICT implementations that ensure the current systems and technology continue to function in a way to support the services.

<table>
<thead>
<tr>
<th>Work Area</th>
<th>Operational</th>
<th>Developments</th>
</tr>
</thead>
</table>
| TPP SystmOne enhancements     | On-going    | • Transfer of TPP to CDDFT ownership  
                                 |                           | • Unit merging                  |
|                               |             | • Outpatient diabetes                                 | • Enhanced data sharing        |
|                               |             | • Community Cardiac Rehabilitation                      | • Outpatient Parenteral Antimicrobial Therapy |
| iCM enhancements              | On-going    | • PAS direct link                             | • VTE recording                |
|                               |             | • Dementia recording                           | • Infection control recording  |
|                               |             | • Long Term Conditions alerts                 | • ECDM link                    |
|                               |             | • Upgrade to version 2.0                        | • Integrated iCM and PACS      |
| PAS enhancements              | On-going    | • Theatres                                     | • 2D Barcode Wristbands        |
|                               |             | • Waiting list functionality                   | • Waiting list functionality   |
| Estates Migration             | On-going    | • Ensuring estates rationalisation is achievable |
| Diabetes Integration          | March 2013  | • Community based Consultant Outpatient clinics, sharing community & GP clinical records |
| Wheelchairs Pilot and Upgrade | April 2013  | • Improved efficiency and availability of the service                        |
| COIN                          | Feb – Sept 2014 | • Full wide area network refresh                      |
| Telehealth Pilot              | Mar 2014    | • Project closed, although commercial opportunities being developed |
| CRAB Phase 1                  | Sept 2013   | • Surgical Benchmarking implementation             |
5. **Next Steps**

The full detailed health informatics programme plan needs to be considered alongside the organisations other development plans; especially how it fits into the clinical and quality strategy portfolio plan.

The development of a wider clinical engagement and communications plan continues to be critical to the success of the health informatics Plan. The focus is on involvement and ownership of the projects by the Trust Care Groups, working with the Associate Chief Operating Officers and the Clinical Directors. The Project Executive role is absolutely critical to ensure that this happens; and that projects are successful and transition fully into business as usual.

Full and active involvement in the organisational strategic direction and clinical strategy is critical to ensure that the health informatics strategy and underpinning architecture support and enable the business strategy. The development of the detailed health informatics strategy is scheduled during 2015; this is closely linked with the contractual position of those systems and services delivered under the National programme for IT; and any opportunities for additional funding e.g. the Integrated Digital Care Fund and the Nursing Technology Fund.

6. **Recommendations**

The recommendation is that the Trust Board:

1. Approve the health informatics plan 2014-2019; which will be subject to the organisations business case processes and on-going programme scheduling
2. Note and approve the next steps

*Tom Hunt*
*Commercial Director*

*Dr Paul Peter*
*Associate Medical Director – IM&T*
# Appendix 1 – NHS England – Clinical Digital Maturity Index – January 2014 baseline


<table>
<thead>
<tr>
<th>Foundation</th>
<th>Core</th>
<th>Ancillary</th>
<th>Departmentals</th>
<th>Specialist Departmentals</th>
<th>Order Comms and Diagnostic Reporting</th>
<th>Clinical Noting and Document Management</th>
<th>Enterprise Scheduling</th>
<th>Simple e-prescribing</th>
<th>Advanced e-prescribing</th>
<th>Integration with Primary Care</th>
<th>Portals and Patient Access</th>
<th>Analytics and Interoperability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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<td>8</td>
<td>9</td>
<td>Aspirational</td>
<td></td>
<td></td>
<td></td>
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</table>

## Table Details:

- **Simple BI**
  - Connexica (CxAir)
  - GE Healthcare (Centricity)

- **PACS**
  - GE Healthcare (Carddas)
  - GE Healthcare (Prism)
  - GE Healthcare (Centricity)
  - Ascribe (CaMIS)

- **DM + D**
  - Community PAS
  - RIS
  - Maternity
  - Critical Care
  - Bed Management
  - Observations - Vital Signs
  - Blood Tracking
  - CDS in use on e-prescribing
  - Patient Data with Social Care Providers

- **SNOMED CT**
  - Discharge Letters
  - Pathology
  - Theatres
  - Oncology
  - Diagnostic Reporting
  - Clinical Noting
  - Clinical Workflow Engine/Integrated Care Pathways
  - Oncology e-prescribing
  - Discharge Summaries to GPs
  - Patient Access Portal
  - Analytics (patient level costing)

- **NHS Number**
  - PAS
  - Pharmacy
  - A & E
  - Cardiology
  - Order Comms
  - Document Management
  - Scheduling
  - Outpatient & TTO e-prescribing
  - Inpatient e-prescribing ward
  - Pathology/Radiology results to GPs
  - Clinical Portal
  - Analytics (BI that includes results)

- **Coding**
  - Foundation
  - Core Ancillary
  - Departmentals
  - Specialist Departmentals
  - Order Comms and Diagnostic Reporting
  - Clinical Noting and Document Management
  - Enterprise Scheduling
  - Simple e-prescribing
  - Advanced e-prescribing

- **Yes**
  - Ascribe (CaMIS)
  - Ascribe (Ascribe Pharmacy)
  - Ascribe (Symphony)
  - GE Healthcare (Carddas)
  - HD Clinical (Prism)
  - CSC (ICM)
  - Civica (WinDIP)
  - Ascribe (CaMIS)
  - CSC (ICM)
  - None
  - Yes
  - None
  - None

- **No**
  - TPP (SyntmOne Community)
  - HSS (CRIS)
  - CSC (Evolution)
  - WardWatcher
  - Ascribe (CaMIS)
  - None
  - None
  - None
  - None
  - No

- **Integration with Primary Care**
  - Integration with Primary Care

- **Portals and Patient Access**
  - Integration with Primary Care

- **Analytics and Interoperability**
  - Integration with Primary Care
## Appendix 1 – NHS England – Clinical Digital Maturity Index – December 2016 baseline


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<td>HSS (CRIS)</td>
<td>CSC (Evolution)</td>
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<td>Ascribe (CaMIS)</td>
<td>NerveCentre (Development)</td>
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<td>Discharge Letters</td>
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<td>Oncology</td>
<td>Diagnostic Reporting</td>
<td>Clinical Noting</td>
<td>Clinical Workflow Engine</td>
<td>Oncology e-prescribing</td>
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<tr>
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<td>ClinSys (WinPath)</td>
<td>Ascribe (CaMIS)</td>
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**Foundation**

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Yes

**Aspirational**

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