

Whittington Health Trust Board

23rd January 2013

Title:	IT Strategy 2013-15						
Agenda item:	13/012		Paper			7	
Action requested:	For discussion and approval						
Executive Summary:	<p>The IT Strategy 2013-15 sets out the Trust's ambitious vision to create a digital integrated care organisation by 2015 and be an NHS exemplar for e-health.</p> <p>The IT Strategy 2013-15 is aligned to Government and Department of Health Digital First strategies, as well as dovetailing with a number of other Whittington Health strategies, which all require technology to support new ways of working.</p> <p>Its purpose is to enable Whittington Health to provide better health, better care and better value for money.</p>						
Summary of recommendations:	Approve IT Strategy to develop digital integrated care organisation by 2015.						
Fit with WH strategy:	Essential enabler to support the delivery of the WH ICO strategy						
Reference to related / other documents:							
Date paper completed:	15/01/13						
Author name and title:	Glenn Winteringham Director of IT		Director name and title:		Glenn Winteringham Director of IT		
Date paper seen by EC		Equality Impact Assessment complete?	N/A	Risk assessment undertaken?	N/A	Legal advice received?	N/A



Information Technology (IT) Strategy 2013-2015



The digital integrated care organisation

January 2013

Document Control

This document is located on the Whittington Hospital NHS Trust shared network drive :-

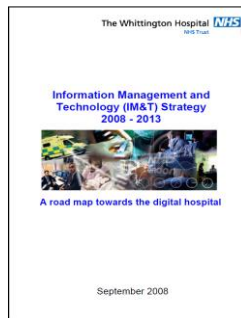
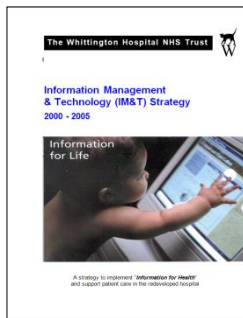
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Revision History

Date	15/01/13
Version	1.0
Status	Draft for comment
Author	Glenn Winteringham
Distributed	Trust Board

1. Introduction

- 1.1. This Information Technology (IT) Strategy 2013-15 sets out Whittington Health's ambitious vision to become one of the first digital organisations in the NHS.
- 1.2. The IT Strategy describes how Whittington Health will give its staff the knowledge, skills, and tools to embrace digital opportunities to improve :-
 - patient care, safety, outcomes and experience
 - individual productivity and organisational efficiency
- 1.3. This is the third IT Strategy for Whittington Hospital NHS Trust following the previous IM&T strategies for 2000-2005 and 2008-2013 :-



2. Policy Context

- 2.1. The table below outlines the key national, local health economy and Trust policy context that have framed the future IT vision described in chapter 2 :-

National

Policy	Description
Health and Social Care Act (2012)	Fundamental re-structuring of NHS, including the establishment of the NHS Commissioning Board and Clinical Commissioning Groups (CCGs) to commission services
NHS Mandate (2012)	Sets out the NHS Commissioning Board's 5 key objectives to improve care, outcomes and experience, including the introduction of the "Friends and Family" test and booking appointments on-line
Toward High Quality, Sustainable Services: Planning Guidance for NHS Trust Boards for 2013/14	Sets out what NHS Trusts will deliver in 2013/14 across 7 domains :- <ul style="list-style-type: none"> - Quality - Workforce - Performance - Finance - Quality Innovation Productivity and Prevention (QIPP) - Innovation - Foundation Trust pipeline

NHS Information Strategy (2012) 'Power of Information'	<p>Sets out how the NHS will transform the use and publication of information to enable patients to :-</p> <ul style="list-style-type: none"> - compare clinical outcomes - access their own records - access advice to improve their health
Government Digital Strategy (2012)	Sets out 14 actions to redesign government services to make digital the default, as well as save £1.8 billion per annum
DoH Digital Strategy (2012)	Sets out the DoH digital vision to provide more efficient, transparent and effective public services with the NHS as an exemplar
Connecting for Health (CfH)	<p>The transition from centralised funding via CfH to a more open, competitive supplier market will affect the Trust directly due to :-</p> <ul style="list-style-type: none"> - CfH enterprise wide agreements for Microsoft and Oracle ceased - CfH contract for Pathology ends March 2013 - CfH contract for Order Communications ends April 2014 - CfH contract for RIO ends October 2015 - Replacement of NHS wide network N3 with N4 in 2014 - Replacement of NHSmail with NHSmail2 in 2014 - Choose and Book future to be determined

North London Health Economy

Policy	Description
Health and Social Care Act (2012)	<p>The establishment of Haringey and Islington Clinical Commissioning Groups (CCGs) to commission services will determine what services the Trust provides, its income and new information requirements</p> <p>The establishment of NHS East and North Central London Commissioning Support Organisation (CSO) will determine primary care IT strategy, including standardising on EMIS Web (GP IT system) and Docman (Document Management System)</p>
Clinical Networks	<p>There are a number of established clinical networks already in place e.g. Cancer, Stroke, Anti-coagulation, Pathology modernisation, and the likelihood of more developing e.g. TB, ITU which will require exchange of information using standards</p> <p>There are already a plethora of information sharing between NCL organisations, both paper based e.g. medical casenotes, patient referrals, and electronic e.g. diagnostic results, radiology images</p>
Service Re-configuration	Re-configuration of clinical services e.g. BEH clinical strategy, Trust mergers and impact of AQP will impact on services commissioned
UCL Partners	Leading academic health science centre for cutting edge education, research and innovation to improve health outcomes

Whittington Health Integrated Care Organisation

Policy	Description
<p>Transforming Healthcare for Tomorrow 2013-17</p>	<p>Sets out our vision to become a pioneer of high quality low cost integrated care in the NHS by</p> <ul style="list-style-type: none"> - Integrating models of care and pathways to meet patient needs - Ensure “no decision about me without me” - Deliver efficient, affordable and effective services and pathways that improve outcomes - Improving the health of local people in the community - Change the way we work by building a culture of education, innovation, and continuous improvement
<p>Corporate Strategies</p>	<p>IT will support the delivery of a number of WH ICO strategies and initiatives :-</p> <p>Foundation Trust application - Integrated Business Plan and Long Term Financial Model</p> <p>Quality Strategy</p> <p>Enhanced Recovery Programme</p> <p>Organisational Development (OD) Strategy</p> <p>Transforming Patient Experience project</p> <p>Information Strategy</p> <p>Information Governance</p> <p>Records Management Strategy</p> <p>Workforce Strategy</p> <p>Estates Strategy</p> <p>Carbon Reduction Strategy</p> <p>SMART working initiative</p>

3. IT Strategy Vision

Introduction

- 3.1. Technology and the internet are transforming society as more of us bank, shop and socialise online than ever before.
- 3.2. The Government has adopted a “Digital by Default” Strategy which will revolutionise public services by delivering significant improvements in :-
 - access to simpler, easier to use public services on-line
 - empowering consumer choice by making information transparent
 - efficiency and cost by removing paper based manual processes
 - mass engagement through social media channels
- 3.3. In healthcare, these advances in technology will lead to better health, better care and better value by enabling people to do things quicker, safer and more efficiently.

Vision Statement

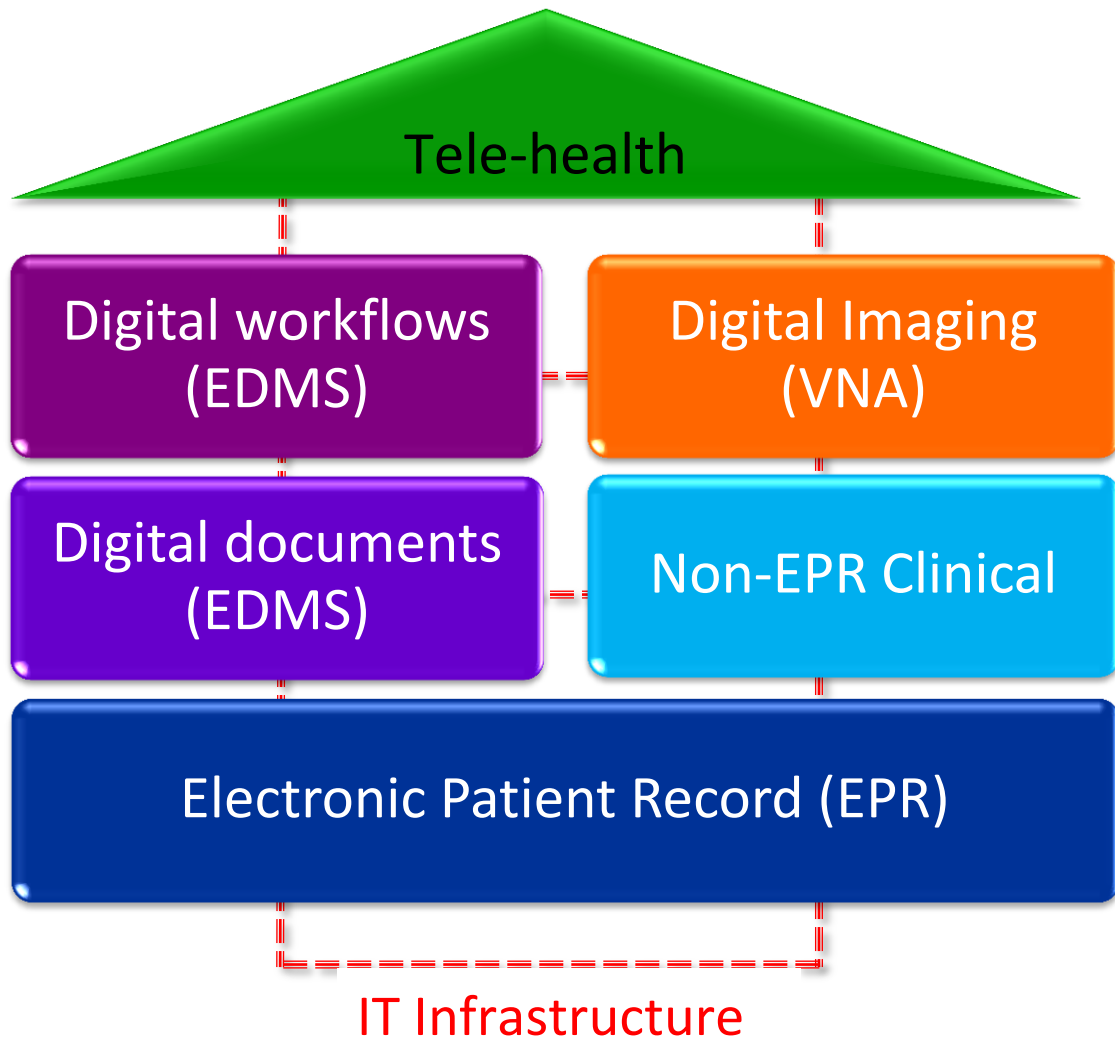
- 3.4. The vision statement for the IT Strategy 2013-15 is :-

“To create a digital integrated care organisation that provides secure on-line access to the right information, to the right person, to the right place”

- 3.5. There are a number of fundamental principles that underpin the IT strategic vision :-

Function	Principle
Information	<ul style="list-style-type: none"> - person based - derived from operational systems - compliant with information governance standards <i>i.e. secure and confidential</i> - available when and where required
IT Systems	<ul style="list-style-type: none"> - proven in the NHS to minimise risk - integrated for once only data capture - compliant with NHS and industry IT standards - support carbon reduction strategy
Staff	<ul style="list-style-type: none"> - access to training & tools to maximise the IT benefits - sufficient IT skills and resources available to implement and support new IT systems

- 3.6. The simplified schema below encapsulates the IT strategic vision for the creation of the digital integrated care organisation (ICO), which is described in more detail in next chapter :-



3.7. The development of the digital ICO will transform clinical care and organisational efficiency through :-

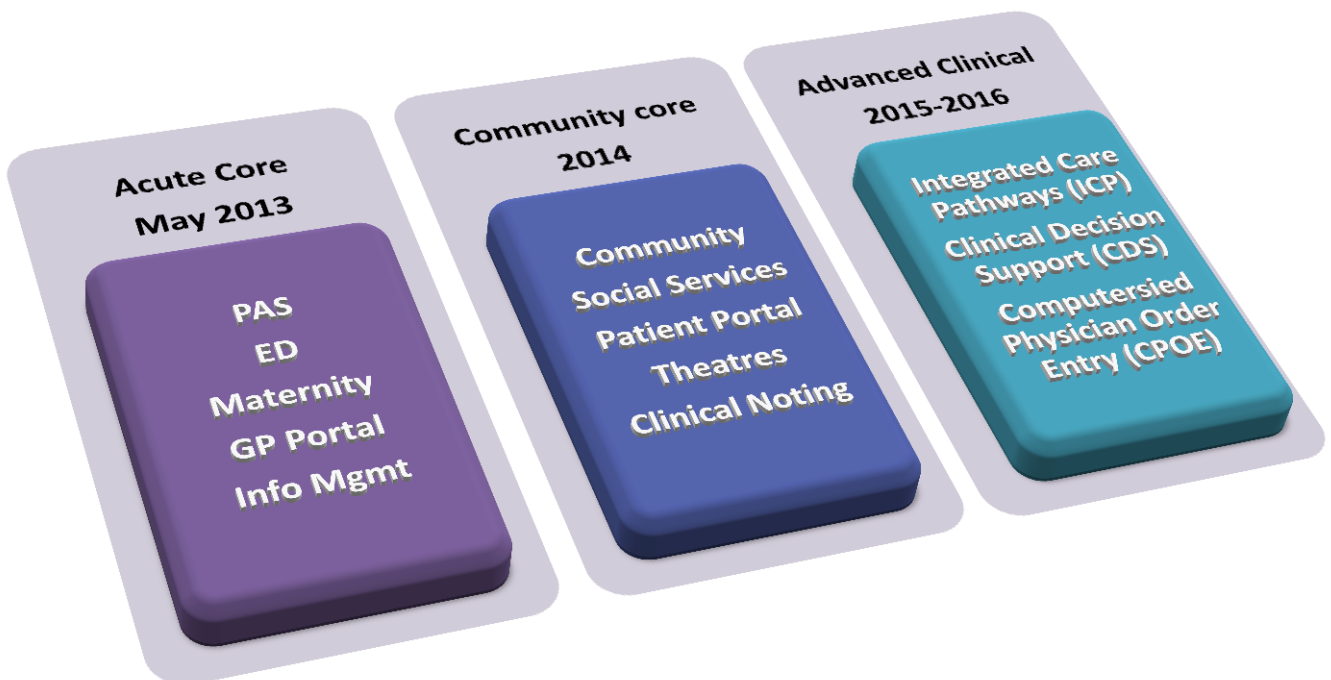
- capturing, storing, and retrieving clinical information real time at the point of care
- integrating IT, medical, and communication technologies to “join up” care along patient pathways rather than organisational or geographic boundaries
- optimising processes using electronic forms and workflows to become paperless

4. IT Strategy Actions

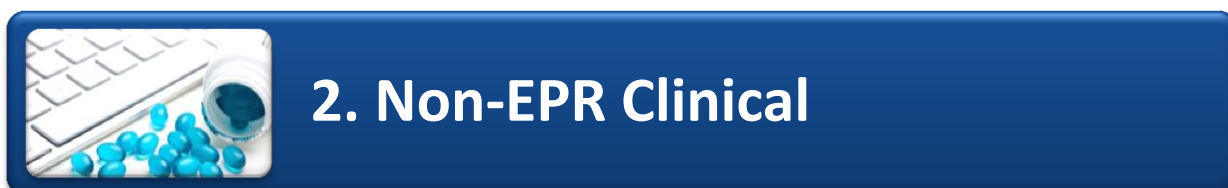
4.1. The IT Strategy will deliver the following project workstreams by 2015 :-



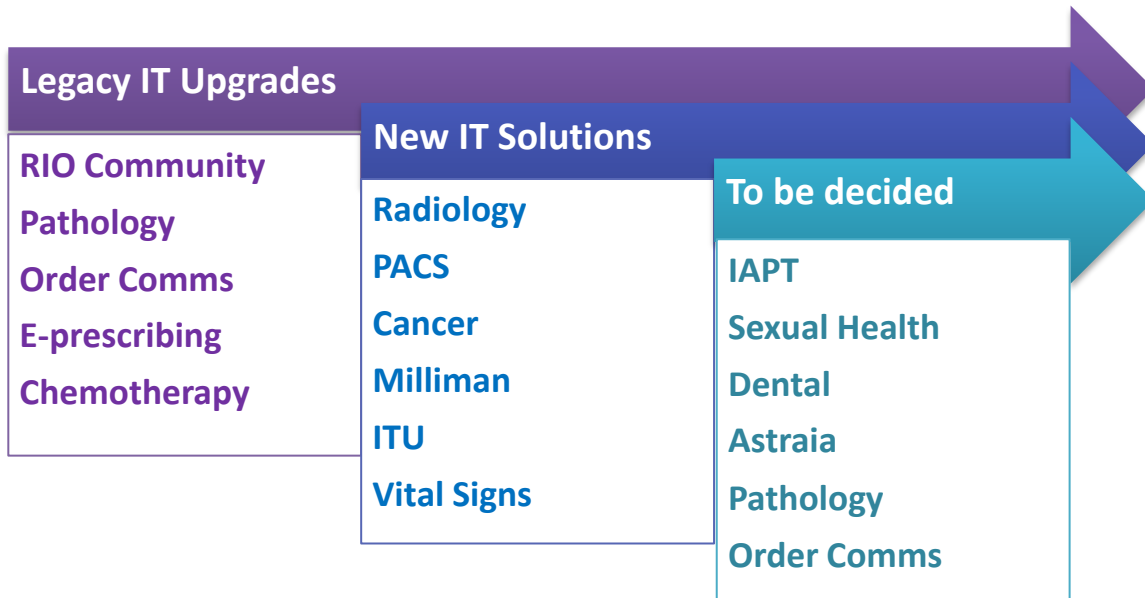
- 4.2. The Electronic Patient Record (EPR) will become the foundation upon which the digital ICO will be developed. It will provide the strategic platform to integrate patient records across WHICO and enable data sharing with external stakeholders e.g. Patients, GPs, and Social Services.
- 4.3. Both the GP and Patient portals will initially enable sharing of patient information, but the aim is to develop “internet health” functionality e.g. book appointments, virtual interaction with health professionals, pro-active health advice specific to long term condition status.
- 4.4. The Trust successfully bid for £5 million capital from the Department of Health and procured the McKesson Medway EPR solution in March 2012. It will be deployed over a number of phases, with the scope of the first three phases outlined below :-



- 4.5. The EPR will need to integrate to a number of other IT systems in order to present a comprehensive clinically rich patient record.



- 4.6. There are a number of legacy non-EPR clinical IT systems that either require major upgrades, need replacing, or a decision about their future is yet to be made. These systems provide specialised clinical data that needs to be made available in clinical context to the EPR :-



- 4.7. One of the recent advances in technology has been software called Vendor Neutral Archiving (VNA). It enables the capture, storage, retrieval and exchange of digital images from different modalities and in different formats. Historically, digital images are stored in specialty specific solutions creating multiple, non-integrated silos.



3. Digital Imaging

- 4.8. The Trust has procured a VNA solution from its Radiology and Picture Archiving and Communication System (PACS) supplier to create a totally integrated solution.
- 4.9. In addition to storing radiological images, the VNA will store all Trust images e.g. Cardiology, Endoscopy, Ophthalmology, EEGs, Medical Photography, which will be made available in patient context to the EPR.
- 4.10. Another major clinical and business benefit of the VNA is that it uses an internationally approved technical standard, XDS-I, to support image and report sharing between organisations.



4. Digital Documents

- 4.11. The Trust has inherited an industry standard Electronic Document Management System (EDMS) from Haringey community when WH ICO was formed.

- 4.12. The EMC Documentum EDMS will provide a single repository for the capture, storage, retrieval and exchange of all unstructured documents. In order to become a paperless organisation all paper documents will need to be scanned into the EDMS to make them available digitally e.g. medical casenotes, nursing documentation, referral letters, clinic outcomes, corporate forms.
- 4.13. The Trust will need to procure a scanning managed service to facilitate its records management strategy to encompass both back scanning of historical documents and forward scanning of new documents as they are created.
- 4.14. All digital clinical documents stored in the EDMS will be made available in patient context to the EPR.



5. Digital Workflows

- 4.15. A key component of moving towards a paperless working environment is the transformation from paper based processes to electronic forms and workflows.
- 4.16. As part of the EDMS, the Trust has also invested in additional software tools that will enable the bespoke development of non-EPR electronic forms and workflows.
- 4.17. This work programme will require significant change management resources to facilitate the organisation wide re-design and adoption of new ways of working; and technical resources to develop, test, implement and support.



6. Telehealth

- 4.18. Telehealth is in its infancy in the NHS. However, the initial results from the Whole System Demonstrator, the world's largest randomised control trial of Telehealth, show the potential benefits of self-care at home :-
- 45% reduction in mortality rates
 - 20% reduction in ED admissions
 - 15% reduction in ED visits
 - 14% reduction in elective admissions
 - 8% reduction in tariff cost
- 4.19. In 2012, the DoH launched the [3 million lives](#) campaign which aims to provide 3 million patients with long term conditions\social care needs to benefit from Telehealth by 2017.
- 4.20. The Trust has registered to be Telehealth demonstrator in London as part of the 3 million lives campaign with an opportunity to work the American Veteran's Association, one of the leading US healthcare providers and an e-health pioneer.

4.21. A Telehealth pilot is proposed to be installed in HMP Pentonville in 2013. It will provide remote diagnosis of specific conditions e.g. dermatology, ophthalmology, in order to prevent the huge cost and resource of transporting and securing prisoners for a hospital visit.



7. IT Infrastructure

4.22. WH ICO will develop a fast, resilient, standardised, optimised and integrated IT infrastructure that will data to be shared securely across the organisation and with key stakeholders.

4.23. Currently, there are three separate IT network and file services infrastructures that reflect the legacy organisations that joined to create WH ICO.

4.24. The creation of an integrated WH ICO It infrastructure is further complicated by the fact that both community provider services :-

- share IT infrastructure with a number of other NHS and non-NHS organisations in North Central London
- IT support is provided by an 3rd party supplier

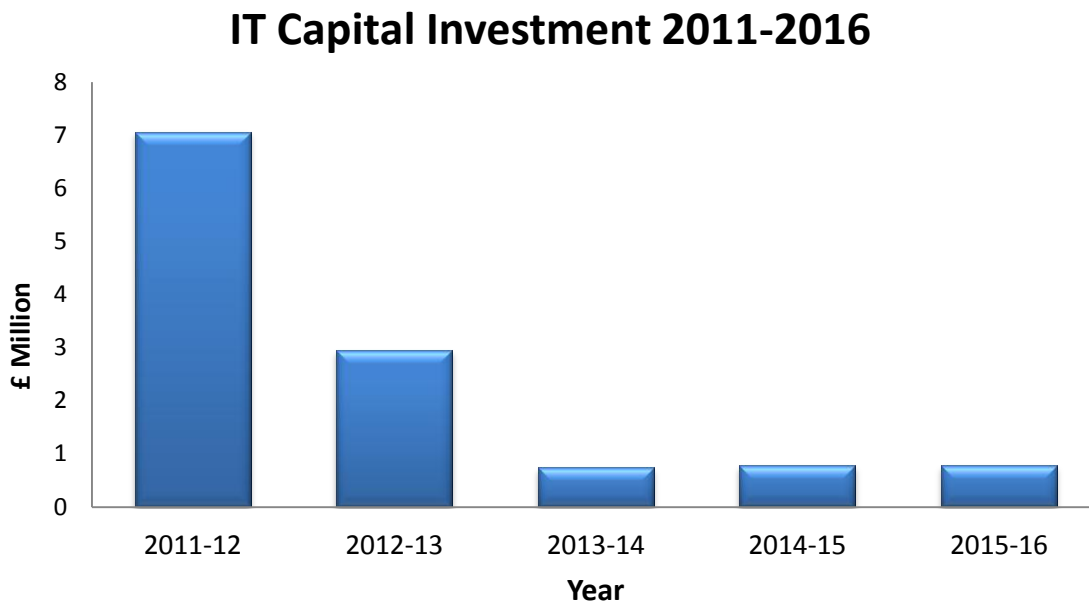
4.25. The IT Strategy will dovetail with a number of other enabling strategies to support the delivery of the Whittington Health Strategy 2012-17 :-



5. IT Strategy Delivery

Capital Investment

5.1 The graph below shows the IT capital investment for 2011-16, which totals £12.3 million.



5.2 The peak in 2011-12 reflects the £5 million DoH capital awarded for the procurement of the Electronic Patient Record. In 2012-13, it is due to a combination of major investment in key IT solutions e.g. PACS/VNA and EDMS, alongside a requirement to bring forward IT capital spend from 2013-14 to enable significant investment in developing clinical service estate improvements.

5.3 It is evident that further IT capital investment will be required to deliver the strategic vision between 2013-16. However, the Trust has a proven track record in attracting additional funding for IT developments e.g. DoH £5m for EPR; CfH £600K for PACS hardware refresh ; London Deanery £150K for software development.

IT Strategy Governance

5.4 The delivery of the IT Strategy will be managed via quarterly reports to the Finance and Development Committee, which reports to the Trust Board.

5.5 A detailed IT Strategy implementation plan and capital investment plan will be developed annually to reflect any changes in priorities over subsequent years and to ensure alignment with the Trust's Strategy.

5.6 All major IT projects will be managed using the PRINCE2 project management methodology.

Key Milestones

5.7 The diagram below outlines some of the key milestones for the delivery of the IT Strategy :-

2013 2014 2015

