

BARNET, ENFIELD AND HARINGEY HEALTH INFORMATICS SERVICE

ENABLING STRATEGY

APRIL 09 TO MARCH 2012

DRAFT

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1. INTRODUCTION

Barnet, Enfield and Haringey Local Health Community (BEHLHC) recognises the significant role that Health Informatics will play in modernising the NHS.

Barnet Enfield and Haringey Health Informatics Service (BEHHIS) is the major provider of Health Informatics Services to

- Barnet, Enfield And Haringey Mental Health Trust
- NHS Barnet
- NHS Enfield
- NHS Haringey

BEHHIS is part of NHS Enfield which acts as the Host Trust. The organisation has its own governance structure reporting via the BEHHIS Stakeholder board to the Host Trust board.

BEHHIS has made considerable progress in working with stakeholders to deliver National Programme for IT (NPfIT), London Programme for IT (LPfIT) initiatives and local strategic developments.

This document will help the BEHHIS to

- Be clear about the scope of strategic Informatics developments through
 - Establishing clear development paths.
 - Defining where and when developments will take place and how they will be managed.
 - Understanding the financial impact and how developments will be resourced.
 - Identifying and ensuring the benefits are realised.
- Share a vision, aims and objectives and explore what they will mean for the development of Informatics by:
 - Being clear about how Informatics will improve services for patients.
 - Setting out how informatics will support individual Trust strategies.
 - Provide a framework for strategic investment decisions.
- Undertake the governance role of Informatics agenda by:
 - Establishing clear governance arrangements for the implementation of the strategy.
 - Setting out the arrangements for monitoring outcomes.

2. STRATEGIC CONTEXT

The NHS Operating Framework for 2009/10 outlines the need for local Informatics Planning with board level ownership and support to deliver information enabled service transformation.

Informatics planning for 2009/10 is set in the context of the NHS Next Stage Review report High Quality Care for All, the Health Informatics Review and the drive to achieve World Class Commissioning Standards.

2.1. High Quality Care for All

The immediate steps identified by this review are:

- Every primary care trust will commission comprehensive wellbeing and prevention services, in partnership with local authorities, with the services offered personalised to meet the specific needs of their local populations. Our efforts must be focused on six key goals:
 - Tackling obesity
 - Reducing alcohol harm
 - Treating drug addiction
 - Reducing smoking rates
 - Improving sexual health
 - Improving mental health
- A coalition for Better Health, with a set of new voluntary agreements between the Government, private and third sector organisations on actions to improve health outcomes. Focused initially on combating obesity, the Coalition will be based on agreements to ensure healthier food, to get more people more physically active and to encourage companies to invest more in the health of the workforce.
- Raised awareness of vascular risk assessment through a new 'Reduce Your Risk' campaign. As we roll out the new national programme of vascular risk assessment for people aged between 40 and 74, we will raise awareness through a nationwide 'Reduce Your Risk' campaign – helping people to stay healthy and to know when they need to get help.
- Support for people to stay healthy at work. We will introduce integrated Fit for Work services, to help people who want to return to work but are struggling with ill health to get back to appropriate work faster.

- Support GPs to help individuals and their families stay healthy. We will work with world-leading professionals and patient groups to improve the Quality and Outcomes Framework to provide better incentives for maintaining good health as well as good care.

We will give patients more rights and control over their own health and care. We will:

- Extend choice of GP practice
- Introduce a new right to choice in the first NHS Constitution
- Ensure everyone with a long-term condition has a personalised care plan
- Pilot personal health budgets
- Guarantee patients access to the most clinically and cost effective drugs and treatments.

2.2. Health Informatics Review

The Health Informatics Review was commissioned by the NHS Chief Executive and the Department of Health Permanent Secretary to:

- Assess the supply of, and demand for, information across the NHS and Social care, so that the data collected can be used to provide valuable and relevant information
- Make sure that, five years after the commissioning of the National Programme for IT, the framework for the NHS Care Records Service and the Secondary Users Service (SUS) is in line with recent, current and potential future policy
- Make sure that the governance of informatics within the NHS and the Department of Health (DH) is clear and appropriate and supported by the right management structure

The term 'informatics' has been used to cover information, technology, processes, analytical tools and techniques, governance and the skills needed to use all of these to improve healthcare.

This review has been taking place alongside the NHS Next Stage Review (NSR) and reflects the informatics requirements of that review. Groups of staff, patients, carers and the public have been looking at clinical pathways and new ways of providing care. There are needs to support access and choice, the involvement of patients and the public and to meet increasing expectations. These make this the appropriate time for a review of information requirements and how information is provided. The review is also timely because of technological advances and the rise of the importance of information to society in general.

Good informatics services are vital to delivering the health and social care services we hope for and the only way of knowing how well we have delivered. By focusing on high quality

informatics services, we will improve patient experience and enable NHS staff to make better use of information to improve the quality of care.

2.3. World Class Commissioning

The world class commissioning programme will transform the way health and care services are commissioned. It will deliver a more strategic and long-term approach to commissioning services, with a clear focus on delivering improved health outcomes. World class commissioning will deliver:

- Better health and well-being for all:
 - People will live healthier and longer lives
 - Health inequalities will be dramatically reduced.
- Better care for all:
 - Services will be evidence-based and of the best quality
 - People will have choice and control over the services that they use, so they become more personalised.
- Better value for all:
 - Investment decisions will be made in an informed and considered way, ensuring that improvements are delivered within available resources
 - PCTs will work with others to optimise effective care.

2.4. Health Care for London

Health care for London is an ambitious ten year plan to transform health and healthcare in the capital. Led by London's 31 PCTs Healthcare for London will deliver world class health care for all Londoners.

The programme consists of a number of related projects which have been organised to transform the health and healthcare of London, the projects include;

- Maternity
- Children and Young People
- Stroke
- Long Term Conditions
- Local Hospitals
- Unscheduled care
- Mental Health
- Polyclinics

- Major Trauma

2.5. Key Informatics Planning Themes

The NHS Operating Framework for 2009/10 outlines the need for local Informatics plans to address the following key themes:

- Developing Information led rather than systems led planning, that is integral to local service plans for delivery of the SHA vision for achieving High Quality Care for all and World Class Commissioning Competencies.
- Establishing robust LHC structures and governance arrangements for Informatics planning that are inclusive of all key organisations and deliver informatics developments to support patient pathways across health and social care settings.
- Ensuring that Informatics capability and capacity is expanded at all levels to make available knowledge skills and resources to support long term visions.

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3. LOCAL CONTEXT

The BEHHIS Enabling strategy has been derived from the business visioning work that has been undertaken within the BEH Clinical Strategy and the associated local Trust strategies, in particular the Primary Care Strategy.

3.1. BEH Clinical Strategy

Barnet, Enfield and Haringey Primary Care Trusts (PCTs) have been working together to plan safer and stronger services for these three boroughs, and the residents of Hertfordshire who use these services, since mid-2006. This collaborative working has resulted in the development of the Barnet, Enfield and Haringey (BEH) Clinical Strategy which sets out a vision for change in local health service provision.

The proposals within the Clinical Strategy were consulted on from 28th June to 19th October 2007 and the views of respondents were sought in a series of questions accompanying the consultation proposals. The proposals focussed on changing the distribution of services between Barnet Hospital (BH), Chase Farm Hospital (CFH) and North Middlesex University Hospital (NMUH) mainly in response to safety and quality issues and the PCTs plans to bring services closer to people's homes. We also consulted with those residents of Hertfordshire who use BEH services. Residents of Barnet, Enfield, Haringey and Hertfordshire also use a variety of acute hospital services, other than those focussed on in the Clinical Strategy, and there were no proposals within the Clinical Strategy to change access to these other providers.

3.1.1. Clinical strategy recommendations

The BEH Clinical Strategy Project Board recommends the adoption of Option 1, with the following steps:

- The establishment of appropriate implementation management arrangements.
- An independent, clinically-led review to determine which types / volumes of inpatient elective surgery should be accommodated on the Chase Farm site. Key stakeholders including representatives of patients and the public will be involved in this process and decisions will be made on the basis that elective surgery wherever taking place must be safe, deliverable and sustainable.
- Transfer of Womens' and Children's inpatient services from Chase Farm Hospital will take place once the PCTs are satisfied that there is adequate capacity at Barnet Hospital and North Middlesex University Hospitals.
- Changes to A&E services at Chase Farm Hospital will take place when the PCTs are satisfied that there is capacity at Barnet Hospital and North Middlesex University Hospital and also that community and primary care services would be able to accommodate changes in patient flows.

- The establishment of a Transport Working Group to make recommendations for change to help address transport issues.
- That work continues on the EIA Implementation Plan and it becomes an integral part of the implementation process.

3.2. Primary Care Strategy

The key features of the Primary Care Strategy include:

- Redesigning the Model of Care
- Care closer to home
- Fewer sites, larger fit-for purpose premises
- Commissioning and Procurement
- Engaging patients and stakeholders

3.3. Other Considerations

The NHS Plan (July 2000) introduced the Government's intention to link the allocation of funds to hospitals to the activity they undertake. It stated that in order to get the best from extra resources there would be major changes to the way money flows around the NHS. Hospitals would be paid for the activity they undertake and this is a system of Payment By Results (PbR).

The aim of PbR is to provide a transparent rules based system for paying Trusts through activity adjusted for casemix; Health Resource Groups (HRGs).

Payment by Results has been introduced incrementally into the NHS since 2005/06, with a new version of HRGs being introduced in 2009/10 which introduces the concept of unbundling to support the principles enshrined in Our Health Our Care Our Say and the development of Autonomous Provider Organisations.

Work continues on developing currencies for use in commissioning for Mental Health services for adults and older people. The ultimate goal is the creation of a national tariff for these currencies.

4. DELIVERING THE VISION, DEFINING THE STRATEGY

The strategy provides a framework for the provision, collection and management of Information using appropriate technology and processes. The aim is to provide a rolling programme to address:

- The many and dynamic national drivers and must do's.
- The local imperatives both within the BEHHIS partnership and the individuals stakeholder Trusts.
- The use of ICT as an enabler to assist the Trusts to work more efficiently and effectively.

Much has been achieved locally to date to deliver individual Trust's existing ICT strategies. The BEHHIS enabling strategy will coexist with the individual trust strategies and plans.

Over the next three years there will be three categories of work associated with the BEHHIS Enabling Strategy. The vision for each of these strategy categories is as follows:

- **Patient Focussed Information**

BEH HIS will work to make available immediate access to routine and high quality patient focussed information which allows seamless care across organisation boundaries.

- **Underpinning Service Transformation**

BEH HIS will ensure that the strategy is backed up by focussed and up to date enabling processes, including policies and procedures, learning and development and programme and project management practice, etc.

- **Data Quality and Information Governance**

BEH HIS will have in place the necessary Informatics related tools and training to enable improving the quality and safety of patient care through better data quality and Information governance.

5. STRATEGY AIMS AND OBJECTIVES

5.1. Patient Focused Information

Patient Focused Information	
Aim	Objectives
1. Developing information led rather than systems led planning.	a) Integrate Health Informatics initiatives into local service plans for delivery.
2. Whenever possible BEH HIS will support integration models of working e.g. health and social care.	a) BEH HIS will always consider/ participate in joint working focused on securing integrated solutions. b) Within valid business cases and associated project parameters individual Trust EPRs will be integrated with partner solutions.
3. Collaborate with national initiatives and programmes to ensure that BEH Informatics developments are informing and informed by national standards in patients focused information.	a) All BEH HIS developments will be aligned with nationally defined programmes and expectations at all times.

5.2. Underpinning Service Transformation

Underpinning Service Transformation	
Aim	Objectives
1. A proactive management approach to ensure that resources and finances are in place to implement and maintain local service transformation.	<p>a) A valid business case/ justification will always be in place for all new BEH HIS developments.</p> <p>b) BEHHIS work programme will be delivered using the principles of Managing Successful Programmes and Prince2 project management framework.</p>
2. Ensure there is an appropriately ICT trained workforce.	<p>a) 100% of BEHHIS staff will be offered core and where appropriate system specific ICT training.</p> <p>b) Training model and methods will be tailored to the staff members personal development needs.</p>
3. Ensure the Information systems infrastructure is modern, fast, robust, resilient and capable of supporting the strategy.	<p>a) A plan to achieve level 4 of the NHS Infrastructure Maturity Model will be presented via the Fault Tolerance Business Case.</p>
4. Collaborate with national initiatives and programmes to ensure that the LHC Informatics developments are informing and informed by national standards in patients focused information.	<p>a) All BEHHIS developments will be aligned with nationally defined programmes and expectations at all times.</p> <p>b) High priority areas will be managed as per national expectations</p>

	<p>checklist:</p> <ul style="list-style-type: none"> • Enabling local service transformation • Governance, capability and capacity • Benefits and costs • Technical Infrastructure.
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5.3. Data Quality and Information Governance

Data Quality and Information Governance	
Aim	Objective
1. Make timely, accurate and comprehensive information available to the LHC to assess performance and facilitate good decision making based on reliable data for management and service transformation.	a) Increasingly clinical and managerial decision makers will routinely use the available tools/associated information to inform decisions.
2. Collaborate with national initiatives and programmes to ensure that the BEH HIS developments are informing and informed by national standards in patients focused information.	<p>a) All BEH HIS developments will be aligned with nationally defined programmes and expectations at all times.</p> <p>b) High priority areas will be managed as per national expectations checklist:</p> <ul style="list-style-type: none"> • Information Governance. • Pseudonymisation of patient data <p>NHS number and patient demographics.</p>

6. BEH HIS STRATEGIC WORK PROGRAMMES

In order to realise the strategic vision, aims and objectives a full programme of work will be required. An indicative outline work programme for 2009–2011 includes:

Patient Focused Information	2009	2010	2011
Provide Strategic advice, Programme and Project Management re Priority areas as required:			
Summary Care Record	*	*	*
Electronic Prescription Service (EPS)	*	*	*
NHS Choices	*	*	*
GP Systems of Choice (GPSoC)	*	*	*
Underpinning Service Transformation	2009	2010	2011
Enabling Local Service Transformation	*	*	*
Governance, Capacity & Capability	*	*	*
Benefits and Costs	*	*	*
Technical Infrastructure	*	*	*
Data Quality & Information Governance	2009	2010	2011
Information Governance	*	*	*
Pseudonymisation of Patient data	*	*	*
NHS Number and Patient Demographics	*	*	*

7. ALIGNMENT TO OBJECTIVES AND GAP ANALYSIS

The key Information requirements identified through our strategic engagements are:

- Robust arrangements to protect patient data
- A method for documenting and communicating evidence based clinical pathways to support both commissioning and clinical practice.
- An integrated patient record shared across all health and social care settings.
- The need for comprehensive and accurate information and outcome data to support commissioning.
- The need for patients to be able access information to support their health and healthcare.
- The need for a fault tolerance Infrastructure to support 24/7 healthcare delivery.

7.1. Robust arrangements to protect patient data

BEHHIS has arrangements in place to ensure that all our staff receive Information Governance training. Staff are required to attend refresh training annually in line with Informatics Planning Guidance.

BEHHIS also has a specialist Business Continuity and Security manager post which provides support and guidance to our stakeholder Trusts.

The commitment to deploy LPfIT systems as available means that smartcard access is widely deployed and systems data is stored in secure data centres.

BEHHIS will continue to support each stakeholder in there submissions of the Information Governance Toolkit.

7.2. A method for documenting and communicating evidence based clinical pathways to support both commissioning and clinical practice.

BEHHIS is exploring the use of Map of Medicine and will work closely with pathway designers to enable service transformation.

7.3. An integrated patient record shared across all health and social care settings.

Continued commitment to the N/LPfIT deployment roadmap and seizing enabling service transformation opportunities e.g. Polyclinic Developments to work more closely with other health and social care organisations will allow the integration of patient records in the life time of this strategy.

7.4. The need for comprehensive and accurate information and outcome data to support commissioning.

Barnet, Enfield and Haringey Health Informatics Service has existed since 2001 to provide Information services to its partners. In 2008 Enfield and Haringey PCTs further invested in the service to provide an enhancement to the original service offerings known locally as 'Intelligent Commissioning'.

Drivers for change to improve information provision include:

- WCC competencies
- Creation of Commissioning Support for London
- Healthcare for London
- Our Health Our Care Our Say

Different Models for Informatics Provision have been discussed with our stakeholders:

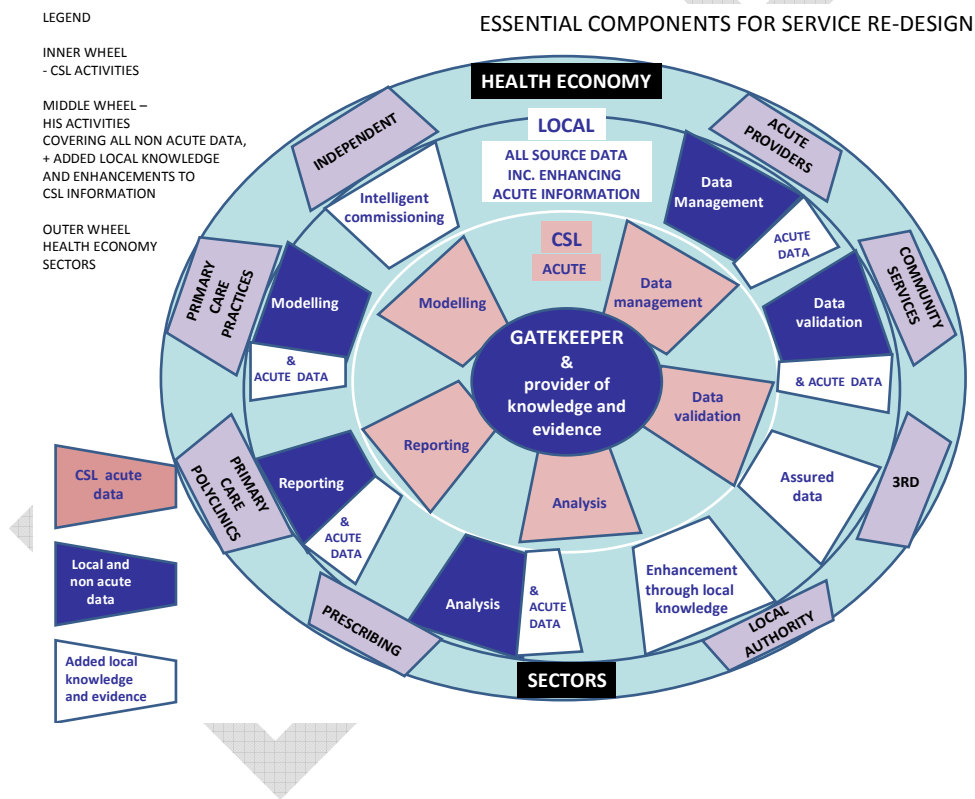
- Central Analytical Function
- Co-location
- Embedding
 - Single/ groups of analyst
 - Multi disciplinary teams

The Scope of Commissioning Support for London (CSL) has been considered in the development of this strategy. The Scope of CSL is currently confirmed as:

- Data management
- Validation
- Modelling
- Analysis
- Reporting

For Acute Services only. This will be expanded and extended over the lifetime of this strategy which will impact the provision of services locally.

The proposed business model for Information Services is shown below:



	AVAILABLE FROM		RESPONSIBILITY FOR ACTION
	CSL	LOCAL	
Data management			
Data validation			
Assured data			
Local enhancement			
Analysis			
Reporting			
Modelling			
Intelligent commissioning			
DATA MANAGEMENT			
DATA PROCESSING FOR SLA PURPOSES - SUS APC / OP / A&E De- duplication National Pbr Rules Local Pbr Rules Pbr / Non Pbr	X X X X		LCS to proactively chase Acute Providers re non or late submissions and application of National rules. Data Quality monitored in line with national rules LCS to implement local rules and unbundled HRG4 prices
DATA PROCESSING FOR PBC & LOCAL PURPOSES - SUS APC / OP / A&E De- duplication National Pbr Rules Local Pbr Rules Pbr / Non Pbr Deriving Additional Fields Critical Care		X X X X X X	HIS to provide local rules agreed at Technical meetings to LCS to implement. HIS need to implement locally also to ensure cohesion between SLA & PBC data. HIS to monitor application of these in accordance with agreements.
DATA PROCESSING OTHER DATASETS Prescribing QOF RIO SCAS GUM SITREPS Patients on Programmes Births & Deaths Direct Access Choose & Book Waiting Lists Local Enhancements & Assurance eg practice mergers		X X X X X X X X X X X X	HIS to use other data sources to build up holistic view of whole health economy performance and complete patient pathway Programme info out of scope of LCS Out of scope

	AVAILABLE FROM		RESPONSIBILITY FOR ACTION
	CSL	LOCAL	
Data management			
Data validation			
Assured data			
Local enhancement			
Analysis			
Reporting			
Modelling			
Intelligent commissioning			
DATA MANAGEMENT CONTINUED			
DATA QUALITY SUS / APC / OP / A&E / PBR	X		CSL monitor adherence of data to national standards and communicate issues with Acute Providers and SUS
SUS / APC / OP / A&E / PBR & Other datasets Local Enhancements & Assurance eg practice mergers		X	HIS monitor data quality in line with specifications from Schedule 5's. Adherence to data quality levels during processing. Where data is incomplete, estimates are made to allow reporting to continue. Maps local knowledge onto data to ensure most accurate position is reported.
SUBMISSION OF STATUTORY DATA MHMDS SUS / HES GUM		X X X	Out of scope
ARCHIVE Archiving of all datasets Datasets available for previous financial years with costs and rules applied		X X	

Data management
Data validation
Assured data
Local enhancement
Analysis
Reporting
Modelling
Intelligent commissioning

	AVAILABLE FROM		RESPONSIBILITY FOR ACTION
	CSL	LOCAL	
DATA VALIDATION			
Collection of acute monthly summary & patient level HRG data IP / OP / A&E PbR & Non PbR inpatients Evidence supplied counting & attribution		X	HIS to validate to ensure adherence to local and national rules. Where discrepancies are identified HIS to act and communicate these to Acute Providers to ensure data is corrected at source
GP Attribution	X		CSL to contact Acute Providers to ensure data is corrected at source
Patient on Programmes Evidence supplied, counting and attribution		X	HIS to provide to PCT and PCT to act
Analysis of top level data quality (DQ) reports & resolution with providers	X		CSL to liaise with Acute Providers
Analysis of non DQ reports eg specialities with multiple admissions, OP while IP etc	?	X	HIS Provides information to PCT/Agency and PCT acts
Takes responsibility for ensuring providers submit on time, offers assistance & receive time frame for resolution		X	To ensure compliance with Schedule 5 rules. HIS to provide information to Agency and Agency acts.

Data management
Data validation
Assured data
Local enhancement
Analysis
Reporting
Modelling
Intelligent commissioning

	AVAILABLE FROM		RESPONSIBILITY FOR ACTION
	CSL	LOCAL	
ASSURED DATA			
SUS Data is checked for completeness & any major data quality issues before data is made available to analysts.		X	HIS performs these checks to ensure that national and local rules have been correctly applied and alerts CSL where there are discrepancies for their action.
If issues occur they are either resolved immediately or estimates are created to ensure an incorrect picture will not be reported to the PCT.		X	HIS make estimates but liaise with CSL to ensure that CSL communicate with Acute Providers to ensure data is corrected at source.
Any SLA monitoring report summary figures checked for accuracy & complnss pre reports go PCT		X	HIS validates CSL information on behalf of PCTs / Agency. HIS report back issues to CSL/Agency for their resolution.
Impact of poor quality of data is made aware to customer for their request.		X	HIS issue health warnings where poor data quality could impact on accurate analysis.
Practice allocation and performance figures checked re PBC pre publication.		X	HIS to check and alert PCT to Data Quality issues
Monitoring of adherence to Schedule 5		X	HIS informs Agency and Agency acts

- Data management
- Data validation
- Assured data
- Local enhancement
- Analysis
- Reporting
- Modelling
- Intelligent commissioning

	AVAILABLE FROM		RESPONSIBILITY FOR ACTION
	CSL	LOCAL	
LOCAL ENHANCEMENT			
PBC Reporting where practices have closed / merged etc data edited. Applies local rules to data to ensure accuracy at Practice level.		X	HIS to investigate significant anomalies against budget and PCTs to act.
Works with providers to derive local rules to be applied to SUS data. Attends SLA technical meetings for input into work around local provider based issues.		X	HIS works with Agency & providers, agreements reached at Technical meetings.
Attends PCT meetings for an understanding of local issues & priorities which can steer analysis and information priorities.		X	HIS and PCT jointly agree priorities and action plans for resolution.
Meets GP Practices to discuss local info reqs and difficulties for PBC. Applies understanding of local perf against national and local targets, local initiatives & WCC comps to analysis.		X	HIS provides realistic interpretation of performance against budgets and provides knowledge of the impact of performance targets on budget performance. PCT / PBC to act on information.
Demand Management provides advice regarding what can be effectively measured.		X	HIS advises PCT on applying measurable targets to budget baseline position.

- Data management
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	AVAILABLE FROM		RESPONSIBILITY FOR ACTION
	CSL	LOCAL	
ANALYSIS			
Identification of key areas of SLA over performance.	X		HIS to assure Agency of accuracy and advise of baseline / coding anomalies which could affect performance. Agency to act on findings.
Identification of key areas of PBC over performance.		X	Once data has been assured HIS to provide analysis of key areas of overperformance along with an understanding of causes. PCT / PBC to act on evidence.
Analysis of activity changes individual over performance areas in PBC & SLA assessing activity changes, shifts, discussion with providers to assure true reflection.		X	HIS provides local assurance and evidence around activity shifts and PCT / Agency to act on this information.
Analysis of divergence from national & local targets investigation to establish causes.		X	HIS to investigate and PCT / Agency to act.
Tracking & investigating trends & indicators for sig changes f/fup, C2C, A&E atts, emergency admissions, readmissions.	X	X	CSL to provide an benchmarking data but HIS to investigate at an SLA and PBC level and advise Agency / PCTs to act.
Analysis of patient pathways and demand management initiatives.		X	HIS to provide analysis and alerts of discrepancies from NICE guidelines. Agency to act on Acute element, PCT to act on complete pathway.

- Data management
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	AVAILABLE FROM		RESPONSIBILITY FOR ACTION
	CSL	LOCAL	
REPORTING			
Summarised SLA monitoring reports – collated for all SLAs.	X		CSL to provide top level information with data handled as agreed at Technical meetings. HIS to assure and Agency to act on assured findings.
Pan London benchmarking information of metrics and activity levels.	X		HIS to assure accuracy of findings. Agency to act.
PBC Budget reports & Demand Mgt.		X	HIS to provide budget information including locally defined Demand Management targets. PCTs to act.
PBC validation reports (locally defined). PBC evidence for local practice initiatives.		X	
Patients at Risk of Readmission identified to community matrons.		X	HIS to provide assured information. PCT and Community services to act.
Trends in metrics such as F/FUP rates & activity levels.	X	X	CSL to provide first information, HIS to investigate at SLA and PBC level and Agency / PCT to act.
Admissions for LTC		X	HIS to provide evidence and PCT to act.
Admissions for preventable of high profile causes eg Alcohol weighted by QOF.		X	HIS to provide evidence and PCT to act.
Quantifying PCT pops UoR across providers A&E / Unscheduled care by PC.		X	HIS to provide evidence and PCT to act.
Ad hoc info to PH / Commissioning teams.		X	HIS to provide evidence and PCT to act.
Patient pathway to produce costed pathway.		X	
Reporting on performance of PCT re national targets.		X	HIS to provide evidence and PCT to act.

- Data management
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- Intelligent commissioning

	AVAILABLE FROM		RESPONSIBILITY FOR ACTION
	CSL	LOCAL	
MODELLING			
Validates and provides acute baseline information to use as the basis of modelling for SLAs, PBC budgets, CSP/WCC initiatives, CSP/WCC overall acute activity & values, Operating Plan and some elements of JSNA.		X	HIS to provide evidence to allow PCT to determine priorities and allow confident decisions to be made and risk effectively measured. HIS to provide evidence PCT to act.
Models activity required to meet waiting list targets and other targets as required for the purpose of SLA creation / CSP / WCC.		X	HIS to provide evidence to allow PCT to determine priorities and allow confident decisions to be made and risk effectively measured. HIS to provide evidence PCT to act.
Models impact of activity shifts within the whole health economy eg shifts from Acute to Primary care settings.		X	HIS to provide evidence to allow PCT to determine priorities and allow confident decisions to be made and risk effectively measured. HIS to provide evidence PCT to act.
Provides local evidence around Policy assumptions and provides Board level narrative around risk eg Polyclinics provides increased access and therefore demand for x years.		X	HIS to provide evidence to allow PCT to determine priorities and allow confident decisions to be made and risk effectively measured. HIS to provide evidence PCT to act.



	AVAILABLE FROM		RESPONSIBILITY FOR ACTION
	CSL	LOCAL	
<p>INTELLIGENT COMMISSIONING</p> <p>In depth analysis of current application of particular patient pathways, research into current services provided for local population and with recommendations as to value for money eg maternity review.</p> <p>Could work closely with Public Health to produce gap analysis from JSNA and stocktake of commissioned services.</p> <p>Provides complete process for data assurance, local enhancement and in depth analysis to allow whole system reporting to be developed to enable PCTs to make confident decisions.</p>		X	HIS to provide evidence to allow PCT to determine priorities and allow confident decisions to be made and risk effectively measured. HIS to provide evidence PCT to act.
		X	HIS to provide evidence to allow PCT to determine priorities and allow confident decisions to be made and risk effectively measured. HIS to provide evidence PCT to act.
		X	HIS to provide evidence to allow PCT to determine priorities and allow confident decisions to be made and risk effectively measured. HIS to provide evidence PCT to act.

Consideration needs to be given during the lifecycle of the strategy to local Informatics Provision – Central or Local?

- Both have a role to play in providing high quality information services to PCTs.
- Local informatics provides PCTs with flexible service and assurance that data is being handled in accordance with local agreements.
- Local informatics service holds central service accountable through informed client role.
- Patient pathways can be developed locally as have access to broader range of datasets.
- Central service provides an element of core data with local service providing extra layers of intelligence to provide knowledge for confident decision making.

7.5. The need for patients to be able access information to support their health and healthcare.

BEHHIS will work with our Stakeholders Trusts re the introduction of HealthSpace. There are some requirements which will not be met by the provision currently planned by NPfIT and therefore BEHHIS will work with stakeholders through the Local Health Community Board to define key work streams for local consideration.

7.6. The need for a fault tolerance Infrastructure to support 24/7 healthcare delivery.

The purpose of technology is to design, implement and support the applications, tools, controls and infrastructure required to provide users with access to their electronic information.

Over the last three years technology services have matured from providing basic services to providing standardised services; provided clinicians with electronic access to patient information; improved network uptime from 80% to over 93.5%; improved telephone support from providing call logging to providing first-line support; and (with the completion of the desktop and server refresh project and the remote access project) provided a standardised, flexible desktop and access to applications and information when not connected to the Trusts' unified network.

During that time requirements and expectations have changed. With the delivery of RiO the dependence on technology services has increased significantly. Now clinicians, not just administrators and management, are dependent on technology services; therefore services need to be available 24 x 7 instead of just 9 to 5, Monday to Friday, and downtime affects clinicians ability to provided effective care; therefore any unplanned downtime needs to be reduced to hours instead of days.

The technology vision for the next three years is to mature from providing standardised services to providing optimised services; close the gap between obligations and expectations; move from supporting systems to providing services and access to electronic information to the whole health community; improve system uptime from 93.5% to 99.9%; increase support services to fulfil the need for 24x7 and extended hours support; and move from being able to provide disaster recovery to providing business continuity.

The vision for technology

- Move from supporting systems to providing services.
- Move from resilient systems to fault-tolerant services.
- Consolidate all services across two data centres.
- Provide logically separate environments on top of a unified physical infrastructure.
- Provide data warehouse and data mining services to support informatics.

7.6.1. Benefits

Realisation of the vision will provide the following measurable benefits:

- Availability will be improved from 93.5% (two days of unplanned downtime a month) system uptime to 99.9% (one hour of unplanned downtime a month) service uptime.
- The impact of a failure will be reduced from potentially affecting all users to affecting no more than 50 users.
- There will be no call charges for internal calls and calls to other mutually connected telephone systems including mobiles.
- Recovery time following a catastrophic failure will be improved from weeks to 24 hours.
- 80% of calls will be resolved on first contact.

Realisation of the vision will provide the following immeasurable benefits:

- Support informatics requirement to underpin the implementation of service transformations.
- Flexibility to quickly respond to changing requirements and expectations
- User satisfaction from providing a reliable, cost-effective service that meets expectations
- Robust security enabling multiple customers to be logically separated while sharing a single infrastructure.

7.6.2. Strategic Fit

The Vision has been aligned with:

- NHS Operating Framework
- NHS Informatics Planning Guidance
- NHS Health Informatics Review
- NHS Guidance on Preparing Local IM&T Plans
- Cisco NHS Network Architecture Blueprint

7.6.3. Existing Resilient Infrastructure

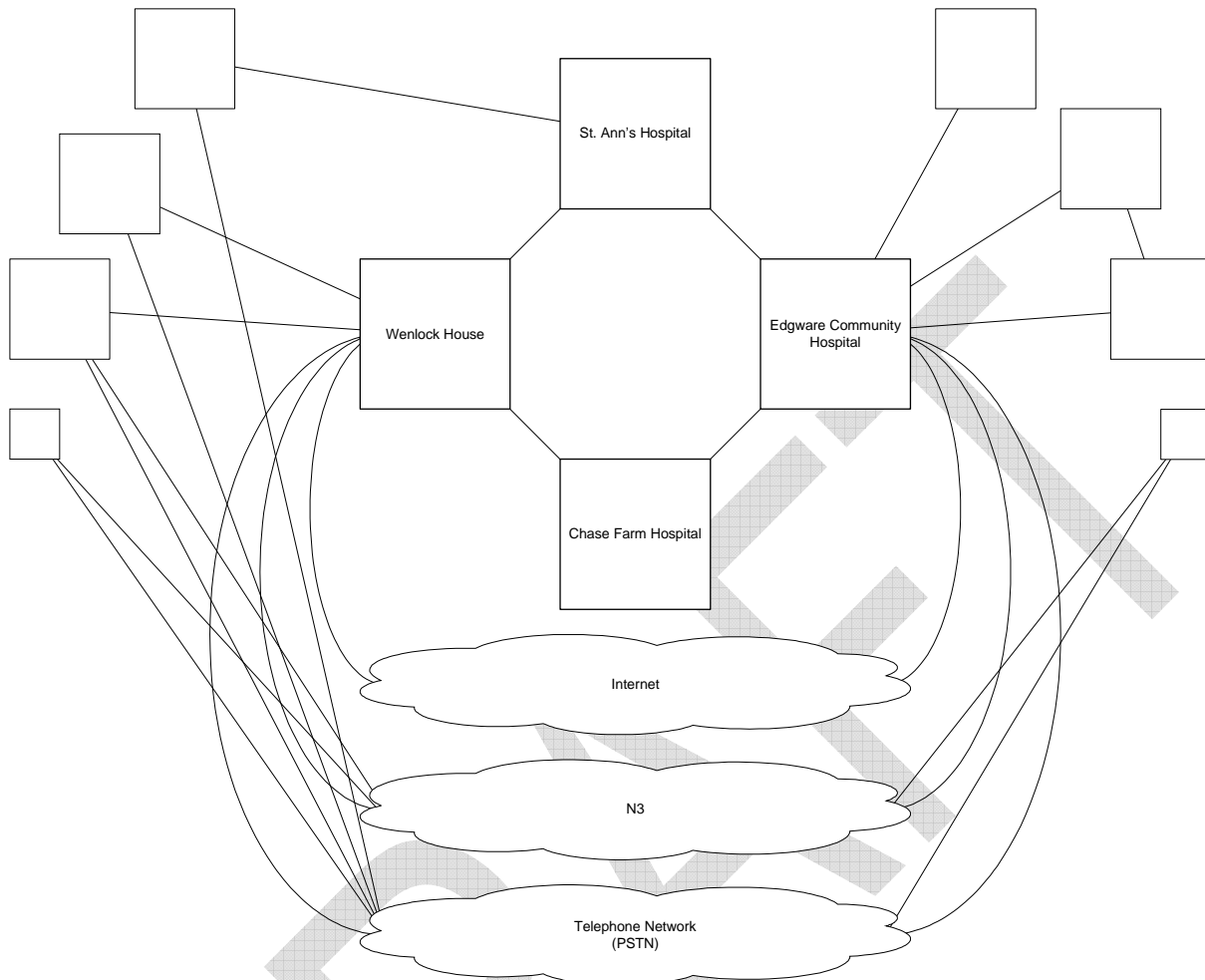


Figure 1: Existing Resilient Network

The existing resilient infrastructure supports a wide range of systems at numerous sites; however there are some limitations to the existing infrastructure including:

- Although there is a network ring linking the main sites ensuring an alternative network connection should one of the network links between these sites fail; most of the smaller sites only have a single network link.
- Although the systems are of high quality ensuring that they do not fail often and when they do fail can be repaired or replaced quickly; they are not fault-tolerant i.e. every failure causes an outage.
- Systems are located at the sites where they are required ensuring performance and availability is not impacted by slow or unreliable network site links; however the physical separation makes it difficult to support and results in massive duplication of systems at each site.

- Most sites have their own telephony solution, which again makes it difficult to support and results in massive duplication, is not fault-tolerant, and does not provide free calls between sites.
- Many sites rely on N3 connections; however they are not as reliable as claimed, because they have no backup links and although they are currently free LPfIT will start charging for them in future.
- The primary data centres at Wenlock House and Edgware Community Hospital do not have fault-tolerant facilities, and have reached their capacity. The data centres and computer rooms at the other sites are generally not suitable.
- The primary data centres are also the network hubs; therefore it is incredibly difficult to move a data centre, since it also requires moving all the network links connecting to the network hub.
- The current infrastructure requires all users connecting to the network to be trusted, connected to multiple physical separated networks or complicated security controls.

DRAFT

7.6.4. Proposed Fault-Tolerant Infrastructure

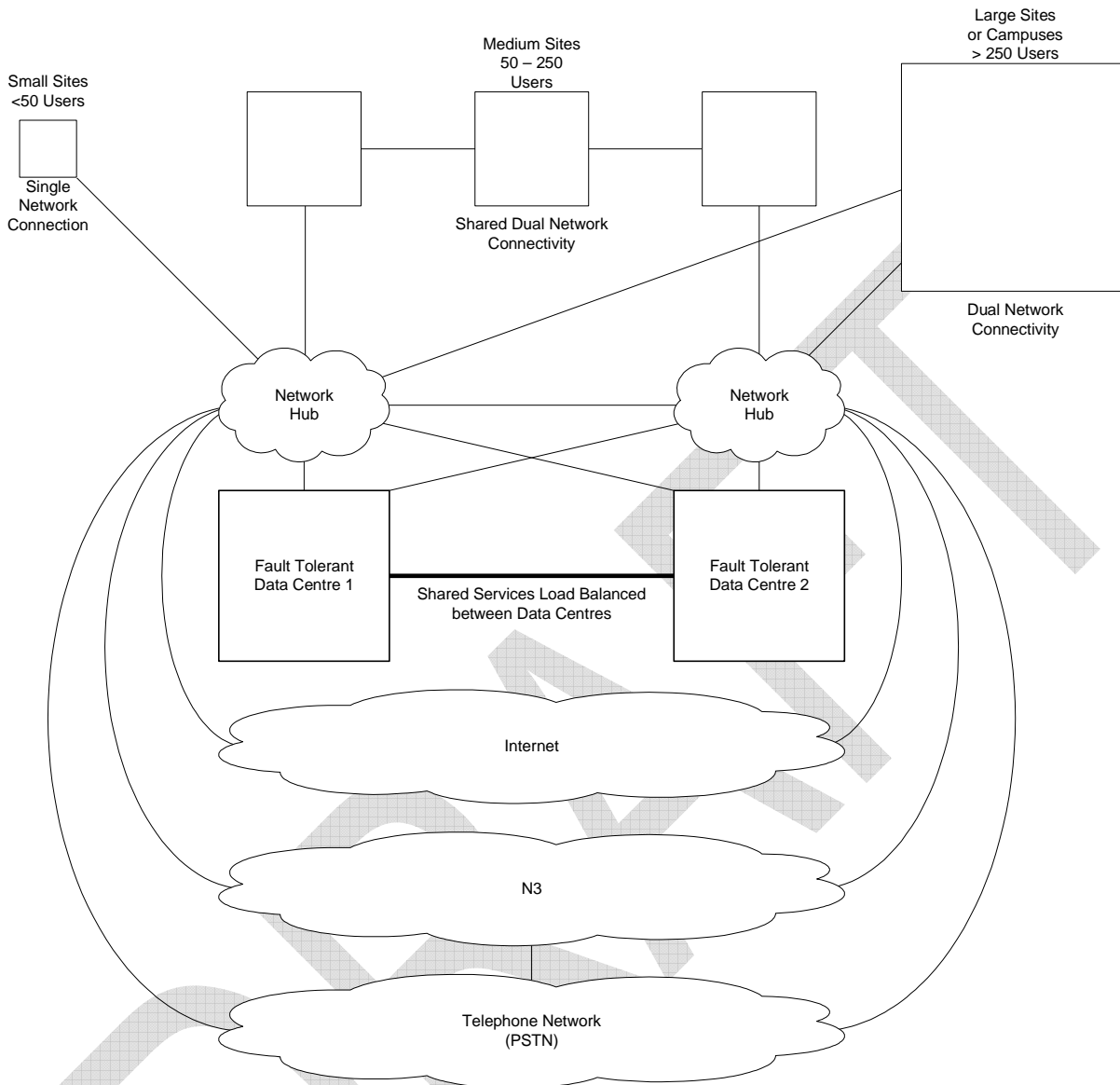


Figure 2: Proposed Fault-Tolerant Infrastructure

The proposed fault-tolerant infrastructure will provide a standardised range of services to any site or customer, which will include the following benefits:

- **Fault-tolerance:** All services will be provided across two fault-tolerant data centres via two separate networks, ensuring that any single system failure will not cause an outage. The limitation is that a single failure can affect up to 50 users connected to a single network switch; however this can be addressed later by providing an alternative network connection to each user, for example via a wireless network.
- **Reduced Management:** Two network hubs provide all sites - including the data centre sites - with only two (for fault-tolerance) network connections, and similarly reduces the number of connections to the Internet, N3 and the Telephone Network to two, for

automatic fail-over, and easier control and management.

- **Data Replication:** Data will be replicated between the two data centres to allow for load-balanced and fault-tolerant services to be provided from both or either data centre.
- **Increased Security:** Virtual networks allow multiple customers to share the same physical network while remaining logically separated.
- **Increased Flexibility:** Virtual networks also allow the physical network to be quickly extended or integrated with other existing networks.
- **Centralised Services:** All services will be provided centrally (from both data centres) to simplify support, allow for centralised capacity management, and provide economies of scale allowing for enterprise level systems to be provided to all users that will automatically fail-over to the other data centre should any component fail.
- **Consolidated Telephony:** Telephony will be consolidated allowing for a single shared telephone directory, enhanced telephony services and free call charges between all connected sites and to other similarly connected NHS Trusts and mobile providers via N3; and automatic fail-over of inbound (and outbound) lines in the event of a telephone link failure.

7.6.5. User Support

User support needs to be improved in the following areas:

- **Call answer time:** Currently the SLA requires calls to be answered on average in 180s; whereas customers expect 90% of calls to be answered within 10s.
- **Call resolution time:** Currently there is no SLA against resolution time; although the HIS has set itself targets to resolve 90% of calls within the following times: Priority 1: < 1 working day, Priority 2: < 2 working days, Priority 3: < 5 working days, Priority 4: < 20 working days, Priority 5: As agreed; whereas customers expectations are that all calls are resolved with 1 – 2 working days. Similarly customers expect 80% of calls to be resolved on first contact.
- **Service availability:** Currently support is available from 9:00 – 5:30 with the Contact Centre available from 8:00 – 18:00; whereas there is a requirement for 24x7 user support – particularly for RiO; and extended hours support for Neighbourhood Health Centres (Polyclinics).

User support service improvements will be achieved through:

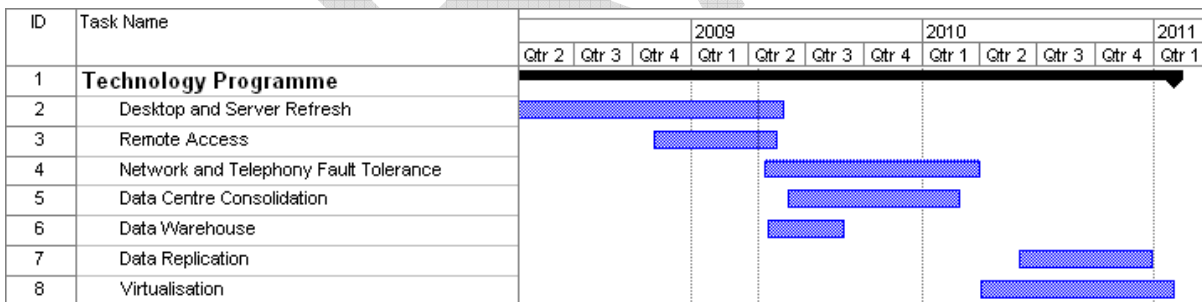
- **Call Volume Reduction:** Systems will be standardised via the Desktop and Server Refresh project to minimise the different types of calls, and by using Problem Management to identify and eliminate common calls.
- **Call Resolution Time Reduction:** Through remote support, support teams will be able to connect to and administer all systems remotely eliminating the need to schedule a time with and travel to the user.

- Self Help: Users will be able to resolve calls themselves by, for example, restoring deleted files and directories through version control; resetting password through a web based tool; automated user account creation and disabling through links with HR systems.
- Training: Contact Centre staff will be trained to ensure that they can resolve 80% of calls. Deskside Support staff will be trained to allow them to provide Problem Management: identify and eliminate common calls; and maintain the standardised environment. Application Support will be trained to provide support for the complete range of applications including the packaging, testing and distribution of new desktop applications.

7.6.6. Approach

The benefits will be delivered through a community programme consisting of multiple projects over the next 2 - 3 years:

- Desktop and Server Refresh (In progress)
- Remote Access (In progress)
- Network and Telephony Fault Tolerance
- Data Centre Consolidation
- Data Warehouse
- Data Replication
- Virtualisation



8. ENABLING THE STRATEGY

The Health Informatics Strategy and its associated programme of work cannot succeed in isolation. Consideration must be given to the enabling entities

- Managing the Programme
- Financing/ Resourcing the Strategy
- Stakeholder Communication
- Risks/ challenges for Success

8.1. Managing the Programme

The programme of work associated with the Strategy will be governed and managed to MSP standards by the HIS Board. The HIS board comprises: representation from all Stakeholder Trusts.

Programme governance will be assured through Information Governance functions and independent audit.

Utilising ICT successfully involves applying a process of business change and understanding key roles and responsibilities necessary to implement the process successfully. Seamless engagement of Health Informatics staff and end users is required to ensure completion of the business change lifecycle. All projects forming part of the Health Informatics Programme will follow the project management principles of Prince2.

8.2. Financing/ Resourcing the Strategy

Funding for the Health Informatics Strategy will be sought from Stakeholder Trust via both capital and revenue streams. In line with good practice BEH HIS will look for efficiencies that release resources to fund a portion of the costs.

The national IM&T investment survey indicates that over recent years the stakeholder Trusts have been relatively low investors in ICT than the national average.

Insert data when released

To respond to the challenging Health Informatics Agenda additional new funding will be required to finance the ICT programme and the associated support arrangements.

Insert data from capital plan when agreed

8.3. Stakeholder and Staff Communication

Communications will be, as far as possible, relevant to particular staff groups and will include elements of 'what's in it for me' to ensure ownership of the strategy. In this way, stakeholders/staff will move through the process of awareness to commitment.

8.3.1. The Path to Commitment

The strategy has three elements aimed at taking stakeholders to the required levels of engagement in order to create the conditions for successful implementation of programme.

These are:

- A **GENERAL AWARENESS** element which will take stakeholders to a general level of awareness of the enabling strategy.
- An **INVOLVEMENT** element for those affected by the strategic aims and objectives
- A **COMMITMENT** element for key stakeholders/staff which will take them to full commitment needed for successful delivery of the strategic programme.

8.3.2. Key Messages

There is a need to ensure that the key objectives of the strategy are realised by reinforcing the objectives through a series of key messages for each of the stages of stakeholder engagement. In the context of the proposed approach to engagement described above, these key messages can be expressed as answers to the following questions:

General awareness for all BEH Health Community staff

- What is the strategy?
- Why is it being implemented?
- What does it hope to achieve?
- Who will it affect?
- How is it going to be implemented?
- What are the timescales?
- What will be the benefits?

Involvement: Specific messages for those that are involved:

- When is it going to happen in our patch?
- How can we prepare for any changes in service?
- Who will be affected?

- What will it mean for those affected?
- Who will be responsible for what?
- Are there any risks?

Commitment: Messages to engage the key stakeholders/staff:

- Why should I (we) make the strategy one of our priorities?
- Why should we support the strategy?
- What is the impact of the strategy on the health community e.g. Trusts, PCTs and other healthcare organisations and agencies?
- How will the strategy affect the way ICT/ healthcare is delivered?
- Are there any risks?
- How will it affect me?

The required outcomes of the three elements of the strategy for the defined stakeholder groups are as follows:

Target audiences	Awareness	Involvement	Commitment
All staff within BEH community	<ul style="list-style-type: none"> • Are aware • Feel informed • Understand the “big picture” • Feel reassured • Appreciate the need for change • Show a positive attitude 		
Staff working in Services undergoing transformation	<ul style="list-style-type: none"> • Are aware • Feel informed • Understand the “big picture” • Feel reassured • Appreciate the need for change • Show a positive attitude 	<ul style="list-style-type: none"> • Are confident that the strategy will deliver real benefits, • Have realistic expectations of benefits • Are clear about their role, what they have to do, and when • Feel a part of the overall service transformation process 	<ul style="list-style-type: none"> • Are enthusiastic • Are supportive • Actively endorse when appropriate • Are positive about working in different ways • Feel actively engaged in the Programme as appropriate
Boards, Directors, Heads of Service, OneHIS Senior Managers.	<ul style="list-style-type: none"> • Are aware • Feel informed • Understand the “big picture” • Feel reassured • Appreciate the need for change • Show a positive attitude 	<ul style="list-style-type: none"> • Are confident that the Programme will deliver real benefits • Are aware of timescales • Have realistic expectations of benefits • Are clear about their role, what they have to do, and when • Feel a part of the overall service transformation process 	<ul style="list-style-type: none"> • Are enthusiastic • Are supportive • Pro-actively endorse when appropriate • Are working in different ways where appropriate • Are fully engaged • Are actively leading • Have assigned the Programme a high priority

8.4. Risk / Challenges for Success

There is a potential risk that any strategic document may fail to address its stated aim. To ensure fitness for purpose a risk analysis has been carried out and can be summarised as follows:

Risk	Mitigation Action
The strategy may not be sufficiently comprehensive	<ul style="list-style-type: none"> • The strategy has been constructed as part of BEH HIS business planning process. • The BEH HIS board has overseen the development of the strategy.
The strategy may not meet local requirements	<ul style="list-style-type: none"> • A critical driver for the strategy is the aims and objectives of the stakeholders Trusts • Consultation about strategy content has taken place with key stakeholders.
The strategy may not address national/ London wide drivers	<ul style="list-style-type: none"> • The strategy author and various contributors are active members/participants in national/ London NHS bodies. • The strategy has been reviewed by informed independent sources.

8.5. Realising the Benefits

BEHHIS work programmes will deliver many opportunities for the stakeholders to support changes in working practices. However, the role of Health Informatics will only be to provide the enabling knowledge, tools and skills. It will be the responsibility of individual services to deliver the service changes if benefits are to be realised.

BEHHIS wish to demonstrate the link between benefits delivered by new information, communication and technology enabled business change projects and wider stakeholder policy priorities, business objectives and service delivery outcomes.

BEHHIS will utilise benefit management planning to introduce a level of accountability for managing and demonstrating the achievement of benefits. In developing the benefits plan the capture of baseline measures at the commencement of the strategy work programmes is critical for tracking the achievement over the strategy lifecycle.

The basic assumption of the benefits management process is that for each identified benefit, there are a series of tasks or actions that have to be undertaken in order to achieve that outcome.

Benefits governance will be through seeking:

- Strong commitment at stakeholder executive level
- Ownership of the benefits management plan
- Robust recording and reporting of benefits at all levels involved in the execution of the strategy.

9. ORGANISATIONAL DEVELOPMENT

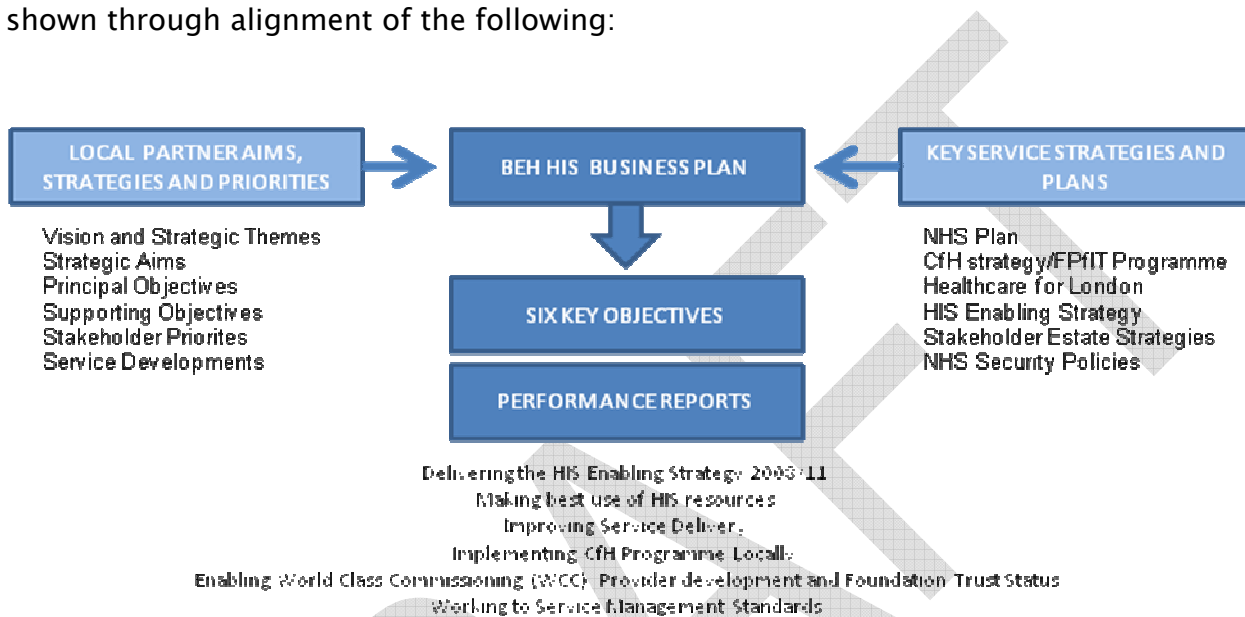
At the inception of the expanded BEHHIS to include Barnet PCT services in 2007 an organisational structure was adopted which was fit for purpose but maximised continuity and allowed rapid progression through the configuration progress to minimise uncertainty and change for staff. This worked very well for our first full year of operation in 2008/09 but will require review during the lifetime of this strategy.

The management structure is currently designed on all powerful, functional directorate basis. This reflects the need to carry out a number of functions for ourselves as well as serving our stakeholders.

Over the last year two years we have evolved our BEHHIS governance systems. Key changes include:

- Being explicit about the governance role of the Host Trust.
- Expanding the stakeholder sub committees of the HIS board to include finance, SLA and Audit/Risk.

Throughout the years, the focus for all BEHHIS operations has always been, and will continue to be, through our core strategy and, as stated in our mission statement, – *delivering outstanding service to our customers*. This is embodied in our business plan: by identifying six key objectives required to satisfy this strategy, we are able to monitor, and demonstrate, our levels of achievement against these aims. The basis for the way BEHHIS operates is shown through alignment of the following:



A organisational development plan in support of this strategy will detail how our organisational development goals underpin our strategic plans. Ultimately, BEHHIS will know if it is a thriving organisation which our stakeholders value through measuring our success via both the strategy and organisational development plan.

9.1. BEHHIS Staff Development

The rapid pace of change in IT requires a correspondingly high level of training to ensure that staff are able to make best use of new hardware and software. The structured environment for service and project management also requires staff to have appropriate training to participate effectively.

With Information Services BEHHIS has already made good use of the National Health Informatics Career framework as an early adopter. It is planned that as this tool becomes more mature BEHHIS will utilise it further to support workforce planning.

As part of World Class Commissioning, the Department of Health with Exeter University are developing a programme – Teaching Operational Research for Commissioning Health (TORCH). BEHHIS have been approached to be a pilot for this innovative course

which will see industry standard predictive models applied within the health arena. This will be our main focus in 2009/10 with further roll out of actuarial skills over the lifetime of this strategy.

10. PERFORMANCE MONITORING

There are three levels of monitoring associated with this strategy:

10.1. National

The Informatics Planning Guidance national expectations will be used for the first level monitoring. Performance within this framework is currently overseen by the NHS Information Executive Group. Quarterly reports are submitted via NHS London in support of that agenda.

10.2. Local

Local reporting will be managed bi monthly through the HIS Board via the BEHHIS business plan reporting cycle. Minutes of the HIS board are available to the Host Trust Board meetings.

10.3. Internal

Progress on the strategy will be monitored through BEHHIS Finance and Performance Committee which meets monthly.

11. APPROVAL PROCESS

Final draft to HIS Board for sign off at a partnership level June 2009.