

Information Management & Technology Strategy 2007-2011

Avon and Wiltshire Partnership Mental Health NHS Trust				
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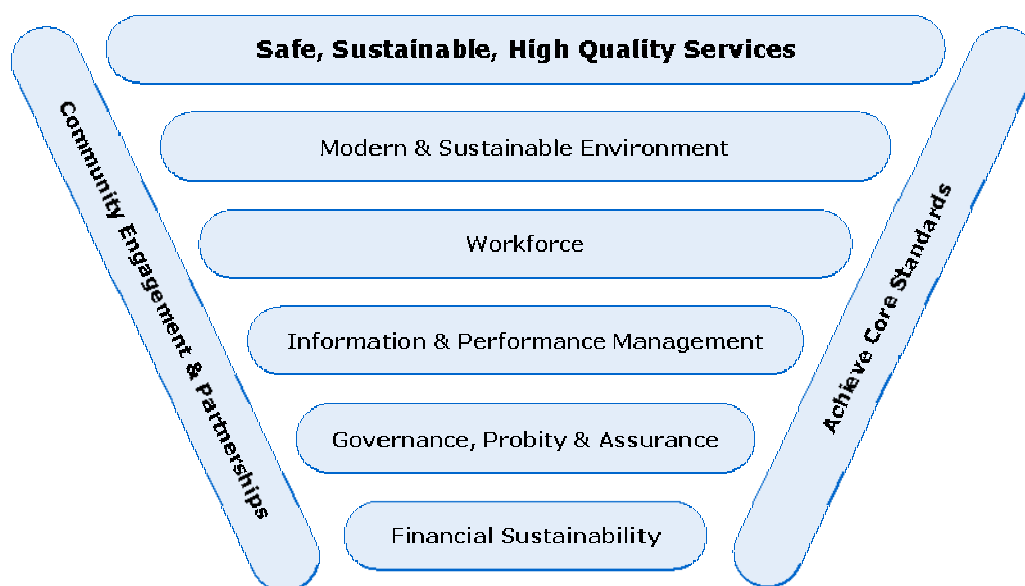
1 Purpose

The Trust recognises that Information is a key asset for the Trust in supporting both day to day clinical operations and the effective management of services and resources. Information Technology is a major driver for initiating change within the organisation, with the capability to create business advantage and enhance the effectiveness of its services. In order to harness the benefits from developing these two major aspects of Information Management and Technology (IM&T) it is important that developments in this area meet the key objectives and priorities, both clinical and business, of the Trust and also the key principles for IM&T development as defined in the Trust's IM&T Policy.

The purpose of this document is to set out the strategic direction for IM&T development over the next four years and the process for implementing it for the period 2007 to 2011.

2 Background

In contributing to AWP's future fitness for purpose the Trust requires an IM&T Strategy to deliver across all of the domains of sustainability which the Trust has identified as core to the achievement of its overall Business Strategy as shown diagrammatically below.



A robust IM&T Strategy will support the Trust in delivering these objectives in a number of ways. For example:

Financial Sustainability – improved value for money: efficiency savings from use of technology: Foundation Trust status supported through having accountability agreements in place with internal customers.

Governance, Probity & Assurance – information managed in accordance with legislation: accessibility of corporate records.

Information and Performance Management – providing appropriate integrated information systems and supporting their use.

Workforce – providing appropriately skilled staff to support the changing technological requirements of the Trust.

Modern & Sustainable Environment – providing new and innovative solutions to support new ways of working: ensuring buildings have appropriate modern infrastructure to support their functions: using technology to support environmental sustainability.

Safe, Sustainable High Quality Services – ensuring appropriate access to information is maintained to support the safe delivery of care.

Community Engagement and Partnerships – providing accessible information to both service users and our partner agencies.

Achieving Core Standards – meeting the requirements of the Information Governance Toolkit.

2.1 Previous IM&T Strategy

The Trust's previous IM&T strategy aimed to achieve better communication and dissemination of information in order to increase productivity and effectiveness throughout the Trust. Investment was made to provide a common IT infrastructure, providing an integrated working environment supported by appropriate IT systems, services and skills. The key achievements of the strategy were:

- The provision of a modern core Trust infrastructure connecting over 60 main bases, providing access for over 3,600 staff from over 2,500 PCs to the Internet, the Trusts Intranet, email, office automation (MS Office), file storage and core information systems.
- The implementation across the Trust of a single integrated Mental Health Information System, which replaced nine legacy systems. This also included the implementation of the Mental Health Minimum Dataset.
- Preparation for the National Programme for IT including adoption of the required technical standards and use of the New NHS Network (N3).

2.2 IM&T Investment

Planned Investments in IM&T within NHS organisations are often benchmarked against the findings and recommendations of the Wanless Report.

“ .. without a major advance in the effective use of ICT, the health service will find it increasingly difficult to deliver the efficient, high quality service, which the public will demand. This is a major priority which will have a crucial impact on the health service over future years.”

To support modernisation of public services the Wanless report recommended that the NHS increase its investment in IM&T to an equivalent of 4% of turnover. For AWP this would be the equivalent to £7.3 million per annum in 2007/8.

The national average investment for 2006/7 was 2.5% of turnover, in AWP the equivalent figure from this year's NHS IM&T Investment survey return remained at 2%.

The Trust is therefore investing currently below the national average 2.5% of turnover in its IM&T Services - and significantly below the 4% recommended in the Wanless Report. Remaining at this 2% level of investment will be insufficient to enable the Trust to continue to modernise its systems and technology such as implementing the National Programme for IT (NPfIT).

3 Strategic Drivers and Context

The Trust requires accurate, timely and relevant information to enable it to deliver the highest quality care and to operate effectively as a modern and effective public sector organisation responsible for health and social care of individuals with serious mental health problems. Having accurate relevant information available at the time and place where it is needed is critical in all areas of the Trust's business and plays a key part in corporate and clinical governance, strategic risk, service and workforce planning and performance management.

This strategy describes the strategic drivers and context within which it must operate, considers the impact of Connecting for Health (CfH) and the National Programme for IT (NPfIT), the data required, the information systems needed to deliver the data and the technical infrastructure, governance arrangements and the staffing and resources required.

3.1 Foundation Trust Status

AWP is in the preparation stages for making an application for 'Foundation Trust' status. Such an application requires the Trust to provide the application assessment authorities with substantial quantities of information, which will describe in some detail the objectives and development plans that the Trust intend to pursue in operating as a successful Foundation Trust. Objectives and plans related to the information management processes and the information technology deployment will form an important part of the application detail. Certain specific IM&T requirements need to be met to enable a Foundation Trust application to be approved. Those stated formally are:

- To demonstrate that the IT systems covering financial reporting and procedures are fit for purpose;
- To demonstrate governance of IM&T within the Foundation Trust committee structure
- To provide an overview of IT systems including readiness for national initiatives such as the National Programme for Information Technology (NPfIT), Choose & Book, etc
- To demonstrate compliance with the requirements of the Information Governance Toolkit, particularly with regard to the Statement of Compliance
- To provide a summary of key risks for IT that may impact the Trust plans. Assessing likelihood, describing mitigation actions and detailing potential financial and non-financial impact, including describing the worse case scenario.

Once FT status is granted, the Trust will have greater autonomy and financial flexibility in how it meets national and local requirements, guided by the views of local people, service users, partners and other stakeholders. It will be required to demonstrate on an ongoing basis, robust management and governance arrangements.

As more trusts achieve Foundation status, there is an increased likelihood of the Trust's services changing at relatively short notice as new services are developed or acquired and existing services divested which will require flexible IM&T services.

IM&T has a key role to play in enabling the Trust to

- manage, monitor and understand its own clinical and financial performance
- analyse the local environment and markets, both in terms of current and future demands
- benchmark itself against competitor organisations.

3.2 Policy Environment

There are a range of national policy and strategic drivers which require strategic IT developments and / or robust IT support to ensure effective implementation and delivery.

In 2000, the NHS Plan described the 10 year NHS development strategy. It set out a programme of investment and reform to transform services to make them more responsive to patients and deliver the best possible care for the population within available resources. It proposed developments for increased capacity, improved standards, reduction in waiting times, increased investment, changes to staff terms and conditions, encouragement of local autonomy, closer working with social care and greater involvement of patients.

The NHS Operating Framework for 2007/8 describes the "second phase of reform" and emphasises more choice and voice for patients, more diverse providers, financial incentives to ensure best value, more national standards and regulation and *"sustained focus on information management and technology to underpin reforms and deliver better, safer care"*. Specific priorities for 2007/8 are "18 weeks to treatment", reducing rates of MRSA, reducing health inequalities and promoting health and well being, and achieving financial balance.

The current national NHS objectives which directly impact on mental health service provision include:

- Improving and protecting the health of the population, with special attention to the needs of the poorest and those with long-term conditions
- Increasing choice of providers of acute care and in long term care, (such as mental health), appointments and treatment regimes
- improving access and responsiveness in primary and urgent care
- shifting more services from secondary to primary care settings
- speeding up access to hospital care
- delivering effective medicines management

- implementing the new Mental Health Act
- changes to financial arrangements including the introduction of Payment by Results and Practice-based Commissioning.

The most significant IT driver for this strategy is the National Programme for IT which aims to bring modern computer systems and an integrated IT infrastructure to transform patient care and services. It is described in detail in section 4.

The White Paper, "Our health, our care, our say", published in 2006, describes a new direction for community services. It has four central aims which have particular relevance to those with longer-term health conditions such as mental health problems. They seek to ensure:

- better health and well-being
- convenient access to high-quality services
- support for those in greatest need
- care in the most appropriate setting, closer to home.

These re-emphasise the NHS objectives but with the expectation of these being delivered in an integrated way between health (in both primary and secondary care), social care and other statutory and voluntary agencies.

By 2008 everyone with both long-term health and social care needs must be offered an integrated care plan, and in 2010 this will be extended to everyone with a long-term condition. The best approach is to deliver this via an integrated health and social care information system so that the shared care plan will be available to relevant staff as the individual moves through care services.

The introduction of Practice Based Commissioning (PBC) will result in commissioning decisions and budgets being devolved to groups of GP practices. PBC will require a strong focus on understanding service users' needs, where these can best be addressed and reasons for referrals into secondary care, the effectiveness of those referrals and the associated costs. PBC is expected to drive up demand for timely and accurate healthcare activity and outcome data.

The introduction of Payment by Results (PbR) will ensure that funds follow the choices made by patients and hence that trusts are paid for the activity they undertake. It is not yet clear how this will operate for mental health although there is a clear expectation that the Trust will move towards a system linking payment and activities within the next financial year.

3.3 National Performance Assessments

In 2006, the Healthcare Commission (HCC) began "Annual Health Checks" to review trusts' performance and to provide assurance that basic core standards are being met, improvements made and that services provide value for money.

The HCC uses a variety of data to assess or validate trusts' performance:

- Trusts are required to declare their performance on 24 core standards ("Standards for Better Health") with the HCC using over 2000 pieces of data to cross check the validity of declarations

- Existing and new national targets are generally based on numeric or descriptive data returns
- Service reviews and national studies typically use a range of data from both new and existing data sources.

Trusts' use of resources is assessed by the Audit Commission's ALE assessment which is based on financial reporting, management and standing as well as internal controls and value for money.

These two assessments provide an integrated approach which is more stringent than that previously adopted and requires robust, consistent reporting across all areas of activity and performance. The current infrastructure needs strengthening to ensure accurate and timely data recording and collation in all areas.

A national Social Care performance assessment framework is being developed and will be monitored by the Commission for Social Care Inspection (CSCI). The social care elements of Trust service provision contribute to the performance ratings for Swindon, Wiltshire, Bristol, North Somerset and B&NES Local Authorities.

3.4 Performance Management Framework

The Trust's Performance Management Framework is the approach being taken to ensure performance improvement within the Trust. IT is key to this process, both as holders of the data held in operational systems and as developers supporting the publishers of performance indicators. This involvement is expected to increase during the life time of this strategy particularly when the Trust achieves Foundation status.

3.5 Information Governance

"Information Governance" assures the confidentiality, availability, integrity and protection of information (service user, staff, financial, organisational, paper or electronic). NHS trusts are required to annually assess and improve their performance against 60 "best practice" standards that make up the Information Governance Toolkit. The assessment is also used by the HCC to validate other declarations and therefore is a high priority for the IM&T Strategy. A social care information governance self assessment is also proposed.

3.6 Transformational Government

Over the last 5 years, the Government has implemented a number of targets relating to making a range of government services available electronically and ensuring interoperability and data exchange between government systems. In 2005, the Government established the "Transformational Government" programme which describes transforming government through technology and making government transformational through the use of technology. Connecting for Health (see section 4) is seen as one component of this vision.

3.7 Climate Change Policy

Climate change policy has particular impact in relation to Information Technology from the reduction in waste caused by technology refresh, required by the Waste Electrical and Electronic Equipment (WEEE) regulations, to contributing to the reduction in CO2 emissions. According to the recent ETNO/WWF report "Saving the Climate @ the Speed of Light" Information Technology can be an important part of combating climate change. The report outlines a roadmap for the ICT sector, and sets out targets for 2010 and 2020. The target for 2010 is to use ICT to reduce CO2 emissions by 50 million tonnes. ETNO has collected the results from some third-party

verified projects and come up with the following examples of how ICT can help to reduce CO2 emissions:

Video conferencing: if 20% of business travel in the EU 25 was replaced by video conferencing, this would save 22.3 million tonnes of CO2

Audio conferencing: if 50% of EU workers replaced one meeting with one audio conference a year, this would save 2.2 million tonnes of CO2

Flexi-work: if 10% of the EU 25 workforce were to become flexi-workers, this could save 22.17 million tonnes of CO2 a year

Online billing: 100 million customers receiving online phone bills would save 109,100 tonnes of CO2

Web-based tax returns: 193 million web-based tax returns would save 195,000 tonnes of CO2.

3.8 Other Drivers

As a major provider of Substance Misuse Services, the report, "Tackling Drugs, Changing Lives" published in 2004, as an update to the national Drug Strategy, is a significant driver. Its aims are to:

- reduce the supply of illegal drugs
- prevent young people from becoming drug misusers
- reduce drug related crime
- reduce drug use through increased participation in treatment programmes.

The Drug Strategy is the responsibility of the Home Office and as a result the monitoring and data and requirements differ from other mainstream NHS services. The Trust already responds well to these requirements but these are expected to increase during the lifetime of this strategy. Responsibility for prison health care passed to PCTs in 2006 to ensure that prisoners received the same quality and range of health services as the general population. A particular issue for our Trust is the high level of drug misuse in the prison population which is likely to require increased input from the Trust services.

4 National IT Strategy

4.1 National Programme for IT (NPfIT)

NPfIT was established in 2002 to implement the national IT strategy "Delivering 21st Century IT Support in the NHS". It aims to provide modern computer systems and an integrated IT infrastructure to improve patient care and services and to transform the way the NHS works by enabling shared access to patient information at the point of care. In time, it will be used by over half a million clinical and support staff in the NHS in England. It will give patients direct electronic access to their personal health and care information.

Connecting for Health (CfH) is the organisation, primarily responsible for delivering the National Programme for IT (NPfIT) in the NHS as well as a number of other national IT initiatives such as technical standards.

The key NPfIT components are:

- National Care Records Service (NCRS) – the electronic patient records connected to a national data spine
- Choose and Book (C&B) – the system to enable electronic referral and appointment booking from primary to secondary care
- Electronic Transmission of Prescriptions (ETP) – the system which enables electronic transmission of prescriptions from GP surgery to local dispensing pharmacies
- Picture Archiving and Communications Systems (PACS) – the system for holding and transmitting X-rays and other clinical images (including video)
- GP practice systems
- N3 – the national NHS broadband communications network
- NHSmail – the national e-mail and directory service
- My Healthspace - a secure on-line personal healthcare organiser

Local Service Providers (LSPs) are consortia of system suppliers, contracted to deliver IT systems and services at a local level for the five regional clusters of strategic health authorities. Our Trust is within the Southern Cluster which has Fujitsu Services holding the LSP contract.

NPfIT is an ambitious programme which has experienced delays, with current system migrations running an estimated 2 years late and there are concerns over its achievability. Following the National Audit Office report in 2006, there have been positive changes in the structure to increase local ownership. This is known as the NPfIT Local Ownership Programme (NLOP). As part of this change a Southern Cluster Board, made up of the three Strategic Health Authorities is leading a contract reset process to realign the contract with local requirements and priorities. This process is due for completion in December 2007 and revised implementation plans will follow.

4.2 Operating Framework for 2007/8

The Operating Framework for 2007/8 includes a significant requirement for the second phase of NPfIT developments. It describes a strategy which includes “...sustained focus on information management and technology to underpin the reforms and deliver better, safer care”. It specifically states that “*IM&T is central to the delivery of health reform, supporting patients in their choices and helping to deliver better, safer care. That is why we remain committed to the vision of a modern IT-enabled NHS set out in “Delivering 21st Century IT Support for the NHS” and to a national programme for IT.*”

All trusts are required to have local IM&T plans “*to actively build the IM&T and service transformation capacity and capability required to deliver this modern, IT-enabled NHS*” with the goal for 2011 is that NHS IM&T “*will enable safe and seamless delivery of patient care across organisational boundaries*”.

Strategic Health Authorities are now accountable for NPfIT implementation and benefits realisation with ownership residing with the NPfIT Local Ownership Programme. Connecting for Health continues to be responsible for

managing national contracts and developing national standards and tools and services to support local implementation.

There is a clear expectation that all English trusts will migrate to, or link to, NPfIT products and services. In preparation, providers are required to ensure they have clear policies and processes in relation to data sharing and data handling, implementing the Care Records Guarantee (which ensures patient's rights to confidentiality), disaster recovery plans and fully utilising the NHS Number.

4.3 National Care Records Service (NCRS)

NCRS was developed in recognition that paper-based records cannot adequately support the modern patterns of care which may be delivered by staff from many disciplines, across multiple sites and agencies.

Within the Southern Cluster, Fujitsu Services are implementing the Cerner product known as Millennium. The first phase of which has been implementation of the Patient Administration System (PAS) capable of linking to the national data spine and this has been mainly in acute trusts without an adequate PAS.

AWP was scheduled to take release 2 of Cerner Millennium in July 2008, with engagement commencing in March 2007. Release 2 was selected as an appropriate entry point to NCRS for the Trust as it was anticipated that there would be sufficient functionality to replace the Trusts current integrated system and provide additional benefits from full prescribing, NTA functionality, Mental Health Act and Clinical functionality (particularly to support ICPA and SAP/CAF). These timescales, and those for other Trusts implementing release 1 and 2, are now under review by the Southern Cluster as part of the contract reset process. This reset is also considering the possibility of a replacement strategic solution for mental health and based on the London Cluster solution, RIO, to allow earlier migration than the Cerner solution is likely to provide.

In order to prepare for the implementation of NCRS the Trust undertook a project to review, document and, where appropriate, redesign its clinical processes. Following on from this the Trust has now initiated an NCRS project to review the specification of requirements for its clinical system, undertake an option appraisal and produce a business case ready for NCRS implementation.

The latest Connecting for Health guidance on NPfIT outlines a Systems Maturity Model (see Figure 1) which shows the required levels of functionality and linkages to other systems such as booking systems and the data spine. All provider trusts are expected to be linked to the data spine by 2009 and achieve Level 6 by March 2011 through the implementation of NPfIT systems.

4.4 Other NPfIT Products

The Choose and Book system enables GPs to make electronic referrals into provider trusts and to enable the patient to choose their provider and book their appointment at a convenient date and time. The system was primarily designed for acute trusts and has some limitations when used in mental health. In time, Choose and Book will enable direct links into provider trusts' patient systems.

“My Healthspace” is a secure online personal healthcare organiser and in time will enable people to log in to a summary of their care record. This is likely to be of particular interest to our service users once it is operational.

The existing National Strategic Tracing Service (NSTS) which currently can be used manually or via automatic data exchange to validate a patient's name, address and registered GP will be replaced with the Patient Demographic Service (PDS) and Personal Spine Information Service (PSIS) from 2008.

Confidentiality of patient information is protected with access being via personal smartcards. However there are a number of confidentiality issues which would need to be addressed as part of implementation project, including meeting the requirements of the nationally mandated Care Records Guarantee.

Other NPfIT systems such as the electronic transmission for GP prescriptions and Picture Archiving Communication Systems (PACS) are unlikely to have a major impact within the Trust within the timescale of this strategy.

National Application Service Providers (NASPs) are responsible for delivering the national services at a local level.

- N3 is provided by N3SP (a wholly owned subsidiary of BT). It is the national NHS broadband communications network for accessing NPfIT applications via provision of fast and reliable communications bandwidth to all NHS sites.
- NHSmail, currently provided by Cable and Wireless, is the national e-mail and directory service. It has some advantages (i.e. security, low cost and easier remote access) compared to the use of MS Exchange installed on a Trust-based server.

Both the systems and hardware of core products such as NCRS, Choose and Book and N3 are provided free so that their implementation enables trusts to release funding from legacy systems. However migration costs are high particularly in replacing local systems and linkages to other systems, reporting tools etc and therefore full business cases will still be required for migration projects.

Over the last few years, NPfIT has had a significant impact on IM&T strategy in all trusts and on the NHS systems market. This is expected to continue for the lifetime of this strategy.

5 Strategic Vision for IM&T

5.1 Trust Vision

The Trust's Strategic Aim **“Together, making a difference for mental wellbeing”** is captured in its vision statement:

“We provide high quality, safe, sustainable services for our diverse communities that all of us would trust to improve our wellbeing. Together, we support individuals to reach their potential, to live fulfilling lives.”

In pursuit of this Vision, the Trust Strategy and Integrated Business Plans and to support the Trust's intent to become a Foundation Trust, AWP has adopted a strategic IM&T vision where:

“AWP is a dynamic and innovative provider of mental health care through harnessing the power of its information assets and fully exploiting technology solutions.”

This is a challenging vision to deliver, but it is achievable. To underpin it the Trust has built its IM&T strategy on the following foundations:

- Being courageous and innovative in our use of Information systems and technology.
- Ensuring the whole workforce is capable and comfortable with the use of technology and information in their role in the workplace.
- Investing in IT core infrastructure to ensure its performance does not inhibit the use of available systems and technology.
- Managing all its information in electronic formats and systems enabling it to provide an integrated repository that is a powerful knowledge base for the business.

In response to the strategic drivers outlined and the strategic vision for IM&T a strategy for the period 2007 – 2011 has been developed. It is planned that by 2011, the majority of clinical and business information will be held electronically and the Trust will be actively utilising technology to support service change.

5.2 Horizon Scanning

To achieve the vision the Trust will actively seek out new technological solutions that can enable new ways of working through encouraging horizon scanning for new potential solutions, investigating their feasibility, promoting their development and then by piloting and rapid roll-out of solutions.

5.3 Electronic Care Records

There will be a single corporate patient information system that supports clinical care that can:

- hold the majority of clinical notes and act as the Trust primary “Patient Master Index”
- proactively support the agreed Trust Care Pathways
- include increased recording of interactions with service users, both for therapeutic interventions and information dissemination
- have a facility for using electronic tools such as on-line assessments
- have a facility to electronically store information received from other agencies whether received in paper or electronic format
- Exchange information with national / approved NHS other partner agencies
- exchange information with specialist or departmental systems holding service user information

- systems will be able to generate warnings and alerts automatically to direct clinicians to follow best clinical practice and clinical guidelines.

5.4 Robust and Integrated Information systems

The clinical and business information systems of the Trust will:

- enable the widest use of information held in the systems, based on appropriate role based access security models
- be able to exchange information with other systems, internal or external to the Trust
- have appropriate confidentiality controls enabling easy access to relevant information for authorised users and preventing unauthorised access
- be easy to use for both regular and intermittent users
- hold data in a format suitable for both NHS and social care requirements.

5.5 Using IM&T to improve efficiency and effectiveness

To better support the management and operations of the Trust:

- Business processes will be supported by electronic systems such as document management, electronic diaries, workflow systems etc.
- Data needed to manage and monitor Trust performance, internally and externally, will be extracted automatically from operational systems
- Electronic business and e-procurement will be implemented where possible
- Performance indicators will be widely available and in a format appropriate for the user, with their content targeted to appropriate levels.
- Technology will be used to collect information, such as through the use of bar codes, voice recognition, touch screens etc.
- The Trusts Intranet will be used as the primary internal source of shared information
- Technological solutions will be used to support the Trust's "Green Agenda".

5.6 Information and Services for Service Users and the Public

To fully support service users and carers involvement in their own care and the Trust's business and in support of the Trust's Patient Information Strategy the Trust will ensure:

- a wide range of up to date information about the Trust, its range of services, mental health conditions, treatments etc. will be made more readily available through the use of technology e.g. using the Trust's web site and intranet.

- IT services will include the provision of access for service users to the Internet for educational and therapeutic uses of information technology to support service user care and social inclusion.
- service users are encouraged and supported in using My Health Space to access and contribute to their information
- on-line feedback mechanisms are established for formal consultation and FT involvement and voting.

5.7 Supporting Technical Infrastructure

This vision will require a robust technical infrastructure, based on

- every member of staff having ready access to a networked workstation at (or very close to) their work place
- workstations being suitable for staff members' specific needs
- staff being able to securely access systems remotely from other sites (both Trust and elsewhere) using PCs or mobile devices
- every Trust site being securely connected to the corporate network by a resilient data link with sufficient capacity for business purposes and with a back-up line in case of failure
- the Trust corporate network being connected to the national NHS infrastructure network by a resilient data link with sufficient capacity for business purposes
- sharing voice and data networks where it is technically sound and financially appropriate
- information systems and infrastructure being generally available 24x7 and appropriately supported
- staff at all levels having competence and confidence to use both information and systems in their day to day role
- making use of national systems and services where they are cost-effective and fit for purpose
- systems being technically linked and able to exchange data and messages, through both electronic messaging and shared data input.

6 Information Systems Strategy

The strategic IM&T vision and drivers requires a new generation of information systems which proactively support operational processes rather than being reactive recording tools and data storage systems. The new systems will be capable of guiding the system user through the Trust's recommended way of working, facilitating the agreed care or business process and preventing inappropriate actions.

6.1 Service User Information and Systems

Holding and accessing information about service users and their interactions with clinical teams is critical to providing safe and effective care and to supporting many other aspects of Trust business. The information systems and processes used must

be robust, fit for purpose and flexible to accommodate changing circumstances and enable the Trust to exploit the opportunities to use systems to transform the way that services are provided.

6.1.1 Care Records

Clinical case notes are currently the main tool for recording interactions with service users. MaraCIS is used for recording administrative events and is increasingly used to record clinical information such as letters and care plans. This enables the information to be readily available Trust-wide to clinicians with a legitimate interest, including those not directly involved in the case.

Clinical case files are bulky, expensive to store and are often not readily available to clinicians at the required time and place. In bulky files, critical information may not be immediately obvious, posing a risk to the service user, the clinician or others. Using electronic systems to hold all such information would enable it to be accessed at any time or place, at sites across the Trust and in other locations.

Clinical contact between staff and service users can occur in many settings, usually in sites belonging to the Trust or partner agencies, but often in the individual's home. Clinicians need to be able to access and record data about the individual service user close to where this contact occurs. They also need to be able to quickly check key information, particularly at times of crisis.

All patients will be known to, and may be being treated by, other parts of the NHS. Being aware of and able to access clinical details is key to successful, safe treatment but this information can be hard to access.

6.1.2 Current System

The Trust has used MaraCIS as its corporate service user system for over 10 years. It is reliable and meets many of the basic information and processing requirements for day-to-day operational business, performance management and monitoring. However its user interface is considered poor from a clinical perspective and it is not yet NPfIT compliant, although the supplier is still working toward such compliance for both Spine connectivity and Choose and Book.

6.1.3 NCRS Implementation Project

The critical development within this strategy is the plan to implement NCRS in the Trust to provide full electronic service user records within 2 years. It is anticipated that by 2011 the Trust will have migrated from using a combination of paper care records and MaraCIS to electronic care records holding the majority of clinical data. The patient record system will proactively support clinical practice throughout the care pathway, based on ICPA and SAP/CAF, and will enable easy immediate access to all relevant service user information to those with appropriate authorisation. It will correspond to Level 6 on the CFH systems maturity model.

The end product will guide clinicians through, and significantly improve, the care pathway for service users, incorporating minimum standards for clinical processes. It will bring a fundamental change in the way of working for most clinical staff. While the migration to electronic patient records is the key component enabling this change, this project must be viewed as a service

transformation project rather than an IT project. The key issue is that service change is being enabled by technology rather than technology being implemented for its own sake.

A work programme will be developed which describes the benefits and transformation required and implements the transformation, in conjunction with the implementation new mental health information system.

Early decisions will be required on the quantity of historical data and records to be held on the system and whether current paper documentation (such as GP referral letters) should be scanned and held electronically.

NCRS will be the Trust's main corporate mental health information system. Any requirements to record additional local service users' data will generally be met through this system. If this is not possible, use of any other system will be assessed on a case by case basis prior to procurement to determine whether it is cost-effective and to ensure it does not contradict the Trust's strategic IM&T vision. As a minimum, it is essential that any departmental system is capable of sharing information and integrating with corporate systems and infrastructure.

6.2 Other Clinical Systems

6.2.1 Choose and Book

As the Trust receives referrals to teams, not consultants, it is not included in current targets for the use of choose and book. It has been recognised nationally that mental health has particular risks and requirements for the use of the system and national pilots are being undertaken to ensure the system can fully support this. The Trust has anticipated utilising Choose and Book once direct booking was available either through the implementation of NCRS or provision by its current system supplier. The Trust then intends to use the national electronic booking system to enable GPs to check our Directory of Service and to make electronic referrals and bookings either into a predetermined multi-disciplinary allocation meeting or assessment clinic.

6.2.2 Electronic Transmission of Prescriptions

Electronic transmission of GP prescriptions to the community pharmacy is available from GP systems. It is anticipated that this facility will be extended to mental health in later releases and should be possible for the Trust to use developments in this area once it has moved to electronic prescribing within NCRS. This would be particularly beneficial for the Substance Misuse Service where daily prescriptions are used as part of detoxification programmes.

6.2.3 Picture Archiving Communications Systems (PACS)

There is no requirement to implement PACS (electronic X-rays) within the Trust during the lifetime of this strategy. However electronic access to other Trusts PACS systems, used under SLA for access to results and images, is required and this may impact the standards and bandwidth requirements for the Trust's network.

6.2.4 Primary Care System Requirements

The Trust currently delivers Primary Care Psychology Services from within GP practices in many areas of the Trust and intends to expand this area of its

business. However the information requirements for this service are significantly different from secondary care and at present it is uncertain how these needs will be met within NCRS provision. This area requires further investigation and until the NCRS solution is clear a separate interim primary care psychology system will be implemented during 2008 to meet the distinct requirements of the service including recording of the new IAPT dataset.

6.3 Business Systems

The Trust has business functions which use information systems to support their operations. The strategic development principles for these are similar to those for patient systems i.e. using systems to facilitate quicker access to information Trust-wide and exchanging information with other authorised systems.

6.3.1 Finance Systems

The Trust currently uses the Cedar eFinance system which has the capability to meet some of the Trust's future requirement such as the use of full eProcurement. It has not been successfully used for asset management and currently a small standalone departmental system Asset 4000 from Real Asset Management is used. The Trust has also recently implemented the Trojan patients' monies system.

The Trust's core financial system needs to reflect the development of PbR and the costing requirements in an FT regime, therefore an appraisal of the suitability of the existing system to meet these needs will be undertaken during 2008-9.

6.3.2 HR Systems

The Trust implemented the national Electronic Staff Record System (ESR) which provides our integrated HR and Payroll system. The Trust has further implemented the recruitment module and much work has been undertaken to ensure the HR information is the definitive source for the Trusts organisational structure. During 2007/8 further electronic processes are being introduced using InfoPath electronic forms to gain further benefits from the system and it is anticipated that self service functionality may be deployed sometime during 2009-10. It is essential that ESR can effectively meet the employment information recording and analysis requirements of equality legislation and the Trust's equality scheme.

Training records are currently held on a Managed Learning Environment MLE purchased on behalf of local Trusts by the AGW Workforce Confederation. It is anticipated that should equivalent functionality become available within the learning module of ESR during the lifetime of this strategy an evaluation would be undertaken to decide which would better meet the Trusts requirements. The MLE is also a delivery mechanism for eLearning modules and these will be further developed and rolled out to provide an efficient and cost effective training mechanism.

The Trust currently uses the HMT Roster Pro system to support staff rostering on in-patient wards and the intention is to link this with ESR data to produce integrated information e.g. sickness absence. It is not expected that this system is likely to need replacement during the life-time of this strategy but

should equivalent functionality become available within an ESR module this would be also be evaluated.

There is currently no Bank Staff Management System implemented within the Trust although this functionality is available within the Roster Pro system. A decision to move from directly employing Bank Staff to using NHS Professionals will require the development of an interface between the Rosterpro system and the system used by NHS Professionals (Baumhart) during early 2008.

6.3.3 Pharmacy Systems

The Ascribe system is used within the SDAS SBU to provide prescription printing however this will be replaced by prescribing within NCRS. Once NCRS is implemented projects will be undertaken to review options for medicines management through the expanded use of its prescribing functionality and also the potential for greater automation of Pharmacy processes, e.g. through the use of robotics.

6.3.4 Capacity Modelling

In order to support the negotiation of its contracts with PCTs for services the Trust needs to more fully understand its clinical capacity. The implementation of a capacity modelling system is now underway in order to provide this information and this will also support effective caseload management within teams.

6.3.5 Integrated Governance systems

Currently the Integrated Governance Department use the Ulysses Safeguard system to record incidents and risks. They also use a small in-house written access database for managing complaints and it is planned during 2007-8 to move this onto the Safeguard system. Further developments to more widely deploy the system will include web based incident reporting and the use of the system for PALS.

6.3.6 Clinical Audit and Research & Development Systems

The Clinical Audit Department and the R&D Strategic Business Unit both require the ability to analyse clinical data and this facility is currently provided by the SPSS statistical package. With the introduction of NCRS and the increase in available clinical data provided by the implementation of electronic records further consideration will be need to be given to how this can be accessed and analysed for these two important areas that support improvement in practice.

6.3.7 Estates systems

The Estates Department has recently purchased an asset database which will be fully populated with data during 2008-9 providing access to plans, drawing and information on all sites across the Trust. The service has also introduced a central monitoring system for utility meters etc. This system will be further expanded as required by the estates strategy.

6.3.8 Hotel and Site Services Systems

A cleaning monitoring system is currently being purchased to provide on the ground assessments using PDA based questionnaires. It is anticipated that this will be further developed to provide similar functionality for other areas requiring assurance from assessment questionnaires.

The Trust has implemented a room booking system at some of its PFI sites which will be gradually rolled out to all sites. The system supports the booking of additional services such as catering and equipment and will provide costing information for invoicing or recharging.

6.3.9 Business Intelligence

The Trust has been rapidly developing its performance management framework and now recognises the importance of this information being provided as a dynamic real-time tool. Investigations are underway to provide access to this information through a user friendly interface that can “drill down” to underlying data. To underpin this performance management system a supporting data warehouse infrastructure will need to be developed during 2008-9.

6.3.10 Market Intelligence

A major development needed to support the Trusts move to Foundation status is gaining access to information related to competitors for marketing and service development purposes. This would include access to national data for comparison purposes and also gaining a better understanding of the health market in our operating area. The Trust will investigate the options for obtaining and interrogating these types of information during 2008-9.

6.3.11 Records Management

The Trusts approved Records Management Strategy identifies the requirement for a structured electronic document management system with a specification that is flexible enough to manage documents produced by the Trust in all three types of information assets produced and relied upon by the trust, i.e. Staff Records, Service User Health and Social Care Records, and Management (corporate information assets) Records and specifically, to replace the unstructured and unmanaged network shares residing on file servers.

The strategy is to store all patient based information electronically within NCRS. Similarly staff information will be held electronically within ESR. However historic paper information and any paper based information that cannot be stored will require a solution. For staff paper records the Windip solution will be used to supplement ESR, for historic service user records a solution needs to be investigated as part of the NCRS implementation. For corporate information assets (business records) the intention is to develop the use of Share Point (MOSS 2007) as the Electronic Document Management system for the Trust.

6.3.12 Library systems

Library services have changed considerably in recent years with the internet providing the means to access services which were traditionally provided in a physical library (such as reference materials and catalogues) from the workplace or home. In addition the Library Service uses a shared South West

NHS Library System (SWIMS) which supports all library functions such as book issues and returns and user self-help. As this service is low cost and the system is well-liked, easy to use and has all required functionality, there are currently no plans to change it.

6.3.13 FT Membership Database

Initially an interim FT membership database will be required to support the Trusts new FT requirements for the period of shadow-membership during the Engagement and Consultation phases of the Foundation Trust Programme. For the future this is likely to increase in scope and may require a system to more fully support customer relationship management.

6.3.14 AWP Intranet / Internet sites

The AWP web site was designed to provide useful information about the Trust and its services and about mental health conditions for a target audience of current and potential service users, their carers, family and friends and current and potential staff. When the Trust achieves foundation status, the web site will increase in importance as a marketing and information tool for potential referrers and as an information source for members and governors. In addition, it is essential that the web site is effective for users from a range of disadvantaged groups. Therefore the website's management, format and content will be reviewed during 2008/9.

The AWP Share Point Intranet is used by staff at all levels and currently consists of much central information including the Trusts Policy Library. Future developments are likely to include expanding the types of information that can be shared by provision of secure areas where additional materials can be made available to restricted target groups. This will require an upgrade to Share point MOSS 2007. In addition further developments to integrate it more closely with Microsoft Office for more formal records management and using it as a delivery mechanism for business intelligence will require a review and redevelopment of Share Point including its management, format and content during 2008.

6.3.15 Text Messaging systems

The Trust has identified the potential benefits to be gained from reminding service users about their appointment thus reducing "Did Not Attends". This requires a technical system solution to provide appointment reminders via SMS text messaging or potentially via email.

7 Information Technology Strategy

Information Technology has become a core integral part of any business and we have long passed the point where its loss is merely an inconvenience. It is now a major element that can directly influence the viability of the Trust through for example, the loss of its information assets. Equally its innovation potential can be a powerful driver for business advantage. Therefore the Trust recognises the need for ongoing and increasing investment in information technology over the life of this strategy as part of its corporate business plans.

7.1 Wide Area Networking

Network infrastructure is the glue that binds all the IT components together. Requirements for Wide Area Network capacity are dependant on the types of systems in use and the technology available to deliver it. The Trust will set minimum standards for network capacity which will be reviewed annually. These will take into account emerging requirements such as the convergence of voice and data and the use of high bandwidth technologies such as videoconferencing, web cams and eLearning. During 2008-9 current network capacity will be upgraded to achieve the initial standard across all Trust sites and will be linked in with the delivery of the Trusts Estates Strategy.

7.2 Network Resilience

The Trust has set standards for network infrastructure to ensure a high level of resilience. This includes such measures as flood cabling, triangulation of building interconnects, standards for IT equipment rooms and monitoring arrangements. Although there are many new or refurbished buildings that meet these standards there are many that do not. The Trust will as part of its estates strategy bring all its estate up to these standards over a three year period.

7.3 Mobile & Wireless Networking

The Trust runs community based services that cover a wide geographic area. These services need to be able to operate flexibly with individuals not tied to Trust bases in order to access information. The Trust intends to develop solutions to provide further real-time mobile access through utilising technologies such as 3G and Wi-fi. During 2008-9 secure wireless access will be piloted in corporate sites and inpatient units. It will be important that such developments are compatible with the NPfIT warranted environment.

7.4 Desktop Infrastructure

The Trust has an IT Infrastructure replacement policy to ensure end user equipment is kept up-to-date. It also provides the flexibility to change these devices to meet the changing needs of the service e.g. through replacing PCs with laptops. The Trust will move to the Vista operating system during the life of this strategy but timing will be dependant on its inclusion into the NPfIT warranted environment.

7.5 Desktop Software

The Trust currently uses Microsoft Office 2003 as its office automation product. As the national NHS software contract has been renewed with Microsoft and upgraded to the Office 2007 version this will be deployed to the desktop to support the further expansion of Share Point as the document repository for corporate information assets. However it is recognised there will be a significant training requirement associated with this and the Trust's undertaking to ensure that all staff are either recruited at, or are subsequently trained to a level of computer literacy equal or equivalent to the ECDL standard will need to be implemented in practice.

7.6 Voice Services

The Trust introduced central management of voice services as part of its PFI initiatives, but this only covers a relatively small number of sites. The strategy is to maximise its use of Voice over IP where network connections are capable to

aim to provide an integrated telephone system across the Trust. This would include access to call logging, internal dialling and voice mail. The Trust will investigate the use of auto attendants, teleconferencing and Trust wide telephone call handling.

7.7 Video Services

Following on from its investment in videoconferencing facilities the Trust will develop a solution for the use of webcams for desk to desk video access within the Trust. It will also investigate the requirements for communicating externally with service user webcams.

7.8 Email Services

The Trust uses Microsoft Exchange and Outlook for its corporate email system. It has recently invested in an email backup and archiving system which will be operational during 2007-8. As it has been announced that the NHSmail provision will be moving to the Exchange environment consideration of the option to move the Trust to this service will be evaluated once all existing users of the service have been migrated. A decision to move to this service will have a direct impact on records management within the Trust and this aspect would need to be fully considered.

7.9 Information Governance

The Trust recognises the importance of embedding high standards of Information Governance into all information processing systems and practices. The Information Governance Toolkit prescribes the standards of compliance with legislation and regulation in this regard, and the Trust is actively working to improve its technical based scoring in order to migrate from its current NHSnet code of connection to the Statement of Compliance required for N3 access by the March 2008 deadline. Areas that are being progressed during 2007-8 to support this are the provision of "zero-day" protection and provision of software deployment capability. It is further recognised that failure to comply with the IG Toolkit could result in a failure of the Trust's Foundation Trust application.

7.10 Smart Cards & Registration Authorities

The Trust has deployed smartcard readers as part of its standard PC provision and coverage across the Trust is good. Further work is required during 2008-9 to deploy the latest software to enable the use of smart cards and make the smart card production infrastructure available to the HR Department to use as part of their Registration Authority deployment for NCRS implementation.

7.11 Enterprise Agreements

The Trust is actively using NHS national enterprise agreements to gain significant benefits for the Trust and intends to continue to evaluate and implement new agreements as they become available. Currently the Trust takes advantage of the following agreements:

- Use of the Microsoft agreement for desktop operating systems, Microsoft Office applications and client licensing including SQL databases and Share Point systems
- Use of Symantec Ghost licensing for PC deployment and support

- Use of the Oracle agreement for Oracle database support
- The Trust also makes use of NHS mail as disaster recovery provision for its Exchange email system and also for some remote internet access by staff.

8 IM&T Related Workforce Strategy

In 2004 a training needs analysis “Better Information for Better Health” was undertaken in the Trust to understand the level of IT skills within the Trust. Following this significant progress has been made in the investment in IT training staff and training facilities in the Trust. Projects such as the roll-out of the rostering system have included some basic IT skills training. However feedback from services still indicates skill levels to be low.

In order to fully realise the benefits from investment in Information Systems and Technology it is vital that the Trust develops a fully IT Literate workforce. All Trust staff need **as a minimum** the basic IT skills and competencies now expected by any modern business. This needs to be further developed to enable staff to be competent users of the information resources and fully understanding of the information governance environment in which, particularly staff and service user, information exists. The Trust’s Workforce Strategy will support this IM&T Strategy through the development of staff to meet these needs.

9 Governance Arrangements for IM&T

Clear governance arrangements for IM&T are important to provide the necessary assurance that the associated projects or programmes (including system, process, organisation, outcome, benefit, deliverable and capability) meet the agreed Trust requirements. These governance arrangements within the Trust also need to support the National Programme for IT through linking appropriately with the NPfIT Local Ownership Programmes (NLOP) within the Trust’s area.

9.1 Local NLOP Arrangements

The Trust currently provides the majority of its services within Avon and Wiltshire boundaries. Within this area there are currently two NLOP Boards: Bristol South Gloucester and North Somerset (BNSSG) and Bath Swindon and Wiltshire (BSW). The Trust is an active participant in both Boards but formally reports on NPfIT progress to the Strategic Health Authority through the BSW NLOP Programme Board.

9.2 Modernisation Programme Structure

In order to appropriately control and manage all the major changes required to become a successful NHS Foundation Trust AWP has setup a specific Foundation Trust Programme Board with delegated sub groups. Within this structure IM&T related change projects are managed as part of the Modernisation and Improvement Group, day to day IM&T issues are dealt within the Business Continuity Group and further IM&T strategy and planning will be included within the Integrated Business Planning Group.

9.3 Integrated Governance Structure

Integrated Governance is managed within the Trust by the Integrated Governance Committee and its four delegated Integrated Governance Forums.

The governance and assurance of IM&T is provided by the IG structure through the Modernisation & Workforce Integrated governance Forum.

9.4 Performance Management Structure

IM&T performance (including NLOP performance), accountability arrangements and IM&T strategy resource & delivery plans are scrutinised and approved by the Finance & Performance sub-committee on behalf of the Board.

10 IM&T Strategy Implementation

The implementation of this strategy will be delivered through annual IM&T delivery plans aligned to the Trusts Integrated Business Plans and the associated projects will be managed using the PRINCE2 project management methodology.

10.1 Timescales

As implementation of the IM&T Strategy is intrinsically linked to the integrated business planning cycle of the Trust. Indicative timescales for the implementation of the constituent parts of the strategy have been identified within this document but it should be recognised that these will need to be further aligned with the Trust's developing short and long term integrated business plans and also the changing business priorities and availability of resources over the lifetime of this strategy.

10.2 Risks

It has been recognised that successful implementation of this strategy within the Trust is highly dependent on the successful delivery of National Programme for IT systems by Connecting for Health and the Southern Cluster Local Service Provider. This major risk is being actively managed within the NHS NPfIT and NLOP structures and also through the Trust's NCRS Project.

Failure to deliver this strategy would have serious implications for the Trust's future as an effective provider of modern mental health services.

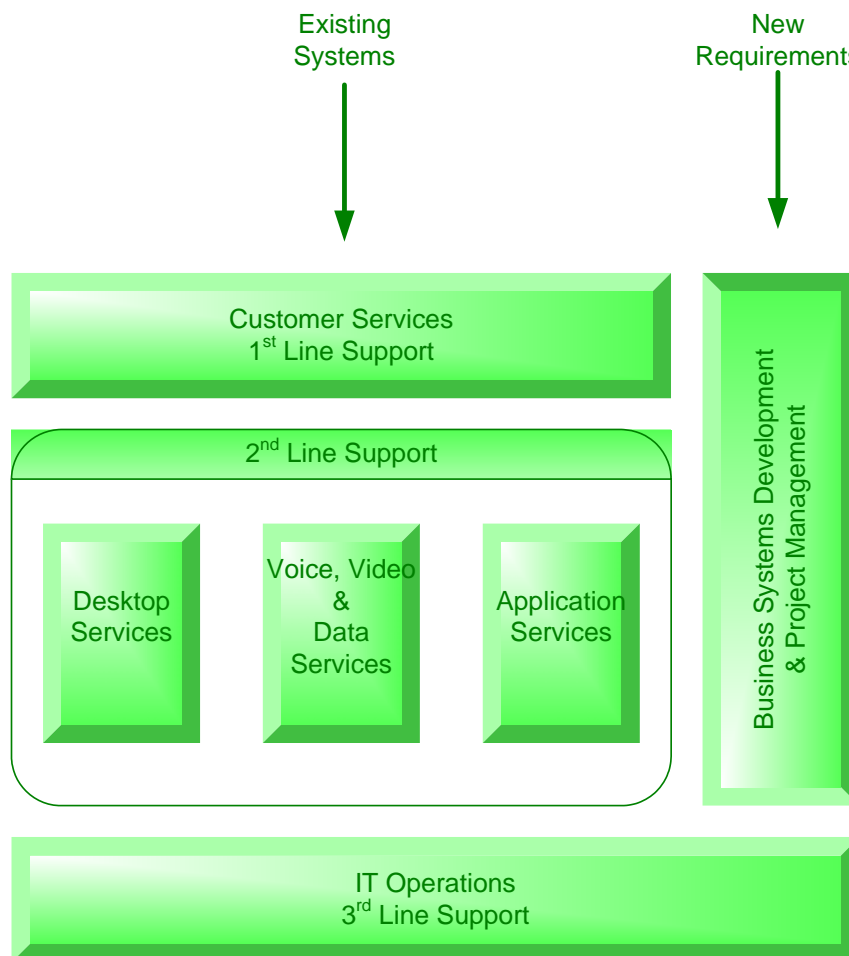
11 IM&T Resources

The use of information systems and technology within the Trust is continuing to grow at a rapid pace that will only increase with the move to electronic information and greater use of technology. Therefore the share of resources required to support this expansion will need to be included in the Trust's strategic financial and workforce planning.

11.1 IT Service Model

In order to ensure the availability, accessibility and range of Information Systems & Technology service provision to the Trust the IT Department has recently been restructured into two customer facing sections: IT Services (helpdesk and 2nd line support) and Business Systems Development both supported by the back office Operations Team.

The Diagram below demonstrates how these services will be accessed and provided to its customers and will support the move to an ITIL based IM&T service model.



11.2 IT Staffing

Key to the delivery of a successful IM&T strategy will be ensuring the appropriate skills and experience are in place to both support existing systems and services and also have the capacity and capability to develop new and innovative solutions to support new ways of working and assist in further service development. The particular areas where there are no available internal resources to support the Trust's strategy are in the areas of project management and systems development.

11.2.1 Project Management

Although for major system implementations contract project managers are generally employed there is a constant stream of small projects as identified in the IM&T systems strategy that would support the ongoing provision of in-house project management and associated project support. This would provide invaluable support to departments implementing these systems and ensure a consistent approach to using the Prince2 methodology.

11.2.2 Systems Development

As part of this strategy the Trust requires all its systems to be integrated, the creation of a data warehouse and for further developments in Share Point and workflow systems. Although large scale application development projects are not envisaged these new system developments do require a technical development resource to support them. This would be best met through the

creation of a small development team that could also provide the capability to develop some small in-house applications if required.

11.3 IM&T Existing Funding

The current breakdown of IM&T spend over the last three years for both capital & revenue are shown in the sections below. Overall the Trust increased, and has now stabilised, revenue expenditure at 2% of turnover and averages around 5% of capital spend on IM&T.

11.3.1 IM&T Capital

The current breakdown of capital spend on IM&T over the last three years is shown below. Although capital spend has generally been at the level of approximately £1M in recent years the level planned for 2007-8 and future years is only based on replacement of existing hardware in line with the Trust's Infrastructure Replacement Policy. System requirements particularly the major investment in electronic records will require considerable further capital investment.

Capital Expenditure	2005/2006	2006/2007	2007/2008
	£'000	£'000	£'000
Tangible Fixed Assets Total	794.0	993.0	585.0
Intangible Fixed Assets Total	202.0	100.0	0.0
Grand Total (Capital Expenditure Items)	996.0	1,093.0	585.0
Organisation Total Capital Spend	16,955.0	26,740.0	11,931.0
IM&T Capital Spend as a Percentage of Overall Capital	5.9%	4.1%	4.9%

11.3.2 IM&T Revenue Budget

The current breakdown of IM&T revenue budget over the last three years is shown below. It should be noted the major area of increase for 2007-8 is for capital charges and depreciation. This increased dramatically due to investment in the PFI schemes which included for example central Trust telephone provision and a second hot site for disaster recovery. Reduction in non manpower based revenue was largely due to the loss of LIS funding for network provision.

Revenue Expenditure (Budgeted)	2005/2006	2006/2007	2007/2008
	£'000	£'000	£'000
Recurring Revenue - Non-Pay	1,118.4	1,234.6	950.3
Recurring Revenue - Pay	1,129.6	1,577.2	1,458.0
Capital Charges & Depreciation	470.3	580.0	1,279.0
LIS Income	-222.5	-141.6	0.0
Grand Total (Revenue Expenditure Items)	2,495.8	3,250.2	3,687.3
Organisation Total Revenue Spend	151,055.0	166,358.0	183,257.0
IM&T Revenue Spend as a Percentage of Overall Revenue	1.7%	2.0%	2.0%

11.4 IM&T Future Funding Requirements

Future funding of IM&T provision requires capital investment for both new projects and the maintaining and replacing existing infrastructure. Increasing the associated revenue spend on a year by year basis to reach a Trust target of 2.5% by 2011 will ensure the associated revenue consequences of these investments are available plus the appropriate additional IT resources are funded to properly support the requirements of new developments.

11.4.1 IM&T Indicative Capital Investment

The estimated capital investment required in IM&T (excluding inflation) for the next three years is shown below.

Capital Expenditure (Estimated)	2008/2009	2009/2010	2010/2011
	£'000	£'000	£'000
Infrastructure Replacement Projects	585	585	585
NCRS Project	780	780	200
Networking Projects	0	600	600
Business Intelligence & Systems Projects	200	100	100
Grand Total (Capital Expenditure Items)	1565	2065	1485

11.4.2 IM&T Indicative Revenue Budget

The proposed indicative revenue budget (excluding inflation) for the next three years is shown below.

Revenue Expenditure (Planned)	2008/2009	2009/2010	2010/2011
	£'000	£'000	£'000
Recurring Revenue - Non-Pay	1110.3	1270.3	1430.3
Recurring Revenue - Pay	1658.0	1758.0	1858.0
Capital Charges & Depreciation	912.3	1222.8	1443.5
Grand Total (Revenue Expenditure Items)	3680.6	4251.1	4731.8
Organisation Total Revenue Spend	183,257.00	183,257.00	183,257.00
IM&T Revenue Spend as a Percentage of Overall Revenue	2.01%	2.32%	2.58%

12 Conclusion

This strategy document sets out the IM&T vision and challenges the Trust will face over the next 4 years. Maintenance and support of existing systems enabling the Trust to continue delivering its core services remains high priority. In addition, an ambitious development programme is required to meet NHS national priorities and to adequately support Trust needs in operating as a more autonomous organisation in the changing NHS environment.

The impact of supporting NPfIT, and in particular the transition to a new electronic patient record system offers significant potential benefits in terms of integrated care for service users. To support applications which will become increasingly business critical and to comply with the NHS code of connection our IT infrastructure and

systems will have to become ever more resilient and available. Individual implementation projects will be the subject of individual business cases with careful cost-benefit analyses to ensure the correct investments are made and appropriate benefits realised.

Current systems are accessible, enjoy high availability, and represent value for money. To ensure continuing provision and incremental improvement of services for the Trust and to support the new developments in electronic records a need for year on year average funding growth of approximately £350K will be planned to bring investment up to 2.5% of turnover within 3 years. It is expected that the additional investment will drive financial savings out elsewhere in the system through new ways of working. This will be robustly tested through benefits realisation plans which will be contained within individual business cases. A strategy implementation plan will be developed, describing the detailed work programme indicating priorities and predicted costs.

Appendix 1 – Strategic Systems Maturity Model

Strategic Solution Maturity Model									
NHS Care Record Service	General Description	Acute and Community	Mental Health	GP	Ambulance				
NHS CRS Level I	Existing systems suppliers; Patient Administration System; provided in 'hosted' environment integrated with spine for PDS and 'Booking' functions	Integrated with 'spine' for: PDS; Booking;	Integrated with 'spine' for: PDS; Booking;	Integrated with 'spine' for: PDS; Booking; ETP;	Integrated with 'spine' for: PDS;				
NHS CRS Level II									
NHS CRS Level III	Patient Administration System; (NHS CRS level II) plus Order Communications (OCM) and Results Reporting (RR); and simple interfaces to departmental systems For Mental Health this included both SAP and CPA functionality	Integrated with 'spine' for: PDS; Booking;	Integrated with 'spine' for: PDS; Booking;	Integrated with 'spine' for: PDS; Booking; ETP; GP2GP;	Integrated with 'spine' for: PDS;				
NHS CRS Level IV	Patient Administration System; (NHS CRS Level III), plus Organisation wide scheduling, Clinical Noting, Care Pathways, and simple Decision Support	Integrated with 'spine' for: PDS; Booking; Simple PSIS;	Integrated with 'spine' for: PDS; Booking; Simple PSIS;	Integrated with 'spine' for: PDS; Booking; ETP; GP2GP; Hosted to C/H SLA;	Integrated with 'spine' for: PDS; Simple PSIS;				
NHS CRS Level V	Patient Administration System (NHS CRS Level IV); plus Integrated Care Pathways and Scheduling across Health community settings, Decision Support, and Electronic Prescribing.	Integrated with 'spine' for: PDS; Booking; PSIS;	Integrated with 'spine' for: PDS; Booking; PSIS;	[GP reference or Alt GP Integrated with 'spine' for: PDS; Booking; GP2GP; ETP; Hosted to C/H SLA; PSIS;	Integrated with 'spine' for: PDS; PSIS;				
NHS CRS Level VI	Patient Administration Systems (NHS CRS Level V); fully	Fully integrated 'Strategic Solution' working across all organisational and professional boundaries with full integration to 'spine'		[GP reference or Alt GP solution]					