Supporting our vision for the future with technology
## Contents

Forward & Purpose ......................................................................................................................... 3
Introduction .................................................................................................................................... 3
Our Vision ........................................................................................................................................ 3
The NHS Five Year Forward View and Digital Roadmaps ............................................................ 4
Infrastructure ................................................................................................................................. 5
   Network .................................................................................................................................... 6
   Telephony ................................................................................................................................... 7
New System Developments ........................................................................................................... 8
Agile Working ................................................................................................................................. 10
   Integration & Automation ........................................................................................................... 10
Mobile First .................................................................................................................................... 11
   Emergency Service Network ...................................................................................................... 12
   E-Ambulance ............................................................................................................................ 13
Using & Sharing Information ......................................................................................................... 14
   Information & Business Intelligence Strategy ........................................................................... 14
   Information Governance Strategy ............................................................................................. 15
   Cyber Security .......................................................................................................................... 15
Financial Profile and Affordability ................................................................................................. 16
Appendix ......................................................................................................................................... 17
   Department Structure ................................................................................................................. 17
   Governance Structure ............................................................................................................... 17
   Glossary ..................................................................................................................................... 18
   References ................................................................................................................................. 18
   Document Change Control ........................................................................................................ 19
   Change Record ......................................................................................................................... 19
Forward & Purpose
This document aims to align with and compliment the Trusts Strategic Plans for 2015-2020, focusing specifically on the Information Management and Technology aspects. This document picks up from the former IM&T strategy “Refreshing our Future Needs” 2013-2015.

This IM&T Strategy is aimed at the whole Trust and is aligned with the needs of the organisation (through the organisational strategic plan ‘Our vision for the Future 2015-2020’), local health communities and the wider NHS. Delivery of the Strategy will be based on good governance, project and service management, coupled with transformational, high quality, affordable, reliable and sustainable IM&T Services.

Introduction
The previous IM&T strategy focused on automation and integration of existing systems within the Trust. Whilst progress has been made in these areas, we still have more to do and this will remain the core focus of this strategy along with refreshing our technology and addressing the challenges of working in a predominantly mobile workplace.

Our Vision
Our IM&T vision will remain a one of providing enhanced Information Management and Technology systems and services, which enable staff to fulfil their roles efficiently and make decisions effectively.

We will realise this vision through the realisation of 7 key Strategic aims

- **Aim 1:** We will develop our Digital Strategy in line with National Targets.
- **Aim 2:** We will refresh and improve our IM&T Infrastructure.
- **Aim 3:** We will implement systems to support organisational transformation.
- **Aim 4:** We will integrate systems to support smarter ways of working.
- **Aim 5:** We will equip staff with technology that is appropriate for the environment in which they work in.
- **Aim 6:** We will develop information to support improved performance and a greater understanding of the business we operate in.
- **Aim 7:** We will consume, share and secure information for the improvement of patient care.

### Key to Tasks

Tasks related to the above aims will be demoted with a ✓ and an indicative timescale of

- **(S)** Short term (0-12 months) – Currently ongoing
- **(M)** Medium Term (12-24 months) – Under development
- **(L)** Long Term (24+ months) – Strategic Aim

Multiple S, M or L timescale indicators show that the Aim has multiple stages.
The NHS Five Year Forward View and Digital Roadmaps

The Five Year Forward View identified harnessing the information revolution as a key enabler to securing a sustainable NHS. By 2020, health and care professionals will be operating paper free at the point of care. This vision developed by the National Information Board was outlined in Personalised Health and Care 2020 – A Framework for Action.

As a key first step, local health economies are to produce Local Digital Roadmaps detailing the actions they will take to deliver this ambition of being paper-free at the point of care by 2020. Local Digital Roadmaps will generate momentum and drive transformation across local health economies, inform local investment priorities and support local benefit realisation strategies.

The Digital Maturity Assessment provides a framework for assessing the extent to which healthcare services in England are supported by the effective use of digital technology. It will help identify key strengths and gaps in healthcare providers’ provision of digital services at the point of care and an initial view of the current ‘baseline’ position across the country. In doing so it supports the National Information Board’s commitment to achieving a fully interoperable health and care system by 2020 that is paper-free at the point of care. The Digital Maturity programme worked with a number of partners including Academic Health Science Networks and healthcare providers and CCGs to:

- Examine effective use of technology, with particular focus on capabilities such as digital care records, transfers of care & medicines management
- Develop a framework that can be used across acute, mental health, community, ambulance and social care settings.

The Digital Maturity Assessment builds on existing evidence about how investing and effectively using IT can achieve better patient outcomes, reduce bureaucracy, improve patient safety and deliver efficiencies.

**Aim 1: We will Develop our Digital Strategy in line with National Targets**

- We will use the results from our Digital Maturity Assessment to identify areas which are relevant and could be improved upon. (S)
- We will contribute to the CCG Digital roadmap development to ensure joined up developments for the wider health system. (S)
- We will develop opportunities to meet the target of paper free by 2020. (S, M, L)
Infrastructure

The entire NEAS systems infrastructure will be migrated to a new network, hardware and software platform during 2016, providing a flexible, scalable and resilient infrastructure that is able to meet our needs for the next 5-7 years, whilst underpinning the delivery of new systems and improvements to existing systems.

Aim 2: We will refresh and improve our IM&T Infrastructure

- We will implement a new backup solution to improve the disaster recovery process for systems. (S)
- All servers will be rebuilt on new more efficient hardware to improve system performance and increase capacity, while reducing the carbon footprint of our infrastructure at the same time. (S, M)
- We will implement new high availability methods to provide cross site resilience to systems that don't currently have this level of availability. This work is being done in preparation for a more agile workforce that is less dependent on being based at HQ, and to improve the business continuity options available for systems. (S, M)

Domain Migration

- All users and computers will be migrated to a new Active Directory (AD) domain in 2016, resolving a number of functionality and legacy security vulnerabilities. (S)
- We will integrate Active Directory with the Electronic Staff Records (ESR) system to automate user account management and provide a centralised and up to date corporate directory. (S)
- We will utilise the authentication services of Active Directory’s (wherever possible) to provide single sign-on to supported applications, reducing the number of account details staff need to remember, and improving the security of systems that do not currently meet national guidelines for authentication. (S, M)
- Secure Socket Layer (SSL) security will be implemented and become mandatory on all internal web based systems (where possible) to improve security. Currently this is only implemented on externally accessible systems. (S, M)

System Reviews

- To complete a comprehensive piece of work that not only assists and supports the new domain implementation but also forms a live reference point for system owners and IM&T alike. (S)
- The output from the system reviews will form a key element of the new Disaster Recovery (DR) document library. DR will aim to focus on simply fully recovering a system / solution from a major failure – knowledge base or specific solution type detail will be extracted and moved to the service desk application. This ensures we deliver consistently and staff are familiar with where specific information resides. (S, M)
- In line with the (national) replacement of NHSMail, a key ‘system review’ and evaluation will be to compare the advantages and disadvantages of what is being offered (nationally) against how we currently (and wish to in the future) access, use and store e-mail. (S, M)
Support and educate system owners so they fully understand and appreciate their responsibilities. (S, M)

Support the creation of change approval boards (CAB) for core systems. Ensuring a consistent approach to development / enhancement and correct stakeholder involvement when key decisions or a specific direction is taken. (S, M)

IM&T Staff to be regularly tested / evaluated on recovering systems in a controlled test environment. This will provide system owners with the assurance / confidence that their resilience requirements are in place and functioning and aids them in preparing business continuity plans for their specific department. (S, M, L)

**Licencing / Open Source**

- Informal trials of alternatives to Microsoft Windows and Office will become formal and more widespread, as will trials of the latest releases from Microsoft. Depending on the success of these trials, a full deployment of a new operating system and office suite may take place in preparation for the renewal of our licensing agreements in 2018. This has the potential to greatly reduce (or increase) the cost of future licensing. (S, M)
- We will continue to investigate the potential usage for non-PC devices such as iPad/iPhone/Android and ways in which they can change and improve how staff work. These types of devices can also avoid some of the licensing costs of traditional PCs. (S, M)
- We will continue to expand our support for bring your own device (BYOD) by looking at ways of delivering access to additional systems and services from personal devices. We will also investigate options for expanding the types of devices supported, from the current iOS and Android to potentially include other devices running Windows and Macintosh Operating Systems. (S, M, L)

**Application Delivery**

- We will investigate new ways of delivering applications to users so that they are not tied to a particular PC/device, allowing staff to be more flexible in the way they work. (S, M)
- Options for repurposing existing devices as thin clients using Citrix will be evaluated, this has potential to enable hot-desking and extend the life of current hardware. (S)
- We will aim to ensure applications will become device agnostic (where applicable) to be available on any device anywhere (See Mobile First) (S, M, L)

**Network**

**Local Area Network (LAN)**

The NEAS LAN was refreshed in 2015 with the latest Avaya LAN switching technology. As a result, we expect future changes only to come from significant changes to the NEAS estate or application hosting infrastructure changes.

- We anticipate deploying Quality of Service (QoS) to provide assurance for critical Internet Protocol (IP) telephony services. (S, M)

**Wide Area Network (WAN)**

The NEAS WAN will be refreshed during 2016. It is based on Multiprotocol Label Switching (MPLS) technology which provides maximum flexibility for site and bandwidth changes which may result from changes in the NEAS estate (such as hub & spoke) as well as the potential for future IP voice and video applications which may be necessary as part of the Agile programme.
Station sites will be provided with the super-fast broadband and large critical sites will be provided with high bandwidth resilient connections where appropriate based on the criticality of applications and business use. (S, M)

External Connectivity
We will continue to monitor the need to migrate N3 connectivity towards Public Services Network (PSN). This will primarily be driven on a national level although

- We will undergo a PSN compliance audit as part of the Emergency Services Network (ESN) See Emergency Services Network). (S)

We already anticipate a growth in Internet connectivity requirements as a result of an increase in mobile and home working as part of the Agile program.

- We will carry out a review of our Internet connectivity to ensure our capacity and resilience meets these needs. (S)

Network Management and Security
Network utilisation will continue to be monitored using the SolarWinds platform. This platform will also continue to be used for proactive and reactive fault management purposes.

- We will continue to migrate firewall services towards next-generation firewall technology utilising existing Sophos UTM wherever possible. (S, M)

Telephony
Ensuring our telephony system is resilient and effective, in line with wider commercial telephony environments is key to our aim for efficient communication with service users as well as of service providers. To build upon this:

- The Operations Centre telephony system will be upgraded during 2016 with the latest Avaya Aura hardware and software in order to ensure its ongoing support as well as offering new features such as updated softphone capability. (S)
- We will carry out soft phone trials for standard office users with the aim of reducing office telephone hardware in line with our agile program as well as reducing telephone maintenance costs. (S)
- We will review station telephony and aim to reduce costs as well look for opportunities to replace fixed line services with mobile voice solutions. (S)
- We will carry out further research in relation to Session Initiated Protocol (SIP) technology and its potential for reducing contact centre line costs as well as the potential for increased functionality and integration with other applications such as Microsoft Lync. (S, M)
- We will continue to review opportunities to utilise softphone technology with the contact centre including its use for contact centre homeworking whilst ensuring any risks to critical services are managed. (S, M)
- We will review the voice recording solution to ensure sufficient capacity for the remainder of the NHS 111 contract up to 2018 as well as other recorded services. (S, M)
- We will continue to work with the contact centre and national ARP team in relation to the new control room solution as part of the ESN program. (S, M, L)
New System Developments

Aim 3: We will implement systems to support organisational transformation

As the organisation undertakes a period of transformation, supporting technology will also be needed to support smarter, more effective ways of working. Over the duration of this strategy the following initial systems have been identified as new requirements or additional enhancements to existing systems.

Demand Planning and Resource Optimisation (DePRO)
We presently have a number of disparate systems which each undertake an element of the overall resourcing process but do not integrate to provide an overall end to end means of measuring the effectiveness of the function.
DePRO aims to enhance the understanding (contributing factors) of future planning needs and the ongoing challenge of matching supply (our staff and associated resources) to demand (patient care) in core areas of the organisation (namely Operations Centre and front line operational resources) effectively and efficiently.

- Develop recommendation on the most effective and cost efficient way to proceed. (S)
- Support the implementation (S, M, L)

NEAS Electronic Patient Care Record (ePCR)
The ePCR project will refresh our current capabilities to capture and report on patient level medical information at the point of care. The project encompasses the provision of both backend system software and hardware, and frontend user tablet PC devices along with appropriate training.
The project and large scale deployment is scheduled to "go-live" by July 2016 with additional “road mapped” functionality to be implemented in line with mutually agreed (with supplier) timescales during 2017.

- Support the transition from existing system to new. (S)
- Support the development of additional functionality. (S, M)

Integrated Care and Transport (ICaT)
It is envisaged that the Integrated Care and Transport project will allow the utilisation of Emergency, Specialist, Urgent and Patient Transport resources to be matched to the most appropriate resource within NEAS irrespective of how the resource was requested (be that 999 / Urgent, 111 or Patient Transport contacts). This requires integration and development of a rules based interface between the three back end command and control systems. Front end mobile data terminals will also require modifications to accommodate the multiple pick up requirements associated with a multi patient pickup approach.

- Support the development of a rule based integration process between Emergency Care and Patient Transport systems. (S, M)
- Support the development of mobile data applications capable of functioning in a hybrid PTS / Emergency Care environment. (S, M)
Access to Safeguarding, Patient Care Records and Child Protection Information

Patient care records are produced and shared (to greater or lesser extent) by all areas of the NHS (including ourselves - see ePCR) and the appropriateness and timeliness of sharing patient level information is likely to reduce risk and improve outcomes for patients. The national system approach is known as the Summary Care Record (SCR) and at present can only be updated by General Practices and primary care settings, however uptake of this system has been slow and remains relatively low in value (information wise) to all users. The recent extension to include additional information (SCR-AI) has gone someway to improve the content however it remains challenging to access or integrate into all but accredited GP systems. A consistent approach to record sharing has been agreed regionally (North East and Cumbria) standardising on the medical interoperability gateway (MIG).

In addition to patient care records we also have a requirement to access Child Protection Information Alerts (CP-IA) as well as Special Patient Notes (SPN) and other (safeguarding related) alerts, at present both of these are not stored within a standard patient care record.

- Support the development of a use case for access to external patient care records within the Trust (S)
- Support the integration of Patient Care Record access within the Trust (S, M)
- Support the integration of access to Child Protection Information (S, M)
- Support the integration of access to Special Patient Notes and other Alerts (S, M, L)

Defibrillator Replacement Project

The defibrillator replacement project will enable staff and the Trust to accurately monitor and improve performance in the area of cardiopulmonary resuscitation (CPR). The project will involve the replacement of current defibrillator equipment with a device which allows the monitoring and onward transmission of CPR performance at the point of care. This is supported by back-end software and hardware which will centrally collate the information (for real time support or subsequent analysis) and allow secure real-time access by receiving locations. Key elements of this information will also form part of the ePCR record and interfaces will be developed to integrate both devices.

- Support the implementation. (S, M)

Medicines Management

The medicine management project presently consists of a number of trial sites that have modular ‘vending machine’ like cabinets, which allow the easy replenishment and stock control of drugs and consumable items within an ambulance. The system is connected back over the Trusts WAN to a central control and monitoring system at HQ. It is envisaged that through the introduction of this system management of medical drugs and consumables stock will be more appropriately managed leading reduction in risk and greater efficiency.

- Support the evaluation. (S)
- Support the implementation. (following successful evaluation) (S, M)
- Support the development of internal medicine management system for controlled drugs. (S)

Flight Deck

The flight deck has been developed as a part of the regional urgent and emergency care Vanguard, by the Informatics Department at NEAS during 2015/16 to provide the wider health system with an overview of hospital capacity across the North East. The system allows for the manual or automatic...
(system to system) recording of bed occupancy at each hospital within the region. It is envisaged that through a holistic view of the region’s pressures demand can be more evenly spread across the region leading to a reduction in hospital delays. Wider interest from outside the region has recently been seen.

✓ We will explore the potential for commercialisation of the product. (S)
✓ Further development and roll out support. (S, M)

**Agile Working**

As a key enabler to organisational transformation an agile approach will be undertaken as a means to realise more effective ways of working for both back office and front line staff. Whilst technology should not be seen as the driver (cultural change being the key), changes to technology and systems will be required to support this transition.

Equipping all staff with a simple, reliable, appropriate and convenient means of access to NEAS technology and systems is required if we are to realise the true benefits of a more agile approach to working however this will require a more holistic approach to how we deliver and fund it in the future. (See **Integration and Automation**)

A refresh of existing staff computers is currently being rolled out taking into account the future requirements for non-office based working.

A bring your own device (BYOD) approach is now available to all staff allowing them mobile access to Trust email, calendars and some mobile specific applications (NEAS Communications App, expense submission, Mobile DoS and GRS (in the near future)), however this relies on staff willing to use their own smart phones.

Trust owned laptops have recently been enabled to securely access (via a virtual private network and 2 factor authentication) the Trust network from any location with internet access allowing remote working.

A home access portal has also been implemented which allows all staff to access a limited number of applications (email, calendars, GRS, Ulysses, Intranet, etc.) from their own home PC’s.

✓ We will continue to promote, enhance access and add to the list of available applications available through BYOD and the Home Access Portal. (S, M, L)

**Integration & Automation**

**Aim 4: We will integrate systems to support smarter ways of working**

Following on from the previous strategy, an overarching approach of integration and automation remains at the heart of an agile working environment. Whilst significant progress has been made there are still a number of additional opportunities which will be developed during the extent of this strategy.
✓ Electronic Staff Records - Where possible we will look to utilise (and encourage system suppliers to adopt) the ESR system as the master record for all systems which require access to staff details. (S, M, L)
✓ Fleet Management System – We will aim to develop feeds from the fleet management system into emergency care and patient transport control systems. (M, L)
✓ Collaboration Tools (SharePoint or similar) – We will review and evaluate the existing use of Share Point (or similar) as a means to effectively store and share documents. (M)
✓ Intranet – we will support (alongside the Communications and Engagement Department) the development, procurement and introduction of a new Trust Wide Intranet. (S, M)

Mobile First

Aim 5: We will equip staff with technology that is appropriate for the environment in which they work in

The potential benefits for mobile working in healthcare are considerable and well-publicised. Significant challenges exist, however, in developing the right strategies and delivering successful programmes to achieve the return on investment.

The majority of staff the Trust employs are based out in the field and can often feel isolated when it comes to access to technology and a means of constant reliable communications. Mobile technology has now become a mainstream way of life for most and the majority of staff expect greater access to it both in their working and personal lives.

The challenge arises in two key areas the first being the availability of line of business applications and the second a one of demonstrating a return on investment.

The majority of the line of business systems (operational) we use have not been developed for access via mobile technology and a significant amount of work will be required to develop and transition systems into this environment.

As the mobile workforce makes up the majority of our staff base, the cost to equip staff (with mobile technology) would be significant. As well as this, the majority of operational staff time is driven by the cover they have to provide to undertake their core role of servicing patient demand rather than predictable and repetitive task based activities. This makes a traditional return on investment approach difficult to develop and ultimately realise in a traditional way.

This said the non-directly cash releasing benefits would be as follows

- Improved general communications, Intranet / Internet access, Email, video, text messaging and voice.
- Allow them to push and pull general and personalised performance information such as that held within Athena (the Trusts reporting system).
- Automation of standard line of business processes via simple Form filling (Expenses, Vehicle defects, Stock control, time & attendance, Risks, etc.).
Clearly some of this activity could be related to a reduction in back office activity however it is unlikely to demonstrate a true cash releasing return on investment by itself or gain buy in from operational management in itself.

- We will continue to trial specifically targeted use of mobile technology with front line colleagues and evaluate areas where demonstrable benefits can be realised. (S, M)
- Work has already been undertaken to cost a large scale deployment of mobile devices and funding opportunities are currently (and will continue to be) explored through Vanguard and CCG initiatives. (S, M)

Emergency Service Network
The Emergency Services Network (ESN) or Emergency Services Mobile Communications Program (ESMCP) as it was formally known will provide a new communication system for the 3 emergency services and other public safety users. ESN will provide the next generation integrated critical voice and broadband data services for the 3 emergency services, over a mobile communications network with extensive coverage, high resilience, appropriate security and public safety functionality. This allows users to communicate even under the most challenging circumstances.

ESN will enable integrated critical voice and broadband data services that are:

- enhanced: to provide integrated broadband data services
- flexible: to better match and be responsive to user needs
- affordable: to address financial pressures on central and user budgets

The timeline for ESN as a whole is:

- main national contracts awarded in December 2015
- service begins July to September 2017
- transition to ESN between 2017 and 2020

Alongside the program to deliver and transition to the core network a DoH lead Ambulance Radio Replacement Program team is in place to specifically work alongside Trusts to focus and centrally procure the Control Room (CRS) and Mobile Data Vehicle (MDVS) solutions.

Whilst the replacement of the existing AIRWAVE solution will cause some disruption and require a significant amount of work to be undertaken by the Trust, it will also provide us with an opportunity to address some of the challenges we face in providing a reliable means of communication to our staff (as discussed in the Mobile First section)

Key NEAS dates (TBC)

- PSN network readiness evaluation – May to July 2016
- PSN network installation – August to December 2016
- Transition, Control Room and Vehicle Systems planning – August to December 2016
- Control room preparation – January to June 2017
- Control room solution implementation - June to December 2017 (pre requisite to transition)
- Network readiness testing - June to December 2017
- Transition January 2018 – December 2018
It is still unclear as to what will be centrally funded and how much flexibility we will have in terms of devices and the applications which will be able to operate on this network, but it is our aspiration that it will provide a cost effective mobile infrastructure and a number of devices on which we can build a truly mobile workforce with secure access to back office and frontline applications.

The project will require resource time from a number of areas within the Trust including PMO, Operations Centre, frontline, fleet, finance and training staff (list not exhaustive) as well as IM&T resource.

- We will act as the technical leads representing the Trust during the planning, mobilisation and transition over to ESN.
- We will advise and seek clarity and assurance (alongside user departments) on the technical suitability, coverage, capacity and functionality of the proposed network and core application provision.
- We will advise and seek clarity and assurance (alongside user departments) on the technical, usability and physical characteristics of proposed hand held devices and ancillary devices.
- We will advise and seek clarity (alongside user departments) on the technical, usability and physical characteristics of proposed vehicle based solutions.
- We will advise and seek clarity on the technical suitability of control room communications systems.
- We will support the technical aspects of installation, configuration, testing and transition.

**E-Ambulance**

The E-Ambulance is a concept which aims to connect up all aspects of technology with an ambulance through a common set of standards and interfaces. At present there are multiple systems within an ambulance which presently function in a discreet manner and utilise separate communications paths to backend systems. This creates duplication and sub-optimal use of technology resources. The key systems are as follows:

<table>
<thead>
<tr>
<th>System</th>
<th>Currently in use by NEAS</th>
<th>Tracking (C)apable / (E)ssential / (U)seful</th>
<th>Mobile Communications</th>
<th>Removable from vehicle</th>
<th>System Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Available now (✔) / Not Available (✖) / (C)apable / (E)ssential / (U)seful</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ePCR</td>
<td>✔</td>
<td>✔</td>
<td>✔ (E, C)</td>
<td>✔ (E)</td>
<td>Mobile Computer</td>
</tr>
<tr>
<td>Mobilisation</td>
<td>✔</td>
<td>✔</td>
<td>✔ (E, C)</td>
<td>✖ (U)</td>
<td>Vehicle Computer</td>
</tr>
<tr>
<td>Defibrillator</td>
<td>✔</td>
<td>✖</td>
<td>✔ (E, C)</td>
<td>✔ (E)</td>
<td>Bespoke System</td>
</tr>
<tr>
<td>Voice comms.</td>
<td>✔</td>
<td>✔ (C, E)</td>
<td>✔ (E, C)</td>
<td>✔ (E)</td>
<td>Mobile Device</td>
</tr>
<tr>
<td>Vehicle telematics</td>
<td>✔</td>
<td>✔ (C, E)</td>
<td>✔ (C)</td>
<td>✖</td>
<td>Bespoke System</td>
</tr>
<tr>
<td>Surveillance</td>
<td>✔</td>
<td>✔ (C, E)</td>
<td>✖ (U)</td>
<td>✖ (U)</td>
<td>Bespoke System</td>
</tr>
<tr>
<td>Mobile Diagnostics</td>
<td>✖</td>
<td>✖</td>
<td>(U)</td>
<td>(U)</td>
<td>Bespoke System</td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- As technology and equipment is replaced within the ambulance we will continuously aim to reduce the duplication of common functions and enhance usability through integration or interfacing and development of a standards based common information bus. (M, L)
Using & Sharing Information

The data which we collect through the recording of our day to day activities can provide us with an invaluable resource of information and knowledge. Whilst we have invested in the building blocks through systems, technology and resource in the form of a data warehouse, the next few years will aim to further capitalise on this investment as more data sources are added. Only recently have we started to see the benefits of disparate data being joined up and presented as meaningful information, moving forward we must harness and analyse this information to help inform future decisions in all aspects of our service delivery.

Information & Business Intelligence Strategy

Aim 6: We will develop information to support improved performance and a greater understanding of the business we operate in

We are now half way through the timespan of the Information & Business Intelligence (I&BI) Strategy and significant progress on the objectives set out has already been made. As with most technology related strategies, the need to adapt and evolve to new challenges and requirements is essential. Our investment at the start of the last strategy has ensured that we have solid foundations and resources to meet the information challenges which will be presented to us in the future.

✓ We will refresh our information and business intelligence strategy (S)
✓ We will develop a key set of tightly controlled (with descriptions and which are regularly maintained and audited) management dashboards / performance packs to be used as a single source of high level performance measures. (S)
✓ We will develop effective and secure means of sharing our key performance measures with external stakeholders (S, M)
✓ We will continuously develop and exploit information to enable us to make more informed decisions in key strategic areas which are laid out within the Trusts key objectives such as ICAT and DePRO. (S, M, L)

Measuring, analysing and re-engineering processes when required are vital to the healthy development of a lean and learning organisation, it is key that accessible, accurate and meaningful information is available to support this.

✓ Through the further development of ‘Athena’ (or similar information systems) staff will be empowered with the ability to easily explore and analyse every aspect of the information we all produce leading to new, more effective ideas and efficient ways of working. (S, M)
Information Governance Strategy

Information Governance (IG) is a means of providing assurance that information, particularly person-identifiable information (PII), is managed efficiently, securely, effectively and in accordance with relevant legislation, with the objective of delivering the best possible care and service.

Aim 7: We will consume, share and secure information for the improvement of patient care.

Quality information and knowledge and effective use of it can lead to the provision of high quality care to patients, clients and service users. It is now recognised as being one of the most important assets of an organisation. Information is needed at all levels to support internal operations, add value to its service delivery functions and to serve as evidence of the way an organisation operates.

This strategy, underpinned by the Information Governance Strategy will ensure that the Trust is in line with the requirements of the data protection act.

✓ We will refresh our Information Governance strategy in line with national guidance. (S)
✓ We will develop a Health Record Sharing & Integration Strategy. (S, M)
✓ We will improve on our previous years Information Governance Toolkit score (S, M, L)
✓ We will implement solutions to minimise our current (where possible) and future archive paper storage requirements. (S, M, L)

Cyber Security

A new national service will provide expert advice and guidance on cyber security threats and best practice to the NHS and other health and care organisations. CareCERT (Care Computing Emergency Response Team) will be run by experts at the Health and Social Care Information Centre and will aim to enhance cyber resilience across the health and social care system.

The project was initially funded by the Cabinet Office National Cyber Security Programme (NCSP) and went live in January 2016.

CareCERT aims to:

- Provide incident response expertise for the management of cyber security incidents and threats across health and care systems.
- Broadcast potential cyber threats and necessary actions to take across the sector, to ensure cyber threats are safely dealt with.
- Be a central source of security intelligence for health and care by working with cross government monitoring partners such as GovCertUK and CERT-UK.
- Support the analysis of emerging and future threats through unique analysis tools and reporting.
- Be a trusted source of security best practice and guidance.

To support this and combat the threats of Cyber Security breaches:

✓ We will develop and train an internal pool of expertise able to engage with CareCert (S, M)
✓ We will monitor our preparedness through the Information Security Group. (S)
Financial Profile and Affordability

The below shows the provisional funding in place for the next five years to support this strategy. As with any key organisational development each of the identified areas will require robust business cases to draw from these provisions.

Due to the rapid nature of technological advancement, changes to government policy, uncertainty around the extent of central funding for specific projects, availability of specialist resource and the current financial position of the Trust the profile may appear heavy front loaded.

The areas of greatest risk of slippage are DPRO (as it is estimated at high cost and still in the feasibility stage) and Agile Working (as there is uncertainty around demonstrating a sustainable tangible return on investment alongside the introduction of ESN)

Airwaves replacement (ESN) has been left blank due to the uncertainty around funding provisions and it may be appropriate to reapportion the provision from the Agile Working allocation.
Appendix

Department Structure

Governance Structure
## Glossary

<table>
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<tr>
<th>Term</th>
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<tbody>
<tr>
<td>Athena</td>
<td>NEAS Data warehouse</td>
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<tr>
<td>CAD</td>
<td>Computer Aided Dispatch</td>
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<td>CP-IS</td>
<td>Child protection Information Sharing</td>
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<td>ePCR</td>
<td>Electronic Patient Care Record</td>
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<tr>
<td>ESN</td>
<td>Emergency Services Network (A private mobile network used for emergency services)</td>
</tr>
<tr>
<td>GRS</td>
<td>Global Rostering System (A NEAS used application used to roster staff)</td>
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<td>IG</td>
<td>Information Governance</td>
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<tr>
<td>LAN</td>
<td>Local Area Network</td>
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<tr>
<td>MPLS</td>
<td>Multiprotocol Label Switching (A Network protocol)</td>
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<tr>
<td>N3</td>
<td>The NHS Network (Private Network used for the NHS)</td>
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<td>NHSMail</td>
<td>Centrally managed secure email service for the NHS</td>
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<td>PSN</td>
<td>Public Services Network (Private Network used for government agencies)</td>
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<td>QoS</td>
<td>Quality of Service (Used as a means to prioritise data on a network)</td>
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<tr>
<td>SCR</td>
<td>Summary Care record (NHS central patient record store)</td>
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<tr>
<td>SCR-AI</td>
<td>Summary Care Record with Additional Information</td>
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<tr>
<td>SIP</td>
<td>Session Initiation Protocol (Used as a means to deliver telephony)</td>
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<td>UTM</td>
<td>Unified Threat Management</td>
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<tr>
<td>WAN</td>
<td>Wide Area Network</td>
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<td>WfM</td>
<td>Workforce Management</td>
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## References

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