

INFORMATION TECHNOLOGY INCLUDING TELEPHONY AND CLINICAL SYSTEMS CONTRACTS

FREQUENTLY ASKED QUESTIONS

Cyber-security

1. *How much money has the Trust spent on cyber security measures in the following financial years?:*
 - a. 2016-17 - £90k
 - b. 2015-16 - £80k
 - c. 2014-15 - £80k
 - d. 2013-14 - £80k
 - e. 2012-13 - £70k

2. *How many cyber-attacks has the Trust experienced in the following financial years?:*
 - a. 2017-18 – 1
 - b. 2016-17 - 2
 - c. 2015-16 - 0
 - d. 2014-15 - 0
 - e. 2013-14 - 0
 - f. 2012-13 – 0

3. *How were each of these cyber threats dealt with? If this request exceeds the FOI cost limit, then please provide as much explanation as possible of how the Trust dealt with the most recent cyber threats. Both attacks in 2016-17 were via phishing e-mails. Some files were affected and all files were successfully recovered. 2017-18 was the WannaCry cyber-attack – see below*

4. Has your organisation reviewed all of the government's '10 steps to cyber security'?
 - a. Yes

5. Have you suffered Distributed Denial of Service (DDoS) cyber attacks on your network in the last year?
 - a. Yes

6. If so, how many DDoS attacks did you experience during 2016?
 - a. Attempted attacks occur weekly or even daily; the Trust has only experienced one successful attack, which was 'WannaCry' – see below

7. Has your organisation ever been the victim of a DDoS attack which was used in combination with another type of cyber attack, such as a demand for ransom/ransomware, network infiltration or data theft?
 - a. Yes

8. How does your IT team detect that your organisation has suffered a DDoS attack?
 - a. A variety of controls are in place

9. Does your method of DDoS mitigation detect sub-saturating DDoS attacks of less than 30 minutes in duration, which do not typically overwhelm the network?
 - a. Yes

Does your organisation have the following solutions in place to protect and manage your IT infrastructure?	Yes/No
Firewall	Yes
Data encryption	Yes
Incident reporting	Yes
Web security	Yes
Mobile threat prevention	Yes
Distributed denial of service protection	Yes
Real-time monitoring solution	Yes
Zero-day protection - threat intelligence	Yes

The Trust will not release certain information about cyber-security and IT-related security under the exemption in section 31(1)(a) of the Freedom of Information Act relating to the prevention or detection of crime to this data. Please see appendix 1 for further detail as to how this exemption has been applied. Under this exemption, the Trust will not release information on:

- URL and web-filtering – name of system, vendor, or cost
- Firewall – name of system, vendor
- VPN or RAS solution system, vendor or date of contract renewal or cost
- MLPS costs per year or number of location connected to MPLS network
- Number of Egress Points

WannaCry

1. Was the Trust subject to the WannaCry cyber-attack?
 - a. Yes
2. How many PCs/laptops/devices were affected by WannaCry in your Trust?
 - a. 1
3. What happened to affected devices?
 - a. The one affected PC was disconnected immediately from the Trust's network and no changes, upgrades or patches were made. It was immediately decommissioned. It was handed to NHS Digital.
4. How many planned outpatient appointments were cancelled or postponed as a result of the WannaCry infection or precautionary steps taken to halt the spread of infection?
 - a. 26
5. How many planned operations were cancelled or postponed as a result of the WannaCry infection or precautionary steps taken to halt the spread of infection?
 - a. None
6. What was the approximate cost to the Trust of dealing with this incident?
7. A. £2570 – staffing time costs for dealing with management of incident

IT Contracts and Spend

What is your organisation's IT spend in FY15/16 and FY16/17?	FY15/16 £	FY16/17 £	FY16/17 £
Overall	£3,137,000	£4,037,000	£4,071,000
Capital	£2,300,000	£3,200,000	£3,234,000
Revenue	£837,000	£837,000	£837,000

Does your organisation outsource any or all of its IT infrastructure?	Yes/No	If yes, who is the main supplier or shared service provider?	If no, please give details:	Contract renewal date

Desktop management	No		In-house	N/A
Networking	No		In-house	N/A
Data centre	No		In-house	N/A
Mobile device management	No		In-house	N/A
Server management	No		In-house	N/A
IT security	No		In-house	N/A
Other (please specify)	No		In-house	N/A

What elements of your IT infrastructure are managed by a cloud provider?	Yes/No/specify
Data storage	No
Networking	No
Back-up and archive	No
Processing and compute capacity	No
Application databases	No
Big data analytics databases	No
Email and collaboration	No
Other (please specify)	Intranet

Does your organisation plan to move to a cloud-based service in the next 2 years?	Yes	No
Data storage		No
Networking		No
Back-up and archive		No
Processing and compute capacity		No
Application databases		No
Big data analytics databases		No

Email and collaboration		No
Other (please specify)		No

What percentage of your servers are virtualised and what virtualisation platform do you use?	Response	
What percentage of your servers are virtualised		80
Virtualisation platform and main supplier		See below

How does your organisation manage data storage?	Please select	On premise/Off premise	Main supplier	Annual spend	Contract renewal date
In-house data centre		On premise	Dell	Not separated from spend with main supplier	N/A

How many servers does your organisation have and are these owned or leased?	Response	
Number of servers	210	
Owned or leased	Owned	
Average age of servers	3	
Main supplier	Dell	
Annual spend 2016/17	Circa £200,000	

Please specify your organisation's network suppliers, annual spend and contract renewal dates	Main supplier	Annual spend - FY15/16 £	Contract renewal date
Fixed line telecoms	KCOM	232,038	Rolling contract
Mobile telecoms	Vodafone	115,200	Rolling contract
Data network (broadband)	KCOM	20000	Rolling contract
WiFi (hardware)	Cisco	Bundled with contract	N/A
CoIN (if applicable)	N/A		
WAN	KCOM	38000	Rolling contract
LAN	N/A		
Other (please specify)	N/A		

Please outline the extent of your trust's WiFi coverage?	Yes/No	Percentage of organisation covered
Community wide (e.g. CoIN)	No	
Enterprise wide (whole campus)	Yes	90
Main building only	N/A	
Sections of building(s) only	N/A	
Mobile phone signal enabled through WiFi	No	
No wireless networks are used in the trust	N/A	

Does your organisation have a BYOD or CYOD policy?	Yes/No
Bring Your Own Device (BYOD)	No
Choose Your Own Device (CYOD)	No

What mobile device management (MDM) software does your organisation use?	Main product and supplier	Annual spend - FY15/16	Contract renewal date
Smartphones	N/A		
Laptops	N/A		
PCs	N/A		
Tablets	Mobile Iron	Circa £30,000	By 01/12/2018
Other (please specify):			

What devices are used by your organisation?	Number across organisation	Average age of product	Main supplier	Spend in 2016/17
Smartphones	626	4	Vodafone	Included in contract
Laptops	500	4	Dell	£107,447.98
PCs	5000	4	Dell	£213,777.57
Tablets	40	4	Apple	Included in laptops

What video/web conferencing software does your organisation use?	Response	Notes
Main product (e.g. Skype, Jabber, Webex)	Polycomm	
Main supplier	Logicalis	
Annual spend	Nil	
Contract renewal date	N/A	

What desktop operating system software is used by your organisation?	Main product	Main supplier	Annual spend	Contract renewal date
	Windows 7	Microsoft	£280,000	Rolling contract

What personal office productivity software is run by your organisation?	Response
Product and version	Office 2010
Licencing model (e.g. cloud-based, enterprise-wide, concurrent-user, named user)	Enterprise
Number of licences	5700

Does your organisation use NHSmail or a locally hosted email system?	NHSmail	Locally-hosted (please specify provider)	Both	Are you moving to NHSmail2 (Yes/no)
		MS Outlook		Yes

Server Hardware Maintenance- contract relating to the support and maintenance of the organisations servers:

- **Contract Title:** See attached analysis
- **Contract Type:** Break Fix / Critical Support for critical hardware
- **Existing/Current Supplier:** All contracts are directly with Dell
- **Hardware Brand:** Dell
- **Operating System / Software (Platform):** Windows
- **Annual Average Spend:** Circa £32,000
- **Contract Duration:** 1 / 2 years
- **Contract Expiry Date:** Various see attached
- **Contract Review Date:** Annual
- **Purchase of Servers:** Servers are procured against specific projects, and phased where the purchase relates to a planned upgrade or expansion. There is an annual allocation and as far as possible, expenditure is equalised throughout the year, with minimal spend in Q1.
- **Number of Physical Server:** 137
- **Number of Virtual Servers:** 210
- **Brief Contract Description:** Break Fix / Critical Support

Virtualisation Licensing (VMware, Solaris, Unix, Linux, Windows Server):

- **Contract Title:** Provided under the Microsoft Enterprise Services Agreement (ESA)

- **Contract Type:** Licensing and software assurance
- **Existing/Current Supplier:** Microsoft
- **Hardware Brand:** N/A
- **Operating System / Software (Platform):** Windows
- **Annual Average Spend:** Not able to disclose
- **Contract Duration:** 3 Years
- **Contract Expiry Date:** April 2018
- **Contract Review Date:** Q3 2017
- **Purchase of Servers:** N/A
- **Number of Physical Server:** N/A
- **Number of Virtual Servers:** 210
- **Brief Contract Description:** Licensing and software assurance

Virtualisation Maintenance/Support:

- **Contract Title:** No additional support beyond the Dell contract described above and as per attached
- **Contract Type:** See response above re Server Hardware Maintenance
- **Existing/Current Supplier:** Dell
- **Hardware Brand:** Dell
- **Operating System / Software (Platform):** See response above re Server Hardware Maintenance
- **Annual Average Spend:** See response above re Server Hardware Maintenance
- **Contract Duration:** See response above re Server Hardware Maintenance
- **Contract Expiry Date:** See response above re Server Hardware Maintenance
- **Contract Review Date:** See response above re Server Hardware Maintenance
- **Purchase of Servers:** See response above re Server Hardware Maintenance
- **Number of Physical Server:** N/A
- **Number of Virtual Servers:** See response above re Server Hardware Maintenance
- **Brief Contract Description:** See response above re Server Hardware Maintenance

Storage Area Network Maintenance/Support (EMC, NetApp etc):

- **Contract Title:** Covered under the Dell contracts described above
- **Contract Type:** See response above re Server Hardware Maintenance
- **Existing/Current Supplier:** Dell
- **Hardware Brand:** Dell
- **Operating System / Software (Platform):** See response above re Server Hardware Maintenance

- **Annual Average Spend:** See response above re Server Hardware Maintenance
 - **Contract Duration:** See response above re Server Hardware Maintenance
 - **Contract Expiry Date:** See response above re Server Hardware Maintenance
 - **Contract Review Date:** See response above re Server Hardware Maintenance
 - **Purchase of Servers:** See response above re Server Hardware Maintenance
 - **Number of Physical Server:** See response above re Server Hardware Maintenance
 - **Number of Virtual Servers:** See response above re Server Hardware Maintenance
 - **Brief Contract Description:** See response above re Server Hardware Maintenance
- Sandboxing vendor – N/A – none in place
 - Sandboxing annual cost – N/A
 - Sandboxing expiry date – N/A
 - Guest WiFi vendor N/A – no guest WiFi in place until September 2017, to Queens’ Centre, Castle Hill Hospital only
 - Guest WiFi annual cost – not yet determined
 - Guest WiFi expiry date – not yet determined

Fixed Telecommunications and Internet Services:

Contract 1

1. Current Fixed Line (Voice Circuits) Provider - Supplier’s name
 - a. Kingston Communications and Vodafone
2. Fixed Line - Contract Renewal Date
 - a. Rolling contract in place
3. Fixed Line- Contract Duration - the number of years the contract is for each supplier.
 - a. Rolling contract in place
4. Type of Lines - PSN, Analogue, SIP?
 - a. PSN/Analogue
5. Number of Lines per supplier? SIP trunks, PSN Lines, Analogue Lines
 - a. Vodafone 60, KC 170

Contract 2

1. Minutes/Landline Provider - Supplier’s name (Fixed Voice not Mobiles)
 - a. Vodafone, KC
2. Minutes/Landline Contract Renewal Date

- a. Rolling contract in place
3. Minutes/Landline Monthly Average Spend
 - a. £9,600
4. Minute's Landlines Contract Duration: the number of years the contract is with the supplier.
 - a. Rolling contract in place
5. Number of Extensions In Place
 - a. 6000

Contract 3

1. Fixed Broadband Provider- Supplier's name
 - a. Kingston Communications
2. Fixed Broadband Contract Date
 - a. 8th June 2012 – Rolling 30 day contract.
3. Fixed Broadband Annual Average Spend
 - a. £20,000

Contract 4

1. WAN Provider- - Supplier's name
 - a. Kingston Communications
2. WAN Contract Renewal Date
 - a. Rolling Contract from October 2000
3. WAN Annual Average Spend
 - a. £38,000

Contract 5 – PABX and VOIP

1. Contract Type: Maintenance, Managed, Shared?
 - a. PABX – maintenance; VOIP - managed
2. Supplier
 - a. KCOM for PABX and VOIP
3. Annual Average Spend
 - a. £263,000 per annum for the last three years
4. Number of Users
 - a. 6000
5. Hardware Brand

- a. The primary hardware brand of the organisation's telephone system. Cisco
6. Application(s) running on PBX/VOIP systems, e.g. Contact Centre, Communication Manager
 - a. Contact Centre
7. Telephone System Type: PBX, VOIP, Lync etc
 - a. Combination of PBX and VOIP
8. Contract Duration - include any extension periods
 - a. PBX rolling annual contract and VOIP 5 years
9. Contract Expiry Date
 - a. Various – rolling contract for PBX. VOIP contract expiry on 31 January 2022
10. Contract Review Date
 - a. Annual review – 31 January each year
11. Contract Description
 - a. The contract is to supply, configure, deploy and support

Pagers

1. How many pagers are used currently within the Trust?
 - a. 11
2. When the supplier contract due to expire?
 - a. November 2017

IM&T Structure and contact details

Digital Director: Mark Simpson

Deputy Director of IM&T: Tracy Sowersby

IM&T is organised into four service areas:

Information (Tracy Sowersby senior lead)

IT (Ian Hutty Head of Service)

Care Records Service (Neil Proudlove Head of Service)

Care Records Digitisation (Karen Nayler Head of Service)

All email addresses are firstname.lastname@hey.nhs.uk

The Trust's switchboard number is 01482 875875

Trust Strategies:

Published on:

<https://www.hey.nhs.uk/about-us/corporate-documents/>**Clinical Systems and Contracts**

Area	System Used (if not in place, when do you expect to implement)	System Supplier	When does the contract expire?	Do you intend to review supplier in next three years?	Is there a bi-directional feed back to the PAS for clinical information or PMI (please say which)?
Electronic Patient Record	Lorenzo	DXC	June 2021	No	
Core Patient Administration System	Lorenzo	DXC	June 2021	No	
Emergency Department	Lorenzo	DXC	June 2021	No	N/A Part of Lorenzo
Cardiology (clinical)	Cardass	GEC	In handover period to new supplier at present for Jan 2019 start	No	Unidirectional PMI Only
Endoscopy (clinical)	Endoscribe	Endoscribe	Rolling	Not known	Unidirectional PMI Only
Ophthalmology (clinical)	Medisoft	Medisoft	Rolling contract	No	No
Maternity	Lorenzo	DXC	June 2021	No	N/A Part of Lorenzo
Theatres	ORMIS	ORMIS	In handover period to new supplier at present for 2020 Start	Not known	N/A will be Part of Lorenzo
ICU/ITU	Medicus	Medicus	2022	Not known	Unidirectional PMI Only
Oncology	Lorenzo	DXC	June 2021	No	Unidirectional PMI Only

Area	System Used (if not in place, when do you expect to implement)	System Supplier	When does the contract expire?	Do you intend to review supplier in next three years?	Is there a bi-directional feed back to the PAS for clinical information or PMI (please say which)?
ePrescribing	Lorenzo	DXC	June 2021	No	N/A Part of Lorenzo
eDMS	None				
PACS	Agfa	Agfa	2022	No	Linked to RIS for PMI orders and results
RIS	Agfa	Agfa	2022	No	Unidirectional PMI Only Bi Directional for Requests and Results
Clinical Patient Observations	NerveCentre	NerveCentre	2019	No	Unidirectional PMI and ATD
Electronic Order Comms	Lorenzo	Lorenzo	2021	No	Linked to RIS and Path for orders and results
LIMS	LabCentre 1.13	CliniSys	2019	Yes	Inbound for PAS and Orders Outbound for Results
Blood tracking	Bloodhound	Bloodhound	2019	Yes	Linked to LabCentre for bloodstock movement
Doctors/Nursing worklist	None				
Digital sharing of care summaries	Lorenzo	DXC	June 2021	No	Transmit via MESH to GP Practices
Electronic processes around discharge (Section 2s/section 5s/social care interaction)	Lorenzo	DXC	June 2021	No	N/A Part of Lorenzo
Bed Management	Cayder	Cambio	May2019	No	Yes PMI and Bi-directional ATD
Medical staff communications	None				

Area	System Used (if not in place, when do you expect to implement)	System Supplier	When does the contract expire?	Do you intend to review supplier in next three years?	Is there a bi-directional feed back to the PAS for clinical information or PMI (please say which)?
(e.g Bleep, mobile app or equivalent)					
Patient Portal	None				
Asset Tracking software	None				
Trust Integration Engine	Healthshare Health Connect	Intersystems	Perpetual Licence	No	This manages all our messaging
eRostering	HealthRoster	Allocate Software	November 2020	Yes- as part of the contract review	No
Digital Dictation	G2 Speech Report	G2 Speech Report	Sept 2021	No	Yes PMI and OPD Activity
Single Sign On	None				
IT Service Desk	In house				
Email	Nhs.uk	Nhs.uk	Rolling contract	Yes	No
Business Intelligence and Dashboards	Analyzer	Strategy Companion	2020	No	No
Risk Management Software	Datix	Datix	Annual	No	No
Data Warehouse	Acute Health Data Enterprise	Insource	2020	No	No
SLAM	SLAM	Civica	Annual Licence	No	No
Coding support	Medicode	3M	Feb 2019	No	PMI details and coding

Area	System Used (if not in place, when do you expect to implement)	System Supplier	When does the contract expire?	Do you intend to review supplier in next three years?	Is there a bi-directional feed back to the PAS for clinical information or PMI (please say which)?
(e.g. 3M)					

Appendix 1 – Cyber security information exemption

The Trust feels that this information falls under the exemption as cited in section 31(1)(a) the prevention or detection of crime to this data.

In reaching this decision we have taken the following into account:

- The actual harm which would occur if the information was disclosed. We believe that the disclosing this information would be likely to result in a more than hypothetical risk of a potential information security breach, given the specific and direct way which such information could be used to facilitate such a breach.
- A section 31(1)(a) requires the Trust to consider the public interest test; that is, in all the circumstances the public interest in maintaining the exemption outweighs the public interest in disclosing the account details.

We agree that there is a public interest in disclosure of information in order to ensure that the Trust is transparent in how it delivers its services. However we believe that the degree to which the disclosure of this particular piece of information (set against all the other detailed information in your request) serves this transparency is minimal. Balanced against that, there is a significant public interest in protecting the Trust against security breaches. Therefore these questions cannot be answered due to the sensitive nature and because providing this information could compromise the security of the Trust.