

UHB EPR Roadmap for LDR

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0.1	10/03/16	Revised roadmap document to reflect LDR and DMA survey
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Approvals

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DOCUMENT REFERENCES

Title	Document Owner	Document Description	Document Location
2016/17 Trust Annual Plan v1	UHB	Trust Annual Plan	UHB
Organisation Charts for: EPR Clinical Roles EPR Governance Structure EPR Team Structure IT Team Structure	UHB	Organisation Charts	UHB
UHB EPR Roadmap - ref to LDR DM 2016	UHB	UHB EPR Roadmap	UHB
Report _ DMA Survey - UHBFT 15012016		Digital Maturity Assessment Report	

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EPR Roadmap Approach

Work to achieve an EPR within UHB began in the late 1990's with the development of the PICS (Prescribing Information and Communications System) prescribing and medicine administration system which was deployed across the Trust by 2008. The development of PICS has been clinically led, placing usability and patient safety at the forefront of the design philosophy. It has been continuously developed, incorporating clinical decision support for safe prescribing via a highly evolved rules engine which integrates information from the Drug Dictionary, laboratory results and diagnostic classifications.

Electronic out-patient noting was successfully introduced following the move into the new Queen Elizabeth Hospital Birmingham in 2011. In-patient clinical noting within PICS was not a design requirement for the new hospital and is only now in development. Clinical and business demands for development of other key elements of PICS such as Critical Care Charting and Ward Order Communications, have taken priority.

The final development of in-patient clinical noting in which descriptive elements of the patient stay are captured, will replace the final elements of the paper record from ward level. This apparently simple task, rendering textual information into an electronic environment, is in fact a significant challenge to all EPR design if its capture is to be as flexible as the current written document and if it is to seamlessly generate real clinical value in the form of coded information. Potential solutions to this challenge are regularly assessed by clinical and development teams. They have identified the maturity of proprietary software solutions and hardware capabilities such that this final element of the EPR is now planned, with initial design elements agreed, resources planned and potential partners assessed.

In 2008 UHB decided to move away from the National Programme for IT and, led by the Medical Director, the trust established an EPR governance framework to ensure that a clinically led EPR transformation programme would enable the organisation to adapt to changes in clinical practice, capacity and capability planning and project delivery.

The opening of QEHB 16th June 2010, and subsequent opening of the new out patient areas on 4th July 2011 saw the final implementation of the Trust's outpatient EPR system which included the key development of clinical noting for out patients within PICS integrating with existing EPR systems; including Clinical Portal, Winscribe digital dictation, PACS Imaging, Telepath Labs, iPM PAS, Scanning and Documentum document repository. This provided a consolidated EPR within a single user interface for clinicians to access and enter data at the point of care, and remove the reliance on the paper record within the clinic setting.

Clinicians work with a dedicated EPR team and the trust's IT department, which is acknowledged as a key enabler to the clinical transformation programme. The trust is taking an iterative approach to designing their EPR via a combination of integration, interoperability and in-house system development.

The EPR Clinical transformation programme is reflected in the trust's annual plan; extract relating to EPR below: (see appendices)

Current State

The core system components of EPR at UHB are:

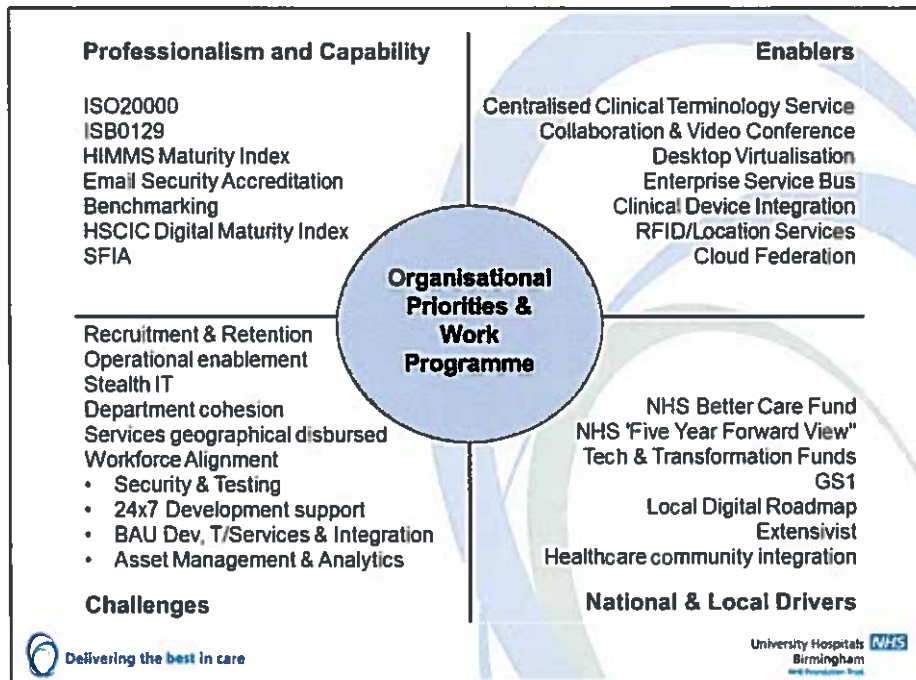
- PICS
- Clinical Portal
- PACS - AGFA PACS system
- CRIS - Clinical Radiology Information System HSS
- Telepath – Labs
- OceanoED (management A&E throughput, including production of discharge summaries from ED)
- Winscribe Text digital dictation
- OPTIMS
- NORSE
- Prism – Cardiology
- Prism – Lung Function
- Audit Base – Audiology
- Infoflex – Neurophysiology
- Unisoft – Endoscopy Suite
- WABA – Clinical Photography
- YCC (Your Care Connected – integrated GP record)
- GP Practice Page – GP facing Portal
- Electronic Document Transfer (EDT DocMan)
- GP Order Comms (electronic requesting of blood sciences from the GP practice)
- MyHealth – Patient facing Portal
- Theatres - Galaxy
- PAS - i.Patient Manager (iPM). UHB will be migrating off i.PM by March 2017

The current state is described in detail in the document EPR Roadmap - ref to LDR DM 2016 (5) within the Vision/EPR roadmap section of this document – (see appendices)

EPR Organisational Structure and Governance Framework

The EPR Programme is led by the Medical director. The following organisation charts further describe the structure: (see appendices)

Capabilities and Infrastructure



List of key IT Enablers:

- Speech Recognition
- IE 11
- ESR
- Cyber Security enhancements
- Video Conferencing (Vidyo)
- Hardware ITU Carts for electronic ITU chart
- Hardware - Ward phlebotomy trollies
- Hardware - Blackberry mobile
- Email Accreditation
- Clinical Portal - High Availability
- Network Refresh
- TIE - Rhapsody
- Blue Prism Interoperability

Vision - EPR Roadmap

The EPR Roadmap referenced below describes the current state and shows what the planned EPR transition projects are over the next 4 years.

Note: In the interest of relating our UHB roadmap to the DMI (Digital Maturity Index) survey and combined local digital roadmap (LDR) for EPR we have referenced the DMI Survey questions where appropriate. (see appendices)

Appendices

- A1 Copy of 2016-17 Trust Annual Plan
- A2 EPR Clinical Roles Org Chart – 2016
- A3 EPR Design & Priority Group Org Chart – 2016
- A4 EPR Org Structure
- A5 IT Services Organisational Chart – 2017
- A6 EPR Roadmap
- A7 DMA Survey Report for UHBFT

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CORE PURPOSE 1: CLINICAL QUALITY

Strategic Aim: To deliver and be recognised for the highest levels of quality			
Strategic Enabler 1: To strengthen the organisational systems and arrangements for the collection, access, use, and reporting of quality outcomes to key			
Ref	Key Task	Outcome Measures	2016/17 Outcome Measures
1.1	Further enhance the electronic patient record	<ul style="list-style-type: none"> a. Design, develop, and deliver full PAS replacement with OceanoPAS. b. Complete scope and specification works to develop patient tracking capability (24x7) via EPR to enhance bed management and discharge planning. c. Develop scope and specification to pilot Telemetry from appropriate bedside clinical equipment into EPR and work with research to explore wider opportunities. d. Expand use of NORSE in to other specialities. e. Support the delivery of ICT enabling works to deliver GP Order comms. 	<ul style="list-style-type: none"> a. Implement system modernisation of Clinical Portal giving more intuitive access to documentation. b. Widen adoption of NORSE and scope and deliver Phase 1 of electronic repatriation system. c. Scope and develop business case for upgrade of Galaxy system. d. Scope and develop business case for replacement laboratory information management system. e. Deliver pre-assessment capability via myHealth@QEHB. f. Scope and implement Phase 2 of bed management. g. Deliver replacement electronic referral management system. h. Develop strategy for delivery of network services following expiry of current contract in 2017.
1.2	Implement the internal plans for PICS expansion and enhancement	<ul style="list-style-type: none"> a. Implement phase 1 of ITU charting in qtr 1. b. Implement Ward Order Comms in qtr 1. c. Implement phase 1 of e-handover in qtr 1. d. Commence proof of concept for enhanced clinical noting (digital proforma management) in qtr 1. e. Integrate Oceano ED with PICS in the Emergency Department in qtr 3. f. Implement electronic consent in PICS in qtr 3. 	<ul style="list-style-type: none"> a. Deliver training for inpatient Ward Order Comms and b. Scope requirements for outpatients Ward Order Comms. c. Finalise Phase 1 and scope and deliver Phase 2 of ITU charting by qtr 2. d. Implement phase 2 of e-handover in qtr 1. e. Develop timeline for implementation of full inpatient EPR with associated business case for training and project support. f. Transition underlying clinical coding from ICD10 and OPCS4 to SNOMED CT. g. Fully implement chemotherapy rotas and infusions for rheumatology. h. Commence proof of concept for embedded speech recognition within PICS.
1.3	Implement the external plans for PICS expansion and enhancement	<ul style="list-style-type: none"> a. Work with Birmingham Children's Hospital to develop a paediatric prescribing and medicines administration module. b. Deliver Phase 1 in November 2015. 	<ul style="list-style-type: none"> a. Deliver EPR system for Birmingham Children's Hospital including paediatric drug dictionary. b. Work with the Royal Orthopaedic Hospital to implement PICS including bespoke drug dictionary.

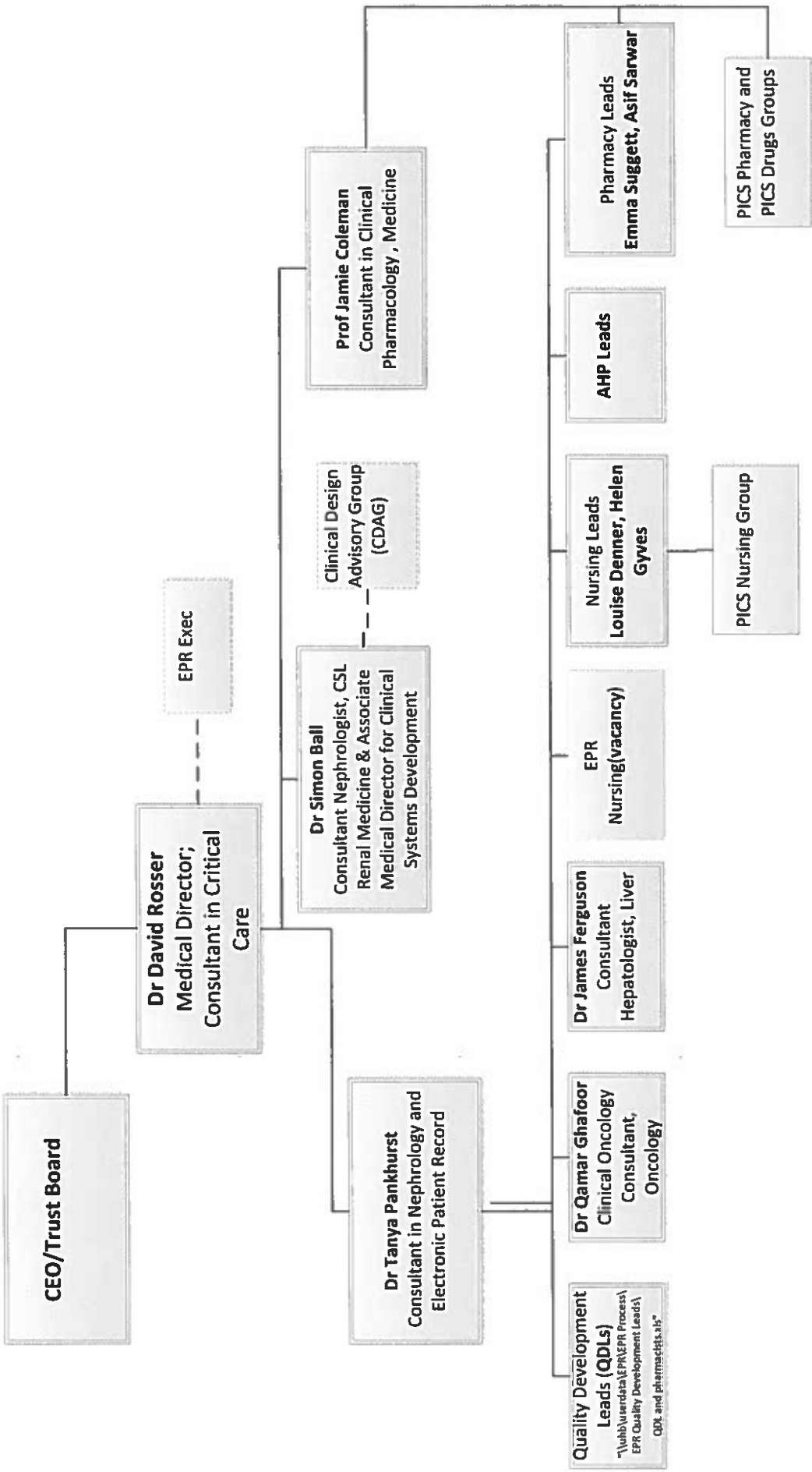
1.4 Expand and enhance the functionality of myhealth@qehb	<p>a. Create virtual clinics in myhealth and undertake a pilot of 10 patients within Liver Medicine and 10 within Cardiology then expand if appropriate to the whole speciality.</p> <p>b. Review and if appropriate expand the implementation of open offer of myhealth to enable more patients to be signed up.</p> <p>c. Expand the implementation of care plans within myhealth.</p> <p>d. Introduce the concept of Competencies in Diabetes in Myhealth.</p>	MD	Myhealth Project Board	Director of IT and Director of Medical Director's Services
Strategic Enabler 2: To provide patients with high quality information and support to allow informed choice and shared decision making				
6.2 Support the delivery of the Your Care Connected initiative	<p>2016/17 Outcome Measures</p> <p>a. Support the local healthcare economy access to electronic GP records via the "Your Care Connected" programme, contributing to the ongoing development of the scope and specification beyond the current technical demonstrator, delivering access to circa 1.6m patient GP records.</p>	MD	EPR Executive Group	Manager of IT

ROLES

- CFO
- Chief Financial Officer
- CN
- Chief Nurse
- COO
- Chief Operating Officer
- DCA
- Director of Corporate Affairs
- DCOMS
- Director of Communications
- DoD
- Director of Delivery
- DoP
- Director of Partnerships
- DSO
- Director of Strategic Operations
- MD
- Medical Director

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EPR Clinical Roles Organisation Chart

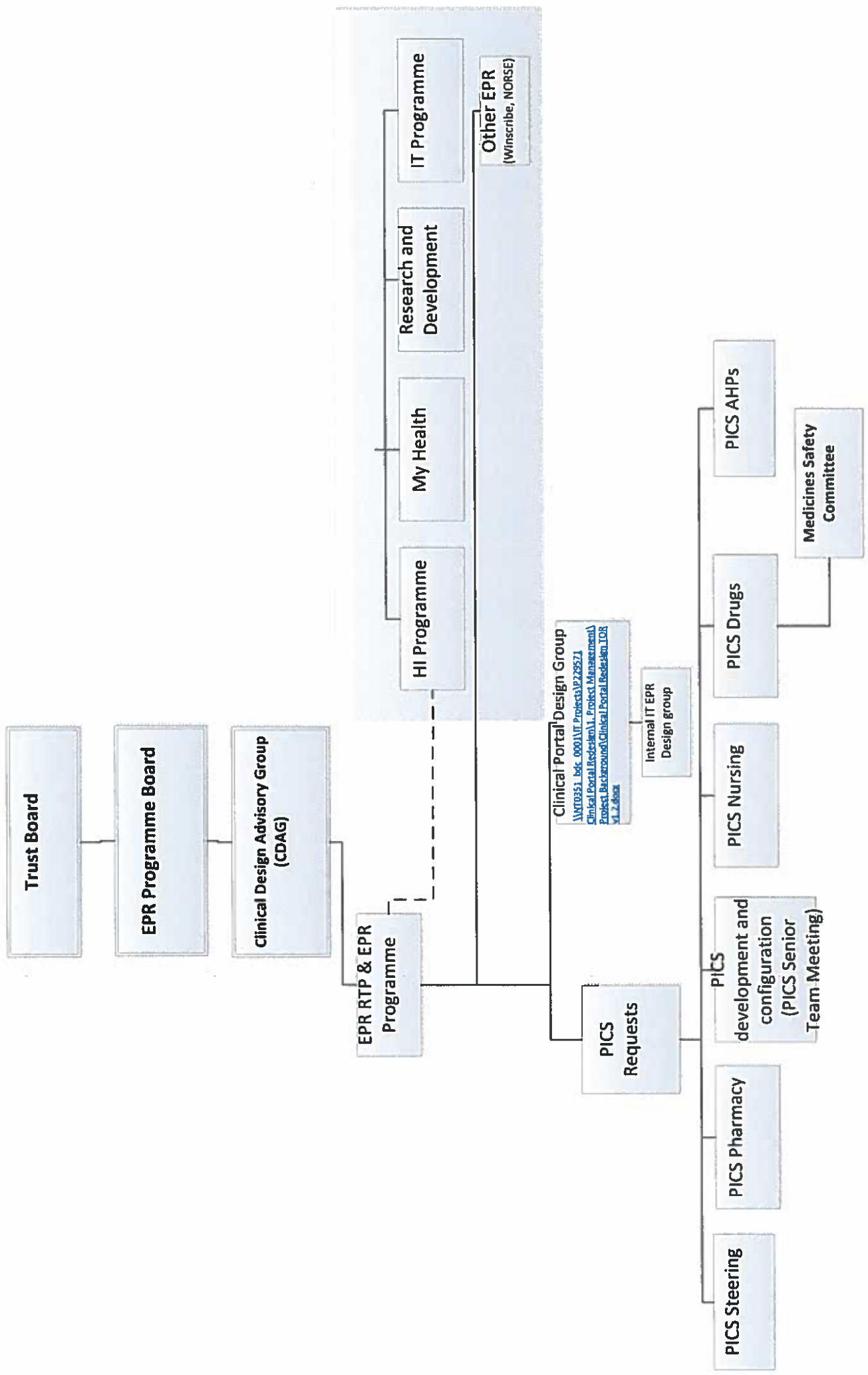


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EPR Design and Prioritisation Groups Organisation Chart



A4

Head of Clinical Systems/EPR
Deb McKee

Oceano PAS PM
Dave Handley

Oceano PAS
Team

EPR Programme Manager
Steve Ryan

EPR Business
Change Manager
Linda Mennell

PICS/IT Project Manager
Vacancy

Principle PICS Analyst
Programmers
Lina Stezhka
Ian Young
Richard Sames

Lead PICS
Analyst
Programmers
Andrew Capewell
Richard Copley

IT Training
Manager
Shirley Shepherd

Clinical Systems
Business Analyst
Laurie Lucas

PICS Training
Manager
Kate Dyer

Senior PICS
Analyst
Programmers
Craig Parrish
Laura Rathbone
Dave Thompson

Senior MARS
Analyst
Programmer
Yuxia Cui

PICS Trainers
Sean Wearden
Dawn Moody
Lucy Clare-
Banayos
Cella George
Rosie Williams
Vacancy

Analyst
Programmers
Simon Kitchen
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Kate Morris
Adam Ross
Vacancy
Vacancy

EPR Support
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Diane Sullivan
Daniel Kenwrick

IT Training Team
Carolyn Wallace
Peter Rollason
Inderepreet
Daiheley
Kiran Dairvair
Ayesha Sakhi

Analyst
Programmer
(MARS and PICS)
Emma Suffield



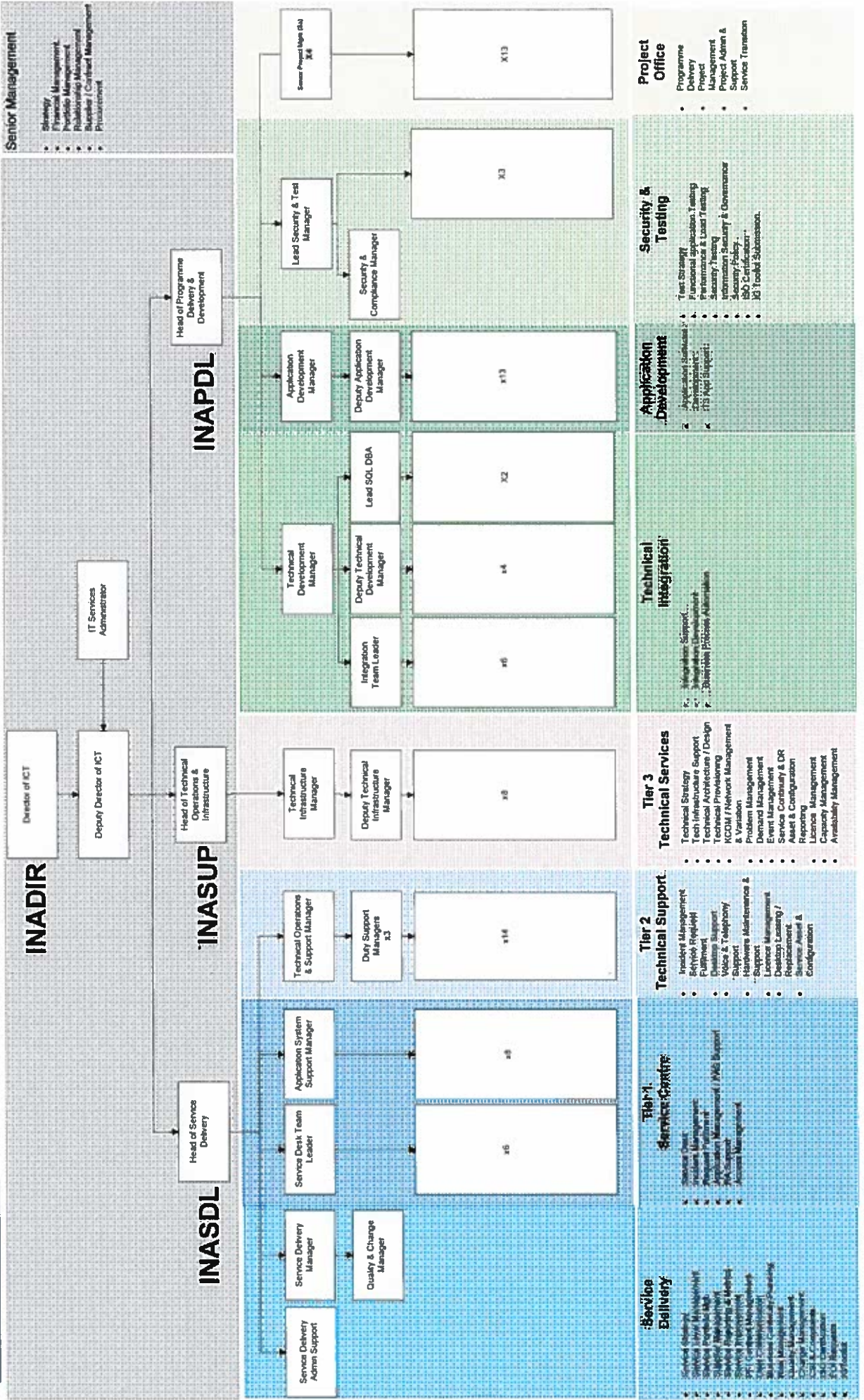
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University Hospitals Birmingham NHS Foundation Trust

IT Services Organisation Chart

- KEY**
- (A) Apprentice
 - (S) Secondment within ICT
 - (O) Seconded out of ICT
 - (C) Contractor Project
 - (CT) Contractor Fixed Term
 - (CS) Contractor Substitute
 - (C*) Local FT Contract
 - (M) Maternity Leave
 - (L) Locals
 - (FT) Part Time



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UHB EPR Roadmap

This is not an exhaustive list of all UHB EPR, IT and HI projects and is therefore not indicative of the complete resource requirements to deliver these programmes of work. The projects listed here are all core projects that will contribute to changes in the Digital Maturity Index (DMI) and/or removing paper records.

DMIA Survey Category Heading Ref	EPR Project	Description	Project Status	Yr 2016/17	Yr 2017/18	Yr 2018/19	Yr 2019/20
UHB EPR Clinical Transition Projects							
C - Orders and Results	PICS Order Comms	Phase 1 - IP Blood requests Phase 2 - IP Other lab tests	Inflight	(Ward) Order Comms phase 1 (from Jan 2016)	Ward Order Comms phase 2 & OP Order Comms (TU Chain phase 2)		
A - Records, Assessments	PICS ITU Chart	Removing the ITU paper chart	Inflight	ITU Charts roll out (from Jan 2016)			
A - Records, Assessments	PICS Handover	eHandover is already in place for doctors. Phase 2 project is replacing the paper assessment form	Inflight	eHandover phase 2 (from April 2016)			
A - Records, Assessments	PICS Pre-screening assessment	Pre-screening assessment tool (incl. Pre-assessment data capture) (from April 2016)	Inflight				
A - Records, Assessments	PICS Paediatric module of PICS	Development of a paediatric module of PICS	Inflight	Paediatric PICS module			
A - Records, Assessments	PICS Timeline, IP Noting and SNOMED CT	Currently IP noting is done on paper. We plan to further	Planned	(Start July 2016) EPR: IP Noting, Nursing care plans, Nursing care pathways, Ward Round, Timeline, SNOMED CT			
C - 3.3 Orders and Results	PICS Diagnostic Requests Other	Many diagnostics and other requests/referrals are already	Planned				
A - Records, Assessments	PICS MDTs	Create PICS forms linked to PICS timeline	Planned				
I - Enabling Infrastructure/	PICS: AD and PICS	All user accounts are controlled by AD (Active Directory) except	Planned				
B1 - Medicines Management	PICS Medicines Reconciliation/DIAMD	Inclusion of Medicines Reconciliation in the PICS OPD	Planned				
A - Records, Assessments	PICS Theatres Workflow	PICS workflow, integration with medical devices	Planned				
A - Records, Assessments	PICS eConsent	Currently paper consent forms are completed and then	Planned				
G5 Asset and Resource	PICS data integration with medical devices	Enhance PICS where appropriate to make sure data	Planned				
A - Records, Assessments	PICS and ED integration	Integrate our ED system with PICS, removing paper that is	Planned				
A - Records, Assessments	PICS AHP Data capture tool	Enhancing PICS forms to include further AHP data	Planned				
E1 - Decision Support	Centralising Patient Alerts	Alerts are recorded in PICS, Portal and Osano ED. When	Planned				
G1 & G2 Asset and Resource	NORSE roll out	Currently Neurosurgery, Renal and Liver use an online referral	Inflight	NORSE roll out to UHB Specialises (from Jan 2016)			
A - Records, Assessments	24x7 Electronic whiteboards	Enhancing the electronic whiteboard application to	Inflight	24x7 Electronic whiteboards			
G2 - Asset and Resource	My Health Patient Portal	UHB Patient portal providing patient's access with all results	Inflight	My Health Patient Portal			
G5 Asset and Resource	Integration of Clinical Devices to Trust EPR systems	Introduce 'Black box' to work with medical devices. Once we	Inflight				
A2.4 Records, Assessments	Clinical Portal	Clinical Portal refresh (IC11 compatibility) and	Inflight				
G2 - Asset and Resource	Mosaic Integration (Radiotherapy)	Integrating Radiology referrals with the Clinical Portal	Inflight				
C4 Orders and Results	Results Tracking	Already in Clinical Portal as optional for Medics, but we	Planned				
Projects to integrate/interface with other health and social care providers							
B3.1 Transfers of Care	Your Care Connected (YCC)	Currently the patient information for participating	Inflight	YCC phase 1	YCC phase 2	YCC phase 3	
B3.1 Transfers of Care	GP Order comms roll out	Currently being rolled out	Inflight	GP Order Comms			
B1.6.3.2 Transfers of Referrals	Reverse NORSE - Emergency Referrals	Approx 6 practices a month are currently UHB have an online referral system that is designed	Planned	Reverse NORSE (sending out emergency external referrals)			
EPR Project Requests not yet planned							
A - Records, Assessments	Electronic CAS Card	Removal of paper CAS card utilising OsanoED and PICS	Future (unplanned)				
G2 - Asset and Resource	PICS Internal Referrals	Improved workflow and audit capability	Future (unplanned)				
H Standards	G51	Adoption of G51 barcode standards.	Future (unplanned)				G51 Barcode

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Current State - description by patient journey

This tab describes the current state of EPR and digital maturity at UHB with reference to the main patient journey processes. The headings are mainly taken from the LDR Digital Maturity Assessment - Indicative process walkthroughs, although some additional process elements have been added.

Patient Journey	Process Element	Current Capability supporting notes	Systems in use	Planned Future State
Emergency Admissions and ED	Referral	Mixed economy; mainly paper-based referrals for inter hospital transfers coming into CDU (Clinical Decision Unit)/SAU (Surgical Assessment Unit). Major Trauma transferred via ambulance and air ambulance services provide us with a paper handover sheet. Self referrals into ED have data captured electronically on registering at the ED Reception Desk.	OceanoED iPM PAS Paper	eReferrals NORSE ?Electronic data transfer from WMAS ?Integration with social care record
	Attendance	Minimum dataset captured within OceanoED (demographics, presenting symptoms, method of arrival (on foot, ambulance). This is then printed and the treating clinician completes the detailed clinical information about findings and management plan on paper. On completion of episode of care the CAS card is then scanned into OceanoED and uploaded	OceanoED iPM PAS Paper - CAS card Clinical Portal (including link to YCC)	Electronic CAS card Integration with PICS/OceanoED/PAS Replacement
	Admission	On decision to admit patient is discharged from OceanoED and admitted onto iPM into the appropriate ward, under the appropriate clinician. Patient is also "clerked" into PICS in order for prescribing and medicines administration to and electronic obs to be recorded. Day to day noting and ward round data capture is done on paper within the paper medical record.	iPM PICS Paper	PAS replacement integrated with PICS PICS In-patient day to day noting; including ward round function
Out patient	Referral Process	ERHA - scanning and workflow application to handle paper based GP and Tertiary referrals eReferrals - to handle electronic GP referrals PICS - Internal referrals	ERHA e-Referrals PICS	ERHA refresh eReferrals updates PICS enhancements
	Clinical Prioritisation and scheduling of out patient appointment	ERHA - scanning and workflow application to handle GP and tertiary referrals iPM - Trust's PAS system where all OP appointments are scheduled CRIS - Radiology	ERHA iPM CRIS - Radiology	PAS replacement ERHA refresh e-Referrals
	Preparation of Clinical info	Clinical Portal, which provides unified view of patient record. (PICS, Winscribe, Lab Results, PACS, PRISM, Auditbase, Unisoft, Infoflex) Outlier is Ophthalmology	PICS, Winscribe, Lab Results, PACS, PRISM, Auditbase, Unisoft, Infoflex	continuous iterative improvements to improve user experience and patient safety
	Patient arrival Height/weight and nurse interaction as relevant	Patient arrival and tracking through their visit is handled by: Self Check in, OPTIMS, Patient Calling, Clinical Portal	Self Check in, OPTIMS, Patient Calling, Clinical Portal, PICS	Continuous iterative improvements to improve user experience and patient safety
	Consultation: Documentation, placing of orders, reviewing of results	Nurse interaction is recorded on PICS; height, weight and all pre consult checks (for example, The clinic list and consultation is managed using the Clinical Portal which allows the user to follow the out patient workflow. This is a single log in access to all systems with the exception of PICS which users are currently required to re-authenticate when accessing the patient record in PICS via CP.	Clinical Portal PICS Winscribe PACS	PICS AD integration to support unified access via single sign on Continuous iterative improvements to: Clinical Portal
	Scheduling of follow-up appointments	Clinicians uses Clinical Portal to provide follow up booking instructions. These are actioned by out patient receptionists and/or medical secretaries who record the action they take in the OPTIMS system. All appointments are then booked/scheduled on iPM (PAS). Usually this is carried out with the patient in out patients; if this was not possible then the actions will be	OPTIMS iPM PICS PRISM	continuous iterative improvements to improve user experience and patient safety PAS Replacement PICS order comms in OPD for blood sciences
	Clinical Correspondence	Contemporaneous clinic notes are recorded in PICS by the clinician Clinical Correspondence; treatment notes, in-clinic GP letters are produced within PICS by the clinician Winscribe digital dictation is used to create clinical correspondence. Standard templates are	PICS Winscribe EDT Docman GPPP	continuous iterative improvements to PICS, CP, MyHealth and GPPP to improve user experience and patient safety Speech rec to improve contemporaneous

Coding	Clinical coding using OPCS4 record procedures carried out in out patients via a configurable tick list by clinicians when they complete the Clinical Portal e-outcome form. All coded information is automatically up-dated into IPM. The 'tick lists' are maintained by the clinical coders and reports are run on accuracy and completeness of outcome forms.	e-Outcome forms OPTIMS CP IPM	continuous iterative improvements to improve user experience and patient safety PAS Replacement
In patient	Patient Admission on a ward	IPM PICS Paper	continuous iterative improvements to improve user experience and patient safety; PAS Replacement PICS Medicines Reconciliation
Ward Round	Ward rounds are undertaken by the senior clinician utilising the paper-based medical record and viewing PICS. Day to day noting currently recorded in the paper record. PICS is used to view Results, Alerts and medications and up-date various elements within the PICS	PICS Telepath Paper	PICS in-patient day to day noting SNOMED CT
Prescribing and Administration of Drugs	Drugs are prescribed and administered in PICS and printed to Pharmacy where they are then entered into the Pharmacy system (no integration layer exists currently)	PICS Paper Ascribe	continuous iterative improvements to improve user experience and patient safety; Integration with Pharmacy system
Discharge (and repatriation)	All administrations are undertaken using mobile devices and positive patient ID via barcode Discharge letter is produced in PICS; started on admission with a mixture of coded (ICD10 and OPCS4) and free text data and must be completed prior to being able to prescribe TTOs. The discharge letter is one standard template across the Trust and is available via GPPP, MyHealth and is sent via EDT Docman. The patient receives a paper copy on the ward on the	PICS Paper	continuous iterative improvements to improve user experience and patient safety; Reverse NORSE to facilitate repatriation to PICS in-patient day to day noting SNOMED CT
Nursing Observations and Care Planning	All Nursing observations and Assessments are recorded in PICS in real time. Assessments recorded electronically are: MUST Waterlow	PICS Paper	continuous iterative improvements to improve user experience and patient safety
Reporting and Analytics	All areas have access to electronic Dashboards driven by the data recorded in PICS. The dashboards are available across the trust and compare key performance indicators	PICS SMART	continuous iterative improvements to improve user experience and patient safety;
Theatres	Rostering information is available electronically in the SMART system and feed into Theatre list management is undertaken within Galaxy Theatre System (this records details about consumables, op duration etc) Theatre stock control is done within SAGE All operation notes are completed within PICS using a mixture of coded (OPCS4) and free text	Galaxy/SAGE PICS Paper	SMART replacement (with Allocate) PICS theatres workflow Device integration (anaesthetic machines etc) Theatre replacement programme for Galaxy
ITU	All critical care observations are currently recorded on paper-based critical care charts. One per day, per patient. Prescribing and medicines administration, alerts and results are all done within PICS; augmented patient care data set is also recorded via bespoke access database and facilitates	PICS Paper Augmented care Access database	Electronic critical care charts within PICS; including capture of augmented care dataset to remove Access Database

Ref	DMA Survey Category	DMA question heading	DMA question sub heading	UHB Comments	Project Status (Inflight, Planned, Ongoing,BAU)
A	Records, Assessments and Plans	Overall this is in place across the trust, although there are pockets where enhancements/extensions need to be undertaken. This is delivered via "best of breed" systems and integration.			Ongoing(BAU)
A1.1		Information your organisation holds electronically	Clinical Notes	Delivered via the PICS system. In place in all out patient settings across the Trust, with the exception of Ophthalmology who are in place - via PICS across all in-patient and out patient settings	Ongoing(BAU)
A1.2			Clinical Observations	In place - via PICS across all in-patient and out patient settings	Ongoing(BAU)
A1.3			Care Plans	Will be delivered via PICS In-Patient EPR Project (as part of in-patient clinical noting)	Planned Project
A2.1		Access/format that information is held?	Trace NHS Number?	In place via PDS link within IPM PAS	Ongoing(BAU)
A2.2			Healthcare professionals can access digital records from wherever they need	In place - via Clinical Portal and PICS; all systems can be accessed remotely via VPN	Ongoing(BAU)
A2.3			Healthcare professionals can update digital records from wherever they need	In place - via Clinical Portal and PICS; all systems can be accessed remotely via VPN	Ongoing(BAU)
A2.4			Healthcare professionals can easily find digital records from wherever they need	In place - via Clinical Portal and PICS; all systems can be accessed remotely via VPN. Currently enhancing searchability to further	Inflight Project
A2.5			Record information at point of collection	In place via PICS Clinical Noting and Digital Dictation (Winscribe)	Ongoing(BAU)
A2.6			Information is collected /recorded once (no need to copy or re-enter)	To be further enhanced with the deployment of speech recognition	Ongoing(BAU)
A2.7			Rely on digital records for the info they need at point of care	In place via PICS - elements of the clinical data capture is stored as persistent data	Ongoing(BAU)
A3.1		Information shared with external providers	GPs	In place - via PICS and Clinical Portal	Ongoing(BAU)
A3.2			Integration with social care, community, other acute	In place - delivered via GP Practice Page (practice centric web-based Portal) and Electronic Document Transfer (EDT Docman)	Ongoing(BAU)
A4.1		Information received from external providers	GPs	Currently not in place electronically. Future enhancements will be required - e.g. integration with social care, community, other acute	Future (unplanned)
A4.2			Integration with social care, community, other acute	NHSE e-Referrals, Local health economy initiative, Your Care Connected for access to GP record (in pilot phase currently).	Inflight Project
B	Transfers of Care	Overall this is partly done, but there are several projects underway or planned which will improve UHB's digital maturity.		Currently not in place electronically. Future enhancements will be required - e.g. integration with social care, community, other acute	Future (unplanned)
B1		Transfers of care into your organisation			Planned Project
B2		Transfers of care within your organisation		NHSE e-Referrals, NORSE (internally developed referrals solution for receiving tertiary emergency referrals)	Planned Project
B3.1		Transfers of care from your organisation	GPs	This is facilitated via PICS Internal referrals (consultant to consultant; therapy services etc) - not currently tracked.	Planned Project
B3.2		Transfers of care from your organisation	Other acutes	Discharge back to GP is done via PICS and the discharge letter is sent electronically via EDT and is also available on the GPPP	Planned Project
C	Orders and Results Management	Overall, results are available electronically but we are working on projects to improve our ordering and tracking capabilities.		Project to send electronic referral to other tertiary providers to repatriate patient's back to their "home" Trust. Working title for	Planned Project
C1.1		Requesting	Labs	Orders and Requests for blood sciences currently in early life proof of concept (PICS WOC project). Future phases of this project will	Planned Project
C1.2		Requesting	radiology	Requesting for all Radiology (in-patients and out patients) is done via PICS system.	Ongoing(BAU)
C1.3		Requesting	other diagnostic	Requests generated via PICS to multiple diagnostic solutions; PRISM Cardiology, PRISM lung function, Unisoft (endoscopy suite) Infoflex	Planned Project
C2		Digital Orders		As above.	Planned Project
C3		Request management		The Orders and Requests for blood sciences advocates identifying patients utilising Positive pt ID via barcode scanning at the point of	Inflight Project
C4		Results Management		All results are available digitally and clinicians can choose to track any result via the Results Tracking functionality in Clinical Portal.	Planned Project

D	Medicines Management & Optimisation	Overall this is largely in place at UHB, but there are several projects underway or planned which will improve UHB's digital maturity.				Planned Project
D1		Medicines reconciliation			This is in place within PICS as part of out patient Clinical Noting functionality. This is achieved in the in-patient record via PICS	Planned Project
D2		Digital Prescribing			This is in place at UHB via PICS. The paediatric prescribing module is currently under development with BCH.	Ongoing(BAU)
D3		Medicines Administration			This is in place at UHB via PICS. Currently being scoped is the intra-op prescribing and medicines administration. This is part of the PICS	Ongoing(BAU)
D4		Quality and Safety			PICS at UHB allows the monitoring of all high risk medications, lab tests, results etc to mitigate risk of adverse events.	Ongoing(BAU)
E	Decision Support	Decision Support			This is in place and provided via the PICS solution. It is under constant review and enhancements are iterative to improve and	Ongoing(BAU)
E1		Digital Alerts within organisation			Clinical digital alerts which facilitate sophisticated clinical decision support are used within PICS across the whole hospital. Admin	Planned Project
E2		Digital Alerts beyond organisation			We provide lab results (processed within UHB) and digital clinical letters to GPs and patients. These are sent via EDI (to GPs), Labs	Future (unplanned)
F	Remote and Assistive Care	Remote Patient Vital Signs Monitoring (Telemetry)				Future (unplanned)
G	Asset and Resource Optimisation	Overall this is largely in place at UHB, but there are several projects underway or planned which will improve UHB's digital maturity.				Planned Project
G1		Digital Bed management			This is in place at UHB via PICS which uploads the information into the in-house bed management solution - 24x7	Planned Project
G2		Digital Patient Flow			This is available within UHB via OPTIMS in out patients which sources information from PAS, PICS and e-Outcome forms (in-house	Planned Project
G3		Digital Asset Tracking			No, except in a few distinct cases (Theatres trays, Med Eng asset management)	Future (unplanned)
G4		Digital Rostering			Currently in place via the "SMART" system. Up-grade in flight to Allocate (recognised solution within the NHS).	Inflight Project
G5		Monitoring Devices			In flight project - Medical devices (Black box' approach to capture data, and then several developments to accommodate how the	Inflight Project
H	Standards	Overall this is partly done, but there are several projects underway or planned which will improve UHB's digital maturity. Notably: SNOMED CT, DM+D and GS1				Planned Project
H1		NHS Number			NHS number is sourced from PAS which synchronises with the National Patient Demographic Service (PDS) - Trust have over 98%	Ongoing(BAU)
H2		SNOMED CT			Currently all coding is ICD10 and OPCS4. Planned project to transition to SNOMED CT will commence in June.	Planned Project
H3		DM+D			This is a planned project within PICS - as part of Medicines Reconciliation/DMBD Compliance	Planned Project
H4		Academy of Medical Royal Colleges Standards adhered			The Royal College Standards have been reviewed aligned to our current development of clinical systems; PICS, Clinical Portal,	Ongoing(BAU)
H5		Patient end of life preferences			Patient end of life preferences are recorded electronically within PICS - DNAR and TEAL (treatment escalation and limitation	Ongoing(BAU)
H6		GS1			Scoping work is at the beginning. No work is yet scheduled for this.	Future (unplanned)
I	Enabling Infrastructure	Overall this is largely in place at UHB, but there are some projects underway or planned which will improve UHB's capability, and all of these enablers require ongoing review and updates.				Inflight Project
I1		Wi-Fi			In place at UHB - continual monitoring and improvements	Ongoing(BAU)
I2		Public Wi-Fi			In place at UHB (deployed March 2016)	Ongoing(BAU)
I3		Healthcare professionals use Mobile devices			In place at UHB - continual monitoring and improvements	Ongoing(BAU)
I4		Single Sign on			In place at UHB - except PICS (PICS AD integration)	Planned project
I5		Digital Systems meet users expectations			Yes. In place at UHB - continual monitoring and improvements	Ongoing(BAU)

16	Software asset and licence		In place at UHB - continual monitoring and improvements	Ongoing(BAU)
17	IT Support Desk		In place at UHB - continual monitoring and improvements	Ongoing(BAU)
18	ITIL process followed on IT support desk		In place at UHB -continual monitoring and improvements	Ongoing(BAU)
19	DR - processes		In place at UHB -continual monitoring and improvements	Ongoing(BAU)
110	DR - multi-site redundancy capability		In place at UHB - continual monitoring and improvements	Ongoing(BAU)

Print Report

Trouble Printing?

Some questions may appear in this report which you have not seen in the online version. This because some questions are dynamically hidden based on your answers to previous questions. You do not need to provide a response to any questions that do not appear in the online survey

Organisation Demographics

Your Responses

Services

What type(s) of services does your organisation deliver?

- Acute
- Mental Health
- Community Health
- Ambulance
- Social Care

Patient Statistics

1%	21%	41%	61%	81%	Don't Know
0%	20%	40%	60%	80%	100%
					N/A

What proportion of the patients who receive care in your organisation come from your local geography, with services commissioned by local CCGs?



What proportion of your patients receive specialist commissioned services in your organisation?



Budgets

Please indicate your annual IT budgets (in £'000)

Capital IT budget 1,400

Revenue IT budget 8,900

Which locally delivered or outsourced services are funded from your annual IT capital and revenue budget?

Networks

Telecomms

Hardware and devices

Applications

Service desk

Programme and project management

Information Governance/Security

Records Management

Clinical coding

Information management, analysis and data quality

End user training

Maintaining Existing Estate vs New Projects

0%	1% -	21% -	41% -	61% -	81% -	Don't
20%	20%	40%	60%	80%	100%	Know
						N/A

What proportion of IT budget spend is allocated to new projects?

Within the last 12 months has your IT department received any additional funding from an external source? Please list the three largest amounts and sources of funding.

Tech Fund 2 - 1.35m

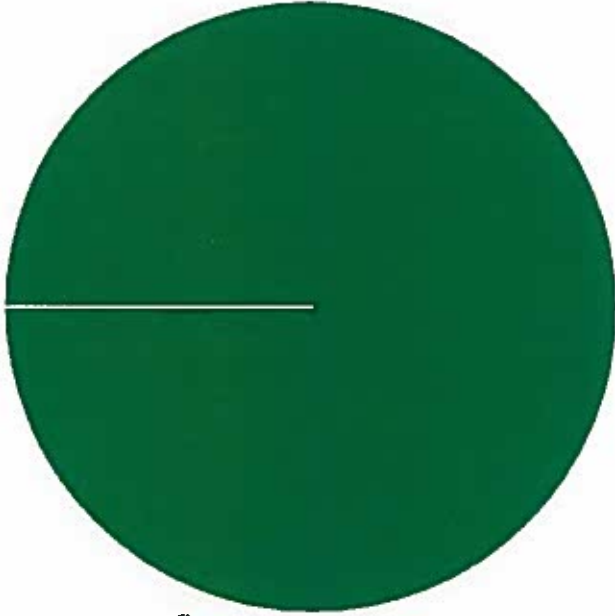
Space for Your Comments on this Section

It is worth pointing out that IT at UHB does not include Medical Records, Health Information, Clinical Coding or IT Training.

Strategic Alignment

Response Statistics

- Disagree Completely
- Somewhat Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Agree Completely
- Don't Know
- N/A
- Unanswered



Your Responses

	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
Your organisation has a clearly defined digital strategy which is aligned to clinical and corporate objectives.					<input checked="" type="checkbox"/>		
Implementation of the digital strategy is fully aligned to, and supported by, a service transformation programme(s).					<input checked="" type="checkbox"/>		
There are effective processes in place to prioritise investment in digital technology and support ideas through to implementation					<input checked="" type="checkbox"/>		

Digital technology is being used to support improved

collaboration and coordination across different parts of your organisation



Your organisation participates in a wider health and care community initiative to achieve digital record sharing

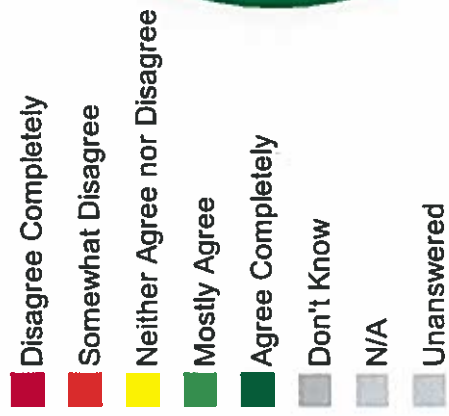


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n/a

Leadership

Response Statistics



Your Responses

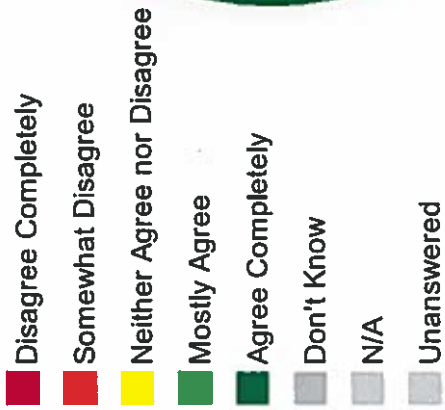
	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
Your Board owns the organisation's digital strategy and expects to receive regular updates about progress.					<input checked="" type="checkbox"/>		
The team leading the organisation's digital transformation includes a board-level sponsor					<input checked="" type="checkbox"/>		
You have strong clinical leadership through a nominated Chief Clinical Information Officer, Chief Nursing Information Officer or equivalent					<input checked="" type="checkbox"/>		
Your CCIO or equivalent has adequate protected time as part of his/her job plan to undertake the requirements of the role within your organisation.					<input checked="" type="checkbox"/>		
Your organisation monitors emerging digital technologies, using regular horizon scanning to keep the digital strategy up to date					<input checked="" type="checkbox"/>		

Space for Your Comments on this Section

n/a

Resourcing

Response Statistics



Your Responses

	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
Your organisation has the buying, contracting, and supplier management capability it needs to manage technology suppliers					<input checked="" type="checkbox"/>		
Your organisation undertakes quantitative and qualitative benefits identification in conjunction with commercial suppliers					<input checked="" type="checkbox"/>		

Your organisation ensures adequate resources are available for technology implementation and change management



Your organisation has a clinical safety officer and routinely undertakes assessment of clinical safety and risk for all digital projects



Financial plans are in place for investment in digital technology you require over the next 2-3 years



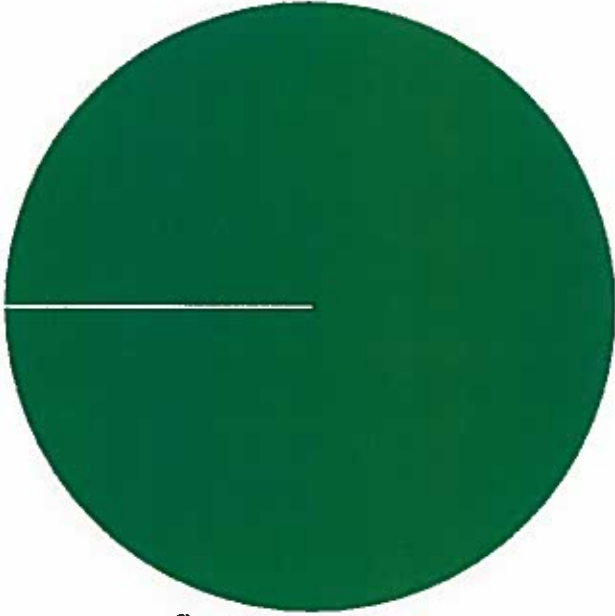
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n/a

Governance

Response Statistics

- Disagree Completely
- Somewhat Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Agree Completely
- Don't Know
- N/A
- Unanswered



Your Responses

	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
There is a Board-led digital programme(s), supported by effective operational IT delivery.					<input checked="" type="checkbox"/>		
Project and programme boards follow standard project management methodologies, ensuring effective allocation of roles and responsibility.					<input checked="" type="checkbox"/>		
Digital projects are underpinned by valid business cases and fully-engaged business owners.					<input checked="" type="checkbox"/>		
Your organisation routinely evaluates the benefits of digital projects using a consistent approach					<input checked="" type="checkbox"/>		

Your organisation routinely adopts principles outlined in best practice guidelines relating to digital services

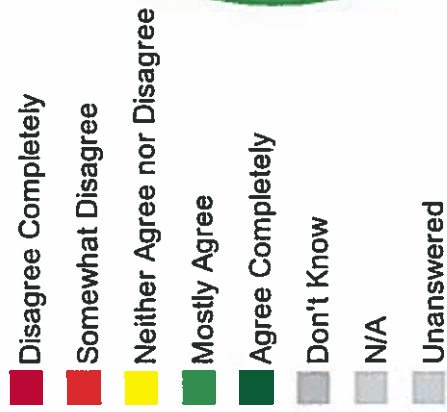


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n/a

Information Governance

Response Statistics



Your Responses

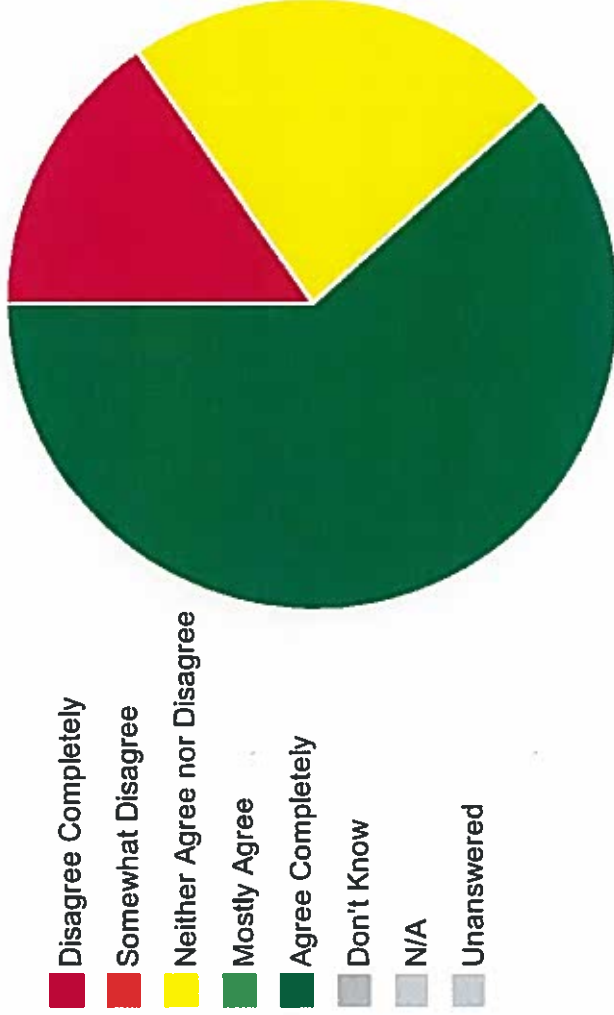
	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
There is active identification, monitoring and review of cyber security risks.			<input checked="" type="checkbox"/>				
The Board has a full and accurate picture that the organisation's key information is being properly managed and is safe from cyber threats.			<input checked="" type="checkbox"/>				
You are confident the entire workforce understands and follows your organisation's information governance policies & processes.			<input checked="" type="checkbox"/>				
You receive assurance on a regular basis that your suppliers and digital assets are secure, including penetration testing.					<input checked="" type="checkbox"/>		
There are robust due diligence mechanisms in place to ensure all 3rd parties comply with the law and central guidance and provide sufficient guarantees that personal data is handled safely and protected from unauthorised access, accidental loss, damage and destruction.			<input checked="" type="checkbox"/>				
All information governance requirements are articulated in third party contracts and monitored on an ongoing basis.					<input checked="" type="checkbox"/>		

Space for Your Comments on this Section

n/a

Records, Assessments & Plans

Response Statistics



Your Responses

Information Your Organisation Holds

What proportion of each of the following types of records is available digitally in your organisation:

0%	1% -	21% -	41% -	61% -	81% -	Don't
20%	20%	40%	60%	80%	100%	Know
						N/A

Clinical Notes	<input checked="" type="checkbox"/>
Clinical Observations	<input checked="" type="checkbox"/>
Care Plans	<input checked="" type="checkbox"/>

In what format are each of the following types of records held in your organisation:

Clinical Notes	<input checked="" type="checkbox"/>	Unstructured	Semi-Structured	Fully Structured	Don't Know	N/A
Clinical Observations	<input checked="" type="checkbox"/>					

Care Plans		Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
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Healthcare professionals can use the Personal Demographics Service to trace patients' NHS number automatically when responding to an emergency call-out

Healthcare professionals can access digital records (or relevant components of them) from wherever they need to as part of their regular day-to-day routine.

Healthcare professionals can update digital records (or relevant components of them) from wherever they need to as part of their regular day-to-day routine.

When using digital records, healthcare professionals can find what they need quickly and easily; they rarely have to navigate multiple systems/user interfaces and/or sift large volumes of irrelevant data



Healthcare professionals use digital systems to record relevant patient information at the point of collection



Information is collected/recorded once; healthcare professionals do not have to copy or re-enter it from one system to another



Healthcare professionals rely on digital records for the information they need at the point of care; paper records are used by exception.



Information Your Organisation Shares with/receives from External Providers

Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
---------------------	-------------------	----------------------------	--------------	------------------	------------	-----

Healthcare professionals in your organisation have digital access to the information they need from other local healthcare providers



Healthcare professionals in your organisation have digital access to the information they need from local social care providers.



Other local healthcare providers have digital access to the information they need from your organisation



Local social care providers have digital access to information from your organisation



Healthcare professionals have access to a consolidated view of their patients' local health and care records



Healthcare professionals can contribute to a consolidated view of their patients' local health and care records



Patients are able to view and download information from their digital care record



0%	1% -	21% -	41% -	61% -	81% -	Don't Know
	20%	40%	60%	80%	100%	N/A

What proportion of information shared with health and care providers outside your organisation is provided in a structured or semi-structured digital format?



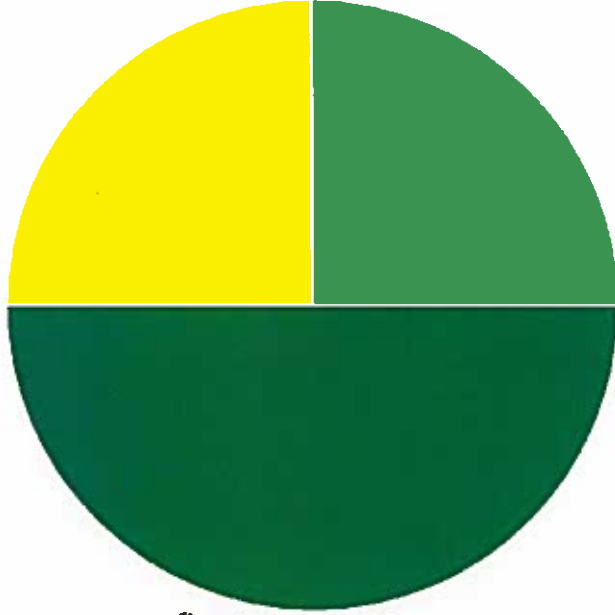
Space for Your Comments on this Section

n/a

Transfers Of Care

Response Statistics

- Disagree Completely
- Somewhat Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Agree Completely
- Don't Know
- N/A
- Unanswered



Your Responses

Transfers of Care Into Your Organisation

Response	Percentage
Disagree Completely	0%
Somewhat Disagree	1%
Neither Agree nor Disagree	21%
Mostly Agree	41%
Agree Completely	61%
Don't Know	81%
N/A	100%

What proportion of referrals received for outpatient or non-urgent assessment are automatically integrated into digital workflows to enable viewing, triaging and scheduling of appointments and investigations?

What proportion of referrals for inpatient care or urgent assessment are automatically integrated into digital clinical workflows to enable viewing, triaging, ordering of investigations or allocation of beds?

Transfers of Care Within Your Organisation

0%	1% - 20%	21% - 40%	41% - 60%	61% - 80%	81% - 100%	Don't Know	N/A
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What proportion of patient information relating to handovers of care within your organisation is shared by Healthcare professionals digitally

Transfers of Care from Your Organisation

0%	1% - 20%	21% - 40%	41% - 60%	61% - 80%	81% - 100%	Don't Know	N/A
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At patient discharge, what proportion of care summaries are shared digitally with GPs?

What proportion of electronic Patient Record Forms associated with handover to a hospital are transmitted digitally?

What proportion of electronic Patient Record Forms are transmitted digitally to a GP when patients are not transported to hospital?

Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
---------------------	-------------------	----------------------------	--------------	------------------	------------	-----

Electronic Patient Record Forms can be transmitted on route to receiving locations

Care summaries are routinely sent digitally to all other local healthcare providers

New care summaries are created in a structured digital format

Care summaries are created in a consistent format across the organisation

Information held in patients' records is used to pre-populate care summaries to avoid re-keying

0%	1% -	21% -	41% -	61% -	81% -	Don't Know
20%	20%	40%	60%	80%	100%	N/A

What proportion of care summaries are generated in real time and shared digitally with other relevant care providers as soon as completed?

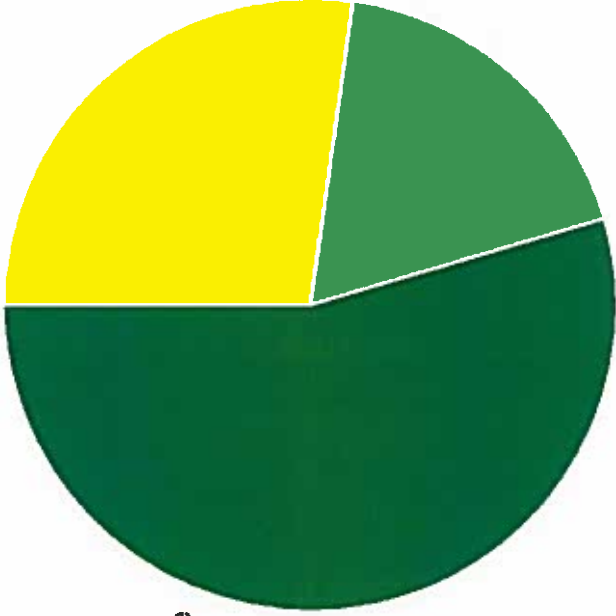
Space for Your Comments on this Section

n/a

Orders & Results Management

Response Statistics

- Disagree Completely
- Somewhat Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Agree Completely
- Don't Know
- N/A
- Unanswered



Your Responses

Requesting

Question	0%	20%	40%	60%	80%	100%	Don't Know
What proportion of patient consultations that healthcare professionals request from other clinical colleagues or specialties are ordered digitally?	0%	20%	40%	60%	80%	100%	N/A
What proportion of laboratory tests are requested through a digital order system?	<input checked="" type="checkbox"/>						
What proportion of radiology tests are requested through a digital order system?	<input checked="" type="checkbox"/>						
What proportion of requests for any other diagnostic	<input checked="" type="checkbox"/>						

tests are made through a digital order system

Digital Orders

	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
Digital orders are created in a structured format and held as part of the patient's electronic health record.					<input checked="" type="checkbox"/>		
Digital orders are pre-populated with information already collected at the point of care; healthcare professionals do not have re-enter the same information.				<input checked="" type="checkbox"/>			
When making diagnostic test requests, healthcare professionals have access to department, speciality or organisation level request/order sets.					<input checked="" type="checkbox"/>		
Healthcare professionals are alerted of duplicate or conflicting test requests					<input checked="" type="checkbox"/>		

Request management

	0%	1% - 20%	21% - 40%	41% - 60%	61% - 80%	81% - 100%	Don't Know	N/A
What proportion of patients are positively identified through using barcode technology at the point of sample collection and specimen labelling and prior to all diagnostic tests being performed?								
		<input checked="" type="checkbox"/>						

Completely Disagree Disagree Agree Completely Know N/A

Requests received by diagnostic services are automatically integrated into digital workflows to enable booking, triaging or scheduling.

Healthcare professionals can track the status of requests at all times, including receipt, authorisation, scheduling and completion.

Results Management

1% -	21% -	41% -	61% -	81% -	Don't
0%	20%	40%	60%	80%	Know
					N/A

What proportion of laboratory test results are available to healthcare professionals digitally?

What proportion of radiology test results are available to healthcare professionals digitally?

What proportion of results from any other diagnostic tests are available to healthcare professionals digitally?

		Neither					
Disagree	Somewhat	Agree nor	Mostly	Agree	Completely	Don't	
Completely	Disagree	Disagree	Agree	Completely	Know	Know	N/A

Healthcare professionals within your organisation have digital access to all relevant diagnostic test results and images for patients under their care, including those undertaken by other providers.

Healthcare professionals have digital access to all relevant diagnostic test results and images for patients under their care, including those undertaken by other local providers.

Healthcare professionals have access to results in different digital formats (where applicable), including discrete data, formatted text, images and photographs

Digital results are held in a structured format to enable clinical decision support and data extraction.

Healthcare professionals are automatically alerted of all results that require acknowledgement and an audit trail exists to demonstrate the acknowledgement process and actions taken.

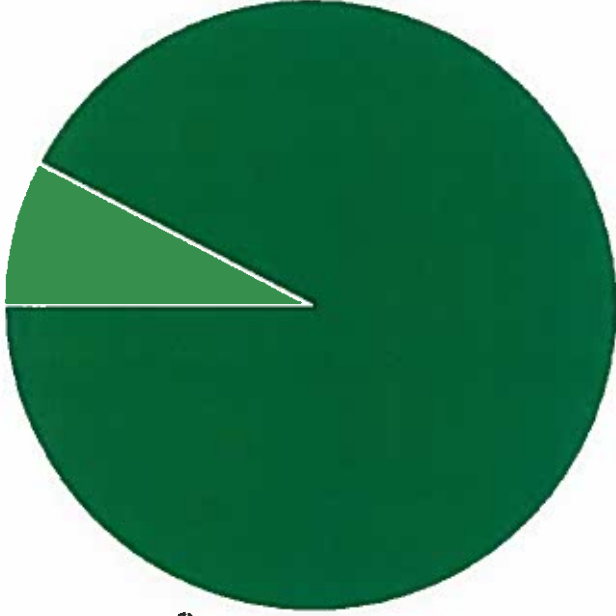
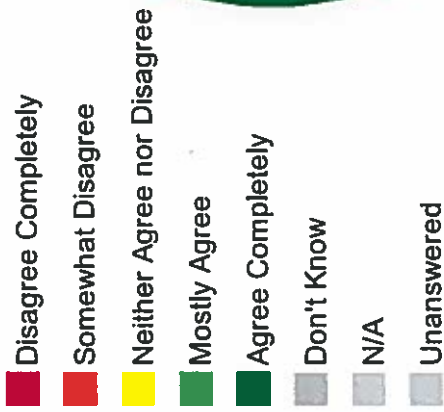
Healthcare professionals can digitally access diagnostic test results and images quickly and easily at the point of care

Space for Your Comments on this Section

Live with GP order requests for GP order comms, in process of rolling out across GP community in our health catchment area. Order comms for in-patient blood sciences is planned to go-live across the Trust in January 2016 with proof of concept on one ward; pending wider Trust roll out aligned with training plan Positive Patient ID for blood sciences is part of the roll out plan for 2016 (this is already live for all patients with wrist band scanning for meds administration) some digital external results are scanned in and therefore are not held in structured format. Clinicians are automatically alerted to results that they choose to track via the Trust's results tracking functionality. Phase 2 of Orders Comms will be to review the requirements for digital sign-off and audit of all results. Tracking from patient being bled to completion of test is part of the further development work required to be undertaken within order comms.

Medicines Management & Optimisation

Response Statistics



Your Responses

Medicines Reconciliation

Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A

Healthcare professionals use digital systems to get a complete view of patients' existing medications/prescriptions

Digital Prescribing

	0%	1% - 20%	21% - 40%	41% - 60%	61% - 80%	81% - 100%	Don't Know	N/A
What proportion of inpatient medications are prescribed digitally in your organisation						<input checked="" type="checkbox"/>		
What proportion of discharge medications are prescribed digitally in your organisation?						<input checked="" type="checkbox"/>		
What proportion of outpatient medications are prescribed digitally in your organisation?						<input checked="" type="checkbox"/>		
What proportion of chemotherapy is prescribed digitally in your organisation?						<input checked="" type="checkbox"/>		
Digital prescribing is routinely performed across all specialities, departments and sites.						<input checked="" type="checkbox"/>		
Complex medicines and infusions are routinely prescribed digitally.						<input checked="" type="checkbox"/>		
When prescribing, healthcare professionals have access to department, speciality or organisation level medication order sets.						<input checked="" type="checkbox"/>		
Reference sources are seamlessly available during the digital prescribing process.						<input checked="" type="checkbox"/>		
When prescribing healthcare professionals are alerted of drug: drug interactions, allergy intolerance, duplication of therapeutic class of drug, out of range doses.						<input checked="" type="checkbox"/>		
Calculation of medication doses, based on height, weight or body surface area, is enabled digitally.						<input checked="" type="checkbox"/>		

Completion of a patient risk assessment form offers best practice guidance and prompts prescription of appropriate medications.

Medicines Administration

	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
Medicines and infusions are automatically scheduled for administration and the outcome is digitally recorded, including reasons for non-administration. <input checked="" type="checkbox"/>							
Your organisation digitally monitors prescribed medications administered early, late or not administered at all, and reviews the reasons recorded. <input checked="" type="checkbox"/>	0%	21%	41%	61%	81%	Don't Know	N/A
	20%	40%	60%	80%	100%	Know	

What proportion of patients and medicines are positively identified prior to administration through automatic identification and data capture using barcode technology?

Quality and Safety

Monitoring of patients on high risk medications is enabled digitally; healthcare professionals are prompted

to monitor relevant laboratory tests (such as INR or drug concentration) results are tracked and there is documentation of actions taken.

Your organisation digitally monitors all adverse events resulting from medicines administration and has an audit trail to show actions taken and follow up, including yellow card reporting to MHRA.



Antibiotics are routinely prescribed digitally based on local or national formulary guidelines for the clinical indication documented, with prompts to consider IV to oral switching after a pre-defined course length.

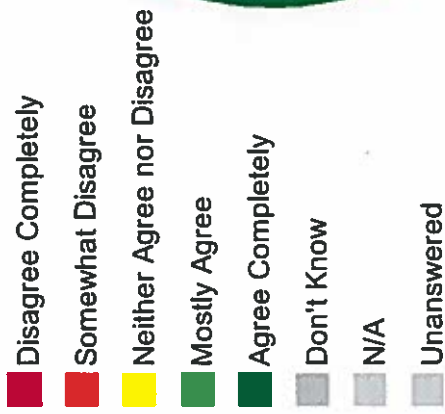


Space for Your Comments on this Section

With regard to yellow card we have the capability within our solution to do this but this is not deployed into live yet. The reason it is not deployed into live is that MHRA were unable to receive the information in the format that were proposing.

Decision Support

Response Statistics



Your Responses

	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
Healthcare professionals receive digital alerts to the existence of patient preferences					<input checked="" type="checkbox"/>		
Healthcare professionals receive digital alerts to specific patient risks					<input checked="" type="checkbox"/>		
Digital systems are used to alert healthcare professionals of patients whose clinical observations, or early warning scores, are deteriorating and need review					<input checked="" type="checkbox"/>		
Digital systems alert healthcare professionals outside							

your organisation to relevant operational information about their patients



Your organisation monitors the overruling of alerts and the reasons recorded, and works with healthcare professionals to refine decision support rules where appropriate



Healthcare professionals are directed to relevant and evidence-based reference material as part of digital clinical workflows and care pathways



Digital systems provide automatic prompts for the next action required by multi-step care plans, pathways & protocols



Healthcare professionals are prompted to complete or remind patients about overdue care actions and/or missing information



Digital systems identify patients who are ready for discharge to a different setting



Digital systems support the patient discharge process, including production of section 2 and 5 notifications and multidisciplinary discharge planning

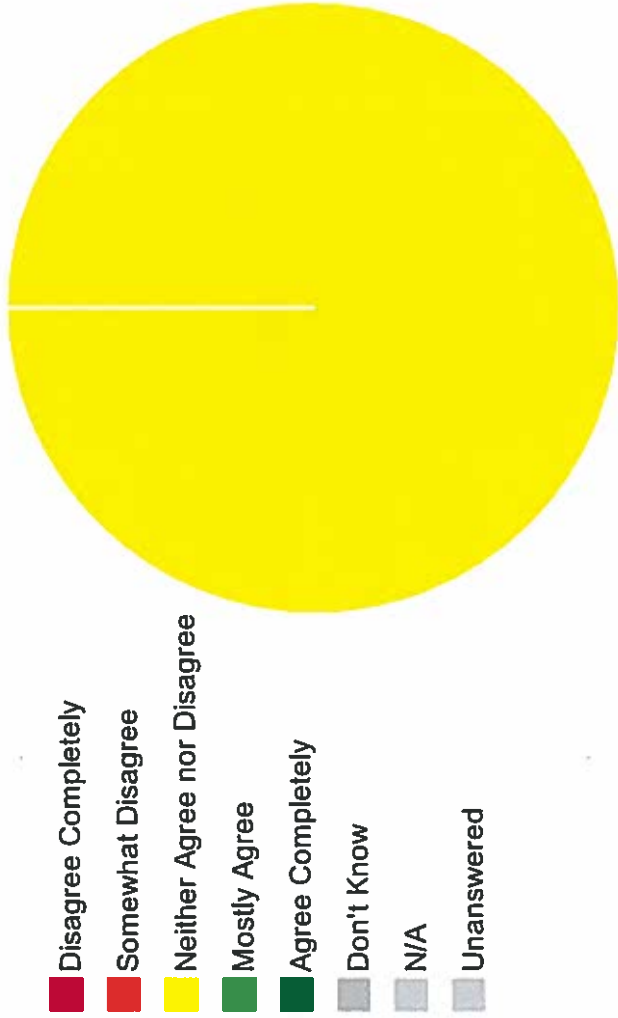


Space for Your Comments on this Section

n/a

Remote & Assistive Care

Response Statistics



Your Responses

	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
Remote/virtual clinical consultations and clinical advice are available to patients using tools such as online meetings, videoconferencing, skype, email or instant messaging			<input checked="" type="checkbox"/>				
Healthcare professionals are able to contribute remotely to discussions about patient care with colleagues outside your organisation using tools such as online meeting, videoconferencing or skype			<input checked="" type="checkbox"/>				
You are able to remotely monitor groups of patients who			<input checked="" type="checkbox"/>				

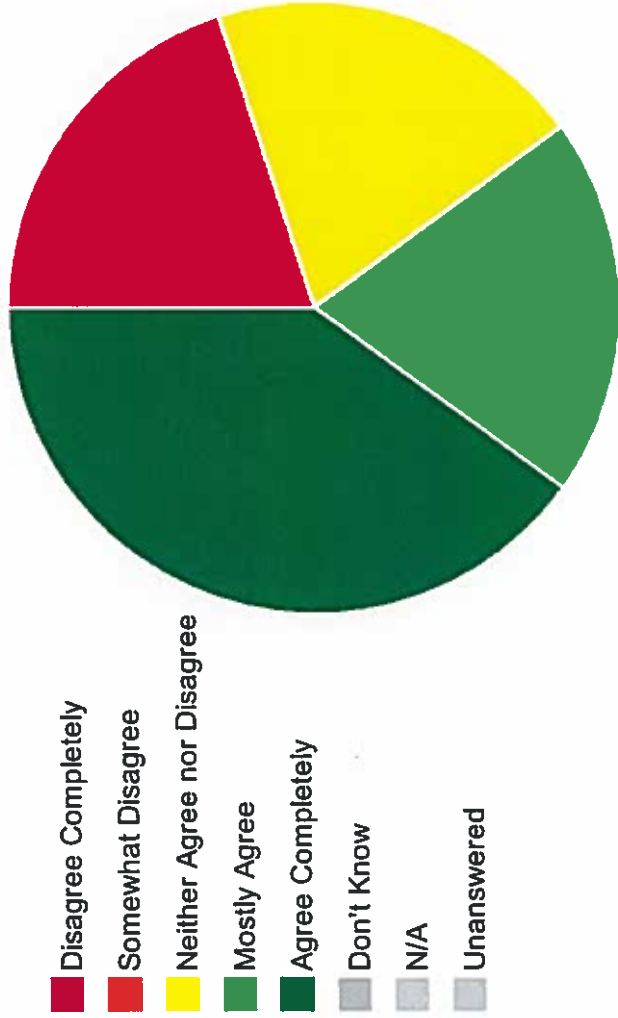
have been discharged home but are at high risk of readmission

Space for Your Comments on this Section

n/a

Asset & Resource Optimisation

Response Statistics



Your Responses

Digital Bed Management

Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know
					N/A

Healthcare professionals use digital systems to manage inpatient beds throughout the organisation



Digital Patient Flow

Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know
					N/A

Patient flow is tracked digitally in real time across all departments and sites to identify bottlenecks and delays



Digital Asset Tracking

Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know
					N/A

The location of key clinical assets, e.g. medical equipment, devices & prostheses, is digitally tracked throughout your organisation (all sites, buildings, departments, wards etc)



Digital Rostering

Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know
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Staff rostering is managed using digital systems throughout the organisation



Monitoring Devices

Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know
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Verified data from monitoring devices is uploaded into patient records or charts automatically, avoiding the need for manual recording



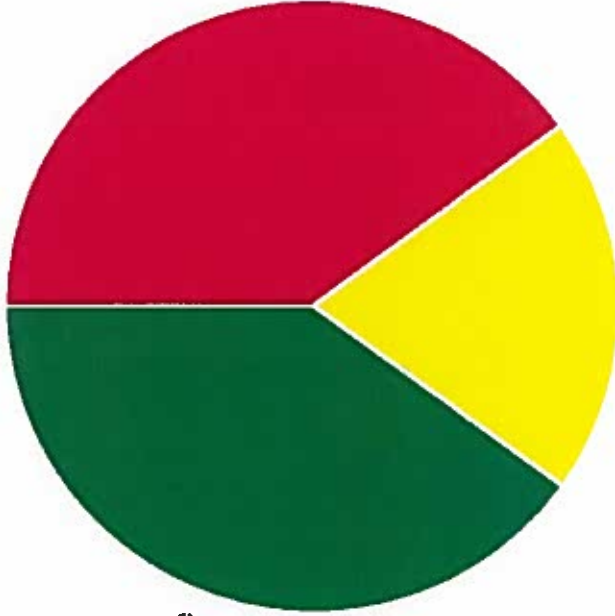
Space for Your Comments on this Section

n/a

Standards

Response Statistics

- Disagree Completely
- Somewhat Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Agree Completely
- Don't Know
- N/A
- Unanswered



Your Responses

NHS Number

Response	Percentage	Count
Disagree Completely	0%	0
Somewhat Disagree	51%	5
Neither Agree nor Disagree	76%	8
Mostly Agree	81%	9
Agree Completely	86%	10
Don't Know	91%	10
N/A	96%	11
Unanswered	100%	12

For what proportion of patients is a verified NHS number included on all information shared with any other care provider or organisation directly involved in a patient's care and treatment?

Please list the top 3 issues preventing the use of a verified NHS number for all patients.

n/a

Standards

	Disagree Completely	Somewhat Disagree	Neither Agree nor Disagree	Mostly Agree	Agree Completely	Don't Know	N/A
SNOMED-CT is the clinical terminology used to support direct management of care.	<input checked="" type="checkbox"/>						
Dictionary of Medicines and Devices (dm+d) is used to describe all medicines and devices			<input checked="" type="checkbox"/>				
The Academy of Medical Royal Colleges Standards for clinical structure and content of patients records are used to create digital patient records and transfer of care summaries.					<input checked="" type="checkbox"/>		
Patients' end-of-life preferences are recorded in accordance with the Palliative Care Co-ordination: Core Content (SCC1580) national standard					<input checked="" type="checkbox"/>		
GS1 is used to identify all patients, products and places, and for radio-frequency identification (RFID) tagging.	<input checked="" type="checkbox"/>						

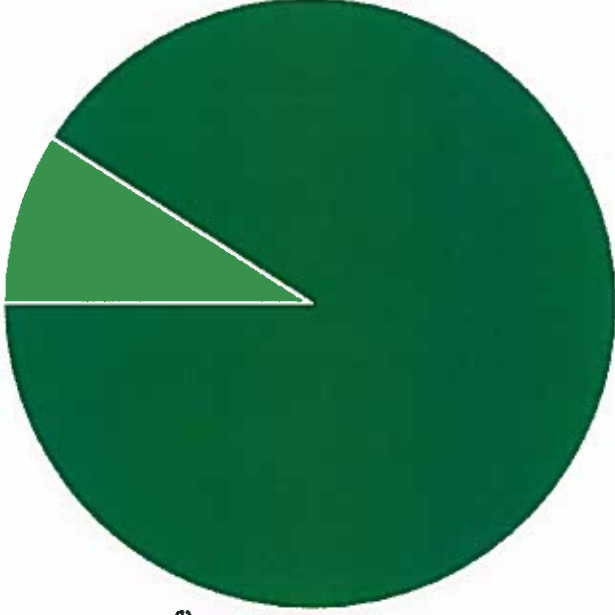
Space for Your Comments on this Section

n/a

Enabling Infrastructure

Response Statistics

- Disagree Completely
- Somewhat Disagree
- Neither Agree nor Disagree
- Mostly Agree
- Agree Completely
- Don't Know
- N/A
- Unanswered



Your Responses

Infrastructure

Healthcare professionals have wi-fi access to clinical applications across your estate

Public wi-fi is available in public areas across your estate

Healthcare professionals are equipped with mobile devices to access clinical applications and information at the point of care

Disagree Completely Somewhat Disagree Neither Agree nor Disagree Mostly Agree Agree Completely Don't Know N/A



Healthcare professionals have single sign-on access & authentication to clinical applications; they do not have to remember and use multiple usernames & passwords



Digital systems meet users' expectations regarding the time it takes to log-in to clinical applications and update/retrieve information



Software (including operating systems) used on NHS-owned IT infrastructure is approved and recorded on a software asset & licence register that confirms it is appropriately licensed for such use



Digital services are supported by an IT support Service Desk that prioritises incidents using a consistent approach agreed with nominated service users/owners



The IT support Service Desk follows an ITIL-aligned (or equivalent) Incident Management process that lets users track issues through to resolution



Business-critical digital services are supported by documented disaster recovery processes, with clear roles & responsibilities assigned



Disaster recovery processes have been tested and audited



Business-critical digital services are supported by IT infrastructure with multi-site redundancy; normal operations are maintained in the event of an outage at any particular location



Space for Your Comments on this Section

n/a



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