

ICT KEY PRIORITIES FOR 2019-22

The near term ICT key priorities are described in section 8.2 of the main IMTP document. These priorities are:

- Bridgend Boundary Change
- Maximising use of existing systems
- Deployment of Digital Medical Records
- Deployment of the Welsh Emergency Department System
- Deployment of Vision 360 as a Shared Care Record

This annex will explain how these priorities fit in a national context and a longer term plan.

Nationally defined projects

We will continue to focus on the deployment of national systems, reviewing the proposed new national strategy, but also ensuring that, where there is a local requirement that is not addressed, we ensure that the Health Board is not disadvantaged and make appropriate arrangements to resolve. We will also work in collaboration with all the Assistant Directors of Informatics to prioritise common requirements across all health boards to present to Welsh Government for potential funding.

ICT Actions	NWIS Reference	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2019	2020	2021
Deliver system which allows Patients to manage their own health and well being	Patient Portal	Facilitates patients managing their records from home	Individual Care: Allowing patient to manage their own record		x	x
Deliver clinical documents in electronic format and make available across Wales	Welsh Care Record Service (WCRS)	Region based/local Clinicians can access forms wherever the patient is treated	Timely Care: Easy and timely access to clinical documented	x	x	x
Deliver online e-referral system between tertiary and secondary care clinicians and GPs	Welsh Patient Referral Service (WPRS)	Improved primary care communications on current patient state	Timely Care: Enabling timely care between primary and secondary care	x	x	x
Integrate local TRRR projects to provide national access to patient results and reports	Welsh Results and Reports Service (WRRS)	Local access to national patient record	Our Staff and Resources: Information availability	x	x	x
Deliver a National, Standardised Pathology System which integrates across other systems	Welsh Laboratory Information Management System (LINC)	National pathology data available locally to clinicians	Timely Care: Easy and timely access to national pathology data		x	x
Delivery of an Integrated Health and Social Care System	Welsh Community Care Information Solution (WCCIS)	Community based services to deliver more effective and efficient services to citizens in their own homes	Effective Care: Enabling the right care and support locally		x	x
Provide business intelligence, dashboards and strategic reporting to support the business	Data Warehouse (DW), Business Intelligence (BI) & Predictive	Accessible data and information locally	Our Staff and Resources: Information availability	x	x	x

ICT Actions	NWIS Reference	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2019	2020	2021
	Information Services (PI)					
Deploy the Welsh Emergency Department solution	WEDS	Purpose built solution for emergency departments fully integrated to the National Architecture	Single system across Wales giving overview of capacity and providing statistical data on usage and staffing	x	x	
Delivery of an e prescribing solution	WHEPMA	Electronic prescribing modern pharmacy system	Single modern pharmacy system across Wales with e prescribing. Ability to have single patient record for treatment		x	X
Deliver the Diabetic module of WCP	WISDM	Diabetes module for patient management replaces outdated and in house solutions to a National module	Single modern diabetes system across Wales	x		
Radiology e requesting	WCP E requesting	Introducing radiology e requesting improvement	Single modern E requesting system across Wales	x		
Critical Care solution	CCCIS	Replace the current solution with a National to provide an all Wales view of Critical Care beds	National CCCIS to provide all Wales view of ITU data		x	x

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2019	2020	2021
Medical Records Digitisation Moving towards scanned medical records.	Supporting the professional	Medical records available anywhere across the health board at any time.	Alignment with national strategy.	x	x	X
WCRS Working in collaboration with NWIS to increase the documents that are sent to WCRS in line with local requirements. This is ongoing project as clinical systems are replaced/upgraded	Supporting the professional	Increase the content of the clinical document store in WCRS to enrich the clinical record. Help move towards the digital record	Increased WCRS clinical document content	x	x	x
WCP – WPRS	Supporting the professional	Replacing paper-based referrals with electronic referral processing via WCP. This enables efficient and safer working practices. Cardiology live developing rollout list	Moving towards an e-referral system being used across Wales.	x	x	
WCP – e-Forms	Supporting the professional	Replacing paper based requesting for clinical specialities, enabling more efficient and safer working	Moving towards a central and National system for clinical speciality requesting	x	x	x

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2019	2020	2021
		practices. Piloting radiology e requesting				
Introduction of electronic prescribing in ITU	Improvement and innovation	Configure the ICCA system to enable clinicians and pharmacists to prescribe electronically		x		
Tele-dermatology Provide ICT solution to streamline the tele-dermatology service	Improvement and innovation	Provide technologies that enable clinicians to review images and referrals in as efficient a way as possible	Interface with WCP to host patient images	x	x	
Ophthalmology Service rationalisation	Supporting the professional	Standardisation of image storage and application		x		
Acute Medicine, Bed Management and Handover System The system will improve patient management in Acute Medicine through the introduction of Patient Status at a glance on screens. It will allow demand management in real time and help overall bed management.	Supporting the professional	It will enable the Health Board to prepare for the eventual introduction of the National Patient Flow System	It will ensure Cwm Taf have improved Business Processes in readiness for the introduction of the National Patient Flow system	x	x	
Digital Histology Digitisation of the glass slide	Improvement and innovation	Revolutionise the way work is moved between HB and across Wales. Moving from glass slides to a digital image which can be shared simultaneously	Due to histo pathologist shortages moving to a digital solution allows for work to be distributed across Wales	x	x	
Pathology system HTA requirement to ensure complete tissue traceability	Improvement and innovation	Move from the manual spreadsheets to an electronic solution for tissue traceability		x		
Pathology system Provide a supported solution for Blood Transfusion	Supporting the professional	Provide a supported system for blood transfusion		x		
Welsh Point of Care	Improvement and innovation	Deployment of ConWorx nationally to facilitate secondary care connectivity	Connectivity to LIMS	x		
Pathology services Service redesign	Improvement and innovation	Move from single chemistry and haematology departments to a blood sciences department		x		
Haemonetics Blood Track	Supporting the professional	Look to deploy this across HB ahead of national LIMS go-live. This will replace local blood tacking and fating solution in TelePath for PCH.	Link in with national roll-out of Haemonetics Blood Track	x		

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				2019	2020	2021
		Will result in better traceability for blood products across CTHB				
Radiology upgrade Move to Synapse 5	Supporting the professional	Provides a single view of a patient across Wales. Important in light of the boundary change				
RFID project	Improvement and innovation	As part of a project with the HUB looking at the benefits of RFID within EBME. Will report back to ADI's on the findings		x		
Maternity and Paediatric services South Wales plan and service redesign	Improvement and innovation	Supporting the service redesign of paediatrics and maternity		x		
Mobile Device Management Strategy	Improvement and innovation	Expanding the mobile solution using appropriate technology for the task to provide mobile access to both the board desktop and mobile apps designed for application delivery. To develop increased access to appropriate systems from the desktop e.g. GP systems. This will change the way of working for many staff removing the reliance to return to base for access to the required systems.		x	x	
Switchboard rationalisation	Improvement and innovation	Continue to rationalise the switchboard across STUHB		x		
Continued infrastructure refresh programme	Improvement and innovation	Server replacement, XP and 2003 eradication. Migration to Windows 10 and server 2012. Exploring server 2016 Rolling replacement of data network to provide the latest switching technologies. Delivery of more robust PSBA connectivity through BT's Engagement programme.	Standardisation of data network, connectivity, server infrastructure, and end user devices, in line with national direction.	x	x	x
Rollout of Lync / Skype for Business	Improvement and innovation	Increasing the time that staff can spend doing their jobs rather than spending time travelling to meetings.	Use of national infrastructure, leading to further innovation.	x		

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2019	2020	2021
		New ways of working and collaborating.				
Rollout of MFDs and Managed Print Services	Improvement and innovation	Standardisation of print services, reduction in printing costs, transfer of device support to third parties.	Alignment with national direction.	x		
Microsoft licensing	Improvement and innovation	Making best use of the products to which subscriptions are held Looking at office 365	Alignment with national direction.	x		
Citrix refresh	Improvement and innovation	Through use of the Microsoft subscriptions, the deployment of Citrix can be modernised, delivering modern applications	Alignment with national direction.	x		
Cyber security	Improvement and innovation	<p>Cyber security is the protection of information systems from theft or damage to the hardware, the software, and to the information on them, as well as from disruption or misdirection of the services they provide. There is a requirement for both local and National work on</p> <p>Understanding what information the HB holds - and what level of protection is needed for it.</p> <ul style="list-style-type: none"> • Implementing appropriate controls • Doing the basics well • Security patching. Avoid 'out-of-support' software • Penetration testing • User training • Proactive monitoring • Design services with security in mind • Defence in depth <p>Having a plan for dealing with a cyber attack - and test it for various scenarios</p> <p>Ensuring we are in a defensible position. It is only a matter of</p>	Lower likelihood of local equipment becoming a risk to national infrastructure.	x		

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2019	2020	2021
		time before we have a Cyber Security Incident Putting cyber security on the agenda before it becomes the agenda				

Collaborative working projects

We will continue to work collaboratively with NWIS, other health boards and the Universities to deliver solutions to benefit patient flow and care across healthcare providers. To look at new and innovative ways to deliver the latest technology to improve patient care and clinical working practice.

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2018	2019	2020
<p>Theatres Investigating the potential of working in collaboration with ABMU, ABHB Health Board and NWIS to deliver a new Pre-Assessment and Theatre System A new Pre-Assessment and Theatre System which will replace the current legacy systems. The system will have links the Patient Administration System, Welsh Clinical Portal and will also benefit from GP data extracts. A modern web based environment will enable deployment on various device types as appropriate to the task being carried out</p>	Improvement and innovation	<p>Will support Snomed CT terminology.</p> <p>Will fully support the Proms and Prems Project</p>	Moving towards NWIS hosting of National systems	x		
<p>111 There are 2 drives that require the HB to participate in the procurement and deploy the 111 solution. The CAS system was originally procured in 2001 and has reached the end of its product lifecycle. The software is now obsolete and the supplier has indicated their intention of not supporting the product beyond 2017 /18.</p>	Improvement and innovation	Replaces the end of life system and delivers a National 111 Wales Solution. Providing the patient with a single point of contact and a single record.	<p>111 to replace the current CAS system which is beyond end of life and using this opportunity to also consolidate to a single GP OOH system across NHS Wales from the current disparate, individual Health Board arrangements</p> <p>From a patient perspective, introduction of this new system can enable the provision of a single point of contact and form an integral part of the wider unscheduled care system by directing patients to the most appropriate service for their needs.</p>	x	x	
<p>Patient flow Across all hospital services providers in</p>	Improvement and innovation	Improved flow from the 'Front Door' to the Ward will reduce 'exit	This proposal is intended to deliver an e-solution through		x	x

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Wales there is a recognition that achieving more effective patient pathways and patient flow through the care system is essential to the ongoing provision of safe and sustainable services and the delivery of NHS Wales's strategic and operational objectives. All Health Boards and Velindre Trust are in agreement that a common, live, intelligent electronic system for managing and monitoring patients in a "ward" environment, be that a: hospital ward; an ED; a virtual ward in the community; or a care home bed is a requisite and effective enabler to delivering this as part of a wider improvement programme.		block' from the Emergency Department, resulting in: reduced waiting times in the Emergency Department; shorter ambulance handover times; improved ambulance response times; and elimination of 12 hour waits in ED Improved bed management of the site with helicopter views to ensure patients get to right bed first time and - improved communication and co-ordination between all healthcare professionals throughout a patient's hospital stay	which all Health Boards in Wales can deliver more effective patient pathways and patient flow through the care system, contributing considerably towards each Board's ability to continue to provide both: safe and sustainable services; and the delivery of NHS Wales's strategic and operational objectives. Consequently benefits would be anticipated to be realised across all aspects of delivery: improved patient satisfaction and outcomes; more efficient and effective use of resource; safer and more clinically effective processes deployed; and services having the ability to learn and improve.			
Digital pathology histology/microbiology/haematology, to deliver the infrastructure to support the move to the use of digital images by pathology departments.	Supporting the professional	Enable staff to be based where most appropriate accessing work produced at any location. Utilise clinical time more efficiently	Nationally there are areas where recruitment of clinical staff is difficult. Digital slides will allow the work to be reported by clinicians irrespective of where they are based. It will improve efficiency with work moving across Wales and patient care by allowing specialised centres immediate access to view images for consultation.	x	x	
Paediatric Mobile application developed to collect admission data on a mobile device	Supporting the professional	Allow for clinical staff to become paperless during collection of admission data. Move towards the EPR and the Health Boards strategy of digitisation of the health record	Will allow the data collected to be part of WCRS and available on an all Wales bases	x	x	
WLIMS2	Supporting the professional	A modern laboratory system that fulfils the needs for pathology going forward	WLIMS is out of contract 2020 required to go out to tender for replacement			x

Identified horizon scanning projects

From the work on the ICT Strategy and Strategic Outline Programme projects have been identified which are either functional requirements for ICT development or potential ICT enablers

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
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Single sign on	Supporting the professional	Reduces the need for staff to have to remember multiple passwords. Allows faster access to systems reduces time spent logging on to various clinical systems		x		
Patient ID	Supporting the professional	Throughout the health-care industry, the failure to correctly identify patients continues to result in medication errors, transfusion errors, testing errors, wrong person procedures, and the discharge of infants to the wrong families.		x	x	
Equipment tracking RFID	Improvement and innovation	Strategy for how and where tracking technologies will be used, with ensuing Proof of Value project to test and demonstrate the value		x	x	
Employee self service kiosks	Supporting the professional	Improves staff access to the electronic systems they need to work and manage their own staff record.		x		
Enterprise Scheduling	Supporting the professional	Implementation of integrated resource scheduling capability to coordinate, allocate, book and order the human and non-human resources needed to deliver a service			x	
Clinical insights platform	Improvement and innovation	Enables clinical staff to use data to provide insight on patient treatment to help improve outcome		x	x	
Master data management	Improvement and innovation	Implementation of MDM to streamline and facilitate accurate data sharing			x	x
ITOM Enhancements	Improvement and innovation	Implementation of ITOM recommendations including the revised steering group, the			x	

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
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		new roles for CTUHB enterprise architect, TSO/BSO and ICT business partners; and the development of PPM, Business Change and Business Relationship Management capabilities				
Architecture review and tech road map	Improvement and innovation	Detailed review of the current architecture and development of technical roadmap covering 1) Architecture patterns and technology adoption including SaaS, PaaS, ESB and APIs; and 2) Detailed roadmap for the entire application portfolio including digitisation and rationalisation		x	x	
Digital process	Improvement and innovation	Business process review to identify all UHB processes, understand how well they are digitally supported and identify opportunities to enhance		x	x	

Boundary change

The boundary change between CTUHB and ABMUHB poses a new challenge for informatics. In previous organisational change situations, the requirement has been to support the merger of two Health Boards into a single Board. However in this case, the boundary change will not result in the merger of two health boards, but the realignment of part of one organisation into another. The requirement is therefore to support the delivery of services for Bridgend and District from one health board to another. This is technically a more challenging proposal for operational delivery and support. In achieving this complex change, the solution must also ensure that service can continue to function effectively during the transition. To achieve this, a phased implementation approach will be required.

Below is the first indication of the work that is required to undertake the disaggregation of the services. It needs to be noted that there is a high dependency with the majority of the projects and they will required to be accomplished in a highly defined stepwise approach.

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2019	2020	2021
Auditbase Used by Audiology	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x		
DMS Used by Multiple services	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	
WCP Used by Multiple services	The system is dependent on WPAS feeds and will be dependent on the WPAS merger Required post WPAS merger	Clinical portal with all Wales view on results and documents but aligning with the HB WPAS ensures correct PAS information eg clinics, HB patient searches		x	x	
WAP Used by Multiple services	WAP and WPAS are highly interdependent and require considerable work before WPAS merger to ensure there is no loss of functionality Required pre WPAS merger	Referrals to HB in electronic form		x	x	

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
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WPRS Used by Multiple services	WPRS and WPAS are highly interdependent and require considerable work before WPAS merger to ensure there is no loss of functionality Required pre WPAS merger	Electronic triage of requests. Extensive rollout in POW need to rollout in CTUHB		x	x	
ABMU Clinical Portal	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	
Mckesson cath lab Cardiology	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	
Muse Cardiology	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	
Mckesson Echo Cardiology	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	
Cellma	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2019	2020	2021
	Required pre WPAS merger					
TOMS	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	
WPAS maternity module	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	
Endoscopy	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	
ETOC/MTED	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		x	x	
EPOA	Disaggregate the current ABMU enterprise solution with a view to either move to a CTUHB version or a new standalone in POW Required pre WPAS merger	Single solution across CTUHB to enable the HB to provide an efficient service		X	x	

ICT Actions	The Vision	Local Benefits	National Benefits	Potential implementation subject to agreed funding and prioritisation		
				2019	2020	2021
ICT infrastructure <ul style="list-style-type: none"> • Network • Comms • Telephony and bleeps • Mobilisation • Servers • Clients • Mobile phones • Infrastructure general 	To de couple the ICT infrastructure and technology from ABMU and move to CTUHB	Standardisation of the technical solutions within the new CTUHB and the ability to move and upgrade all areas of the health board in line with CTUHB requirements and IMTP.		x	x	x