



AGENDA ITEM

4.1

DIGITAL & DATA COMMITTEE

DIGITAL PROGRAMME ASSURANCE REPORT

Date of meeting

22/06/2022

FOI Status

Open/Public

If closed please indicate reason

Not Applicable - Public Report

Prepared by

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Presented by

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Executive Sponsor

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Report purpose

FOR NOTING

Engagement (internal/external) undertaken to date (including receipt/consideration at Committee/group)

Committee/Group/Individuals

Date

Outcome

Digital Delivery Board

24/05/2022

NOTED

ACRONYMS

CTM

Cwm Taf Morgannwg

PoWH

Princess of Wales Hospital

RGH

Royal Glamorgan Hospital

PCH

Prince Charles Hospital

WCP









Welsh Clinical Portal



ED	Emergency Department
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1. SITUATION/BACKGROUND

1.1 This report provides an update on the progress of the prioritised digital deliverables within the corporate Integrated Medium-Term Plan (IMTP) across the 8 strategic solutions:

1	 Digital health board	Digitising the processes across the health board that support patients and employees across all care settings, removing manual effort, eliminating paper and capturing valuable, reusable data as standard
2	 Insights-driven healthcare	Providing the platform to interrogate and analyse multi-source data, surfacing previously unknown insights on performance and driving optimal decision making
3	 Single patient view	Managing a single, digital view of a patient's care and history across Primary, Community and Secondary services, improving patient centric care, reducing delays in information seeking and removing re-keying errors
4	 Intelligently integrated healthcare	Intelligently integrating processes and systems, providing two-way communications across silos and implementing smart workflow to automate key process interactions across care settings, removing manual effort and baking in zero-error processing
5	 Digital workforce	Providing the digital tools to support employees in their day to day activity, reducing admin and travel time and enabling increased clinical contact
6	 Adoption and exploitation	Providing the resources, structures and toolkits to properly manage identification, implementation and adoption of new solutions; and supporting staff in exploiting the systems they have access to
7	 Managing innovation	Managing and encouraging innovation with innovation forums and idea receptors; as well as a governance and funding model to turn them into reality
8	 Digital enablers	Putting in place the enabling infrastructure and maturing the key supporting capabilities needed to deliver the strategy

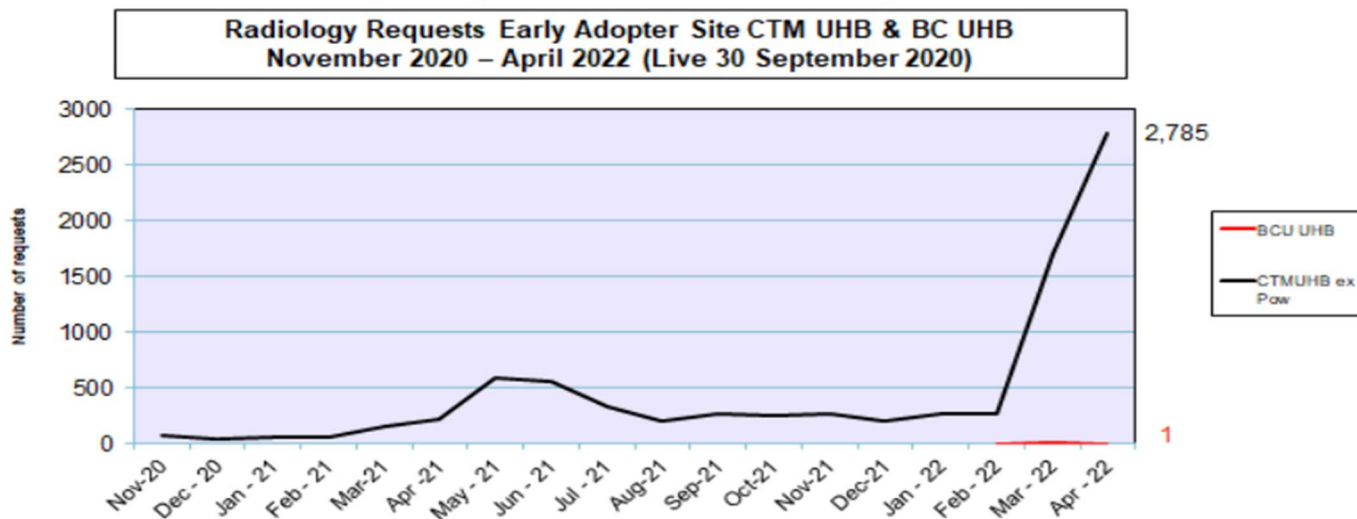
2. SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING

2.1 Digital Health Board & Single patient view

Electronic test requesting and WCP

24/7 Radiology e requesting has now been rolled-out into the RGH Emergency Department (ED) and outpatient departments and can be used by all services that will request tests for patients whilst they are in the ED. A service lead to commence the roll-out in the PCH ED has been identified, with the initial business analysis and programme engagement initiated.

WCP Monthly Usage Figures – Radiology Requests (CTM UHB & BC UHB)



	January	February	March	April
Users	3544	3955	4028	3972
Patient Records Accessed	46030	48104	53095	48797
Path ETR	35420	33798	35495	29447
ETR (Including POW)	78%	78%	78%	80%
Path Results Viewed	118052	116950	131395	113256
Radiology Reports Viewed	37622	38245	47035	37869
Rad ETR	262	273	1701	2785
PACS Images Viewed	7570	7682	8382	7749
A&N Signed off Results	25321	12648	11408	13818
DALs Sent	2759	2899	3579	3050
WPRS Referrals	1515	1612	1896	1554
Clinical Notes Created	1561	1/21	18/5	1592
ACP Flags Created	17	22	23	13
Hep C form Created	1	2	0	1
OCS Created	113	69	122	80
Ad Hoc OCS Created	54	52	76	47
Diabetes Consultation Form Completed	1373	1507	1671	1354
Active WCP Mobile Users	45	58	58	53
COVID Mortality (cumulative total)	1231	1279	1287	1302

Scanned Records (CITO)

Approximately 78,000 legacy records have been digitised as of 19/5/22. Progress is delayed and discussions / negotiations are ongoing with the commercial supplier to agree the revised plan and ensure it will be achieved. Executives have been apprised of the issues and associated risks and costs.

Day-forward scanning at the in-house scanning bureau continues to be delayed but increasing volumes of material are incoming as the number of digital patients rises. In April, 9,844 folders were received, plus other ad-hoc material. The temporary additional hours supporting the backlog reduction ended on 31/3/22. The current position is that day forward scanning is 11 days behind target. Recent Cito downtime and scanning pauses have added to this delay, as image ingestion errors have come to light that occurred during these episodes that were not apparent, resulting in work needing to be re-done.

Incorrect documentation received continues to be a significant time cost to check and correct; 112 instances of patient records filed in the wrong patient skinny folder were identified in April. The two Patient Records Quality Officers have been extended in post until March 23 to continue work with all areas to mitigate against such errors. Clinicians are now coming forward to engage with this work, enabling dialogue to take place and address some of the concerns and queries raised about the change in records access. The Information Governance Group is also being updated on these issues.

There have been 4 incidents in April and May when Cito was unavailable. The CTM ICT team are working with the software supplier to identify the causes and prevent recurrence. Investigations are ongoing. As mentioned, these incidents resulted in system downtime but also halted scanning operations. Based on the level of clinical feedback, clinical operations don't appear to have been significantly affected. However, scanning bureau operations have been significantly affected.

The project is currently underperforming with scanned records and timeliness and the quality of the scanned record (NB scanning is a like for like copy of the record) costs are escalating and the health board is not realising the wider value/functionality that CITO can offer to the health board

Critical Care Services (WICIS)

The national programme has indicated that CTM (PoWH and old CT combined) will be the second health board to go live with the new WICIS system, with a planned date of Q4 2022/23. A funded Senior Responsible Officer (SRO) is in place and engaged. National funding includes 12 month funding for a project manager which is currently out for advert, funding is also available from June 2022 until 2027 for a band 6 nurse, which will go out for advert shortly. One of the priority deliverables of these posts will be the analysis of stakeholder needs and the development of a local business case.

Technical discussions around deployment and disaster recovery are not yet finalised however, it appears that they will be similar to those in place for the WNCR application.



Ophthalmology (OpenEyes)

CTM have led the way by instigating the idea of User Acceptance Testing (UAT) mock runs. The first mock run was undertaken last month at RGH which engaged users and identified user-focused configuration changes. Planning is underway to conduct further mock runs at the Talbot Green On Demand Training Centre (ODTC) and PoWH – targeting end of May 2022.

Training and engagement with key stakeholders continuing to maintain momentum and awareness of the new system. Planning is also factoring final UAT and business readiness activities for launch by the end of June 2022.

CT is ready for 'go live' in Glaucoma, but this is dependent on the national program finalising the national service management framework, the Data Protection Impact Assessment (DPIA) and several outstanding technical issues with Toukan Labs and Digital Health Care Wales (DHCW).

Presently there is no funding in place either to extend the programme to other ophthalmic pathways beyond glaucoma, or to deliver Public Sector Broadband Aggregation (PSBA) access for any additional CTM optometrists.

Community Services (WCCIS)

The Deployment order for the staff already using WCCIS in conjunction with the Local Authority teams has been signed. Current discussions are underway on how support is delivered as we rollout to Child and Adolescent Mental Health Services (CAMHS).

Unfortunately, the funding to enable the use of WCCIS by CAMHS at Bridgend was never in the CTM business plan and as a result the finance department are assessing whether costs could be met from existing funding presently spent within the Bridgend / Swansea Bay Health Board Service Level Agreement.

As previously highlighted, the national programme has currently been paused due to governance concerns. A national review appraising the factors and options has been now been completed by Channel Three Consultancy and the briefing papers shared with all health boards and local authorities. The next steps agreed by the programme are detailed below



Strategic Review: Next Steps

The response to the recommendations requires definition and then the design of a programme of work to deliver the implementation. There are multiple paths and scenarios the programme could follow in the areas of service, contract and technology. These need to be appraised, and a future direction agreed. The output from the work in the timeline is the programme plan for this future direction.



Currently both ABHB and BCU have delayed go live in health, it is our present intention not to proceed until a full national evaluation has been completed and more is known about the design of the programme post September 2022.

Emergency Medicine (WEDS)

Welsh Government have turned down all funding requests made to DPIF for capital and revenue to rollout WEDS and the local and national projects have been paused (due to lack of national funding.)

At the WEDS Project Board when the decision was made to pause the project, it was agreed that the team would still explore the option to pilot Imprivata for single sign on. The team has produced an Imprivata exception report, where it has been identified that, due to lack of identified technical and roll-out support, the approach to single sign on will require further review and support from the digital team. This will be taken forward as a priority for the department, given the wide ranging clinical support for single sign on, to clinical applications.

Welsh Nursing Care Record (WNCR)

WNCR was successfully implemented in the Royal Glamorgan Hospital over a 5 week period in March/April 2022 and has now entered business as usual. Usage and compliance continues to be monitored weekly, and ward managers and senior nurses are provided with a report.



Latest Weekly stats as of 17/05/2021

Total Digital patients	2,796
Nursing notes	96,206
Risk assessments	51,829
Pain scores	107,552
Temp users	845
Total users	1569

Work has commenced with the information team on creating an internal dashboard with the aim of providing ward to board assurance on documentation standards. WNCR data has been mapped against existing point of care audits and a shadow audit using WNCR and existing audits is planned in June. This will assess how WNCR data can inform audit and assurance, and reduce the requirement for manually entered audit data.

PCH implementation has been delayed by a month to July/August 2022, however training and scoping of the PCH Hospital implementation have commenced.

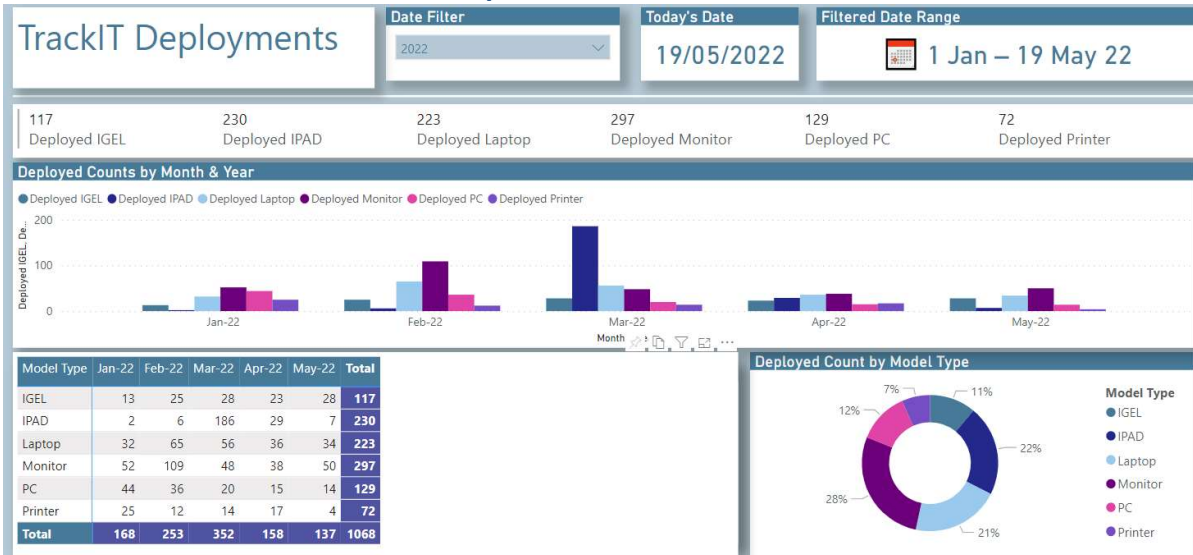
Deployment into the PoWH remains in scope and the project team are working up an options appraisal for implementing the application prior to the completion of the CT/PoWH PAS aggregation work completing (which is likely to be 18 months). This is not without challenges and consequences to all stakeholders (CTM, SB and DHCW).

Evaluation and benefits realisation work is being undertaken by the lead informatics nurse as part of an MSc dissertation, and a survey and staff interviews are in progress.

Mobile Users

The Health Board continues to deploy kit to enable mobile agile working. Out of DPIF funds, some additional laptops have been purchased and also some iPad devices to support the disaggregation work being undertaken in Bridgend. Due to current and future capital challenges, there will be reduced growth in this area but opportunities will be looked at where possible.

It is important that all CTM staff are aware that the supply chain issues faced in many sectors are presently causing delays of 3-4 months for end user device hardware purchases.



E Whiteboards

The WG capital 2021/22 has been used to purchase the equipment required. ICT have been allocated £200k non recurrent revenue this year to proceed with the rollout of the system into Bridgend, and are in the process of recruiting staff. The outcome of the request for recurrent funding to provide ongoing business as usual support for the system is still pending.

Business requirements for all the three District General Hospitals have been gathered awaiting the appointment of the software developer and business change person to commence developing a road map for the product

2.2 Insights-driven healthcare

Clinical Coding

As at the 15th May 2022 89.7% of 2021/22 records have been coded. Electronic Discharge Advice Letters and documents (such as clinic letters) recorded in the PAS have been used by the coding and analytics team to develop an auto-encoding system. The accuracy of the system is being iteratively improved, with the department confident that it will be of sufficient quality to deliver the anticipated benefits and along with the other elements of the coding improvement programme, enable the UHB to meet the 98% coding standard by the middle of June 2022.

On the back of work undertaken by our coding team, there has been national agreement to take forward a coding strategy for Wales and separately to consider the future of the profession and how to improve recruitment and retention. This is timely as the absence of a digital record and recruitment and retention premia in Wales (relative to England) has resulted in a 4.5% decrease in coding staff over the past 12 months.

Integration of primary care and Health Board data

A proposal to take forward a collaboration with the Tarian Group has been developed and is under consideration as part of the UHB's wider prioritisation process for this year's annual plan.

2.3 Intelligently integrated healthcare

Bridgend & CT aggregation

The Joint Management Paper has been submitted with the board papers as attachments.

Service Resilience

During the months of April and May, there have been notable losses of services and or performance in the following areas:

- CITO – 08/04 - Complete CITO outage and ingestion delays due to possible file corruption. Service was restored by introducing a new file storage area, and root cause still being investigated by Civica.
- Citrix Access Gateway – 12/04 - Issues accessing from devices with older Citrix Receivers installed, due to planned change from DHCW, disabling older insecure ciphers. Still waiting for report from DHCW. Receivers were updated on end effected end user devices to restore service.
- PCH Server Room Power Issues on network Equipment – 13/04 - One of the NEXUS pairs experienced what appears to be a temporary power failure at 6:54am and returned by 7:01am. Issue due to faulty UPS, UPS has now been replaced and resilient power feeds enabled.
- QLIK System Down – 01/05 - License expired – New license applied to restore service.
- CITO System Failure – 07/05 - SQL Sync issue caused the CITO system to go offline. System resolved by rebooting secondary node, allowing syncing to restart. Root cause still being investigated, current thinking is a clash between Anti-Virus and Backup.
- Sharepoint Intranet Unavailable – 09/05 - Users unable to view <http://ctuhb-intranet/> - Same issue and possible root cause as above CITO issue on 07/05.
- CITO Images not loading – 15/05 - Issue restored by restarting "Rabbit" part of application. Root cause still pending from Civica.
- National Everlight Delays – 16/05 - Network issue on Everlight side caused issues with delayed transfers of radiology images. All health boards failed over to



secondary Everlight HSCN connection to resolve issue. Root cause being fixed by 24th May.

- POW Citrix Access Issues – 17/05 - Citrix access issues for PoWH Staff due to power cut at Neath Port Talbot, effecting SBU provides citrix services – Servers brought back online, issue resolved. Waiting on P1 report from SBU
- WCP Unavailable – WCP Unavailable after DHCW Planned change (Domain Controller replacement programme)

CanISC replacement and Cancer Business Unit Improvements

The CanISC system which is not only the Velindre PAS but also the system used across Wales for delivery of the Cancer service will be replaced by modules of WPAS and WCP with a Velindre go live in November 2022.

In order to provide a clinically safe service there has been considerable planning around coordination of Velindre go live and the health boards. It has been agreed that health boards will be going live with the Cancer Audit forms across Wales on agreed set dates starting with breast and urology.

Use of the MDT forms is being left to local health boards to decide when to deploy as they are more complex. It was felt that a stepwise consistent approach was the safest way to implement

At CTM there are discussions underway with the urology team to pilot the MDT form and the audit form at the same time. Mock MDT runs are planned for July.

Funding last year enabled 2 pieces of work to be completed to improve the cancer service

- The Cancer Tracker has been integrated with the CTM Data warehouse to bring in the relevant radiology, pathology and endoscopy data for that pathway
- The scope of the QLIK cancer dashboards have been extended and a rationalization of the existing dashboards undertaken

The End User Computing group are starting to work with the Cancer coordinators to look at hardware requirements due to the new working practices

Foetal Monitors

As reported to DDB in November 2021, CTM purchased £660k of foetal monitors, which includes a new software module. These are intended to replace the Trium system in the old CT and the paper system in PoWH.

Unfortunately, the business case has overlooked how the data presently stored in Trium is to be retained by the UHB in line with legal requirements, how the system will integrate with the rest of the health record, and how the network requirements at PoWH will be provided.

Following a technical appraisal, the most pragmatic approach which enables these monitors to be used is considered to be:

- The PoWH monitors to be deployed as standalone units with the paper CTG stored in the patient's notes
- The PCH and RGH monitors will be deployed across maternity and will be integrated into the existing system Trium

2.4 Digital workforce

Microsoft 365

SharePoint Online

As per the previous update, SharePoint Online is an ongoing concern. Discussions are ongoing regarding the three focus areas – Corporate File Data, Intranet and Platformed Services. Plans are being drawn up to address the three aforementioned areas with associated financial and resource requirements defined. These costs will however need to be prioritised against other Digital priorities.

Microsoft and other licensing

The UHB has received the NHS Wales Microsoft Enterprise Agreement (MSEA) Commitment To Participate document. This document provides the final costs associated with the latest version of the agreement and the CTM element is based on the numbers submitted to the negotiation group.

The cost pressure to CTM is significantly lower than the projected cost pressure that was initially publicized, due to an internal review being undertaken of active users and devices. The potential cost avoidance on that cost pressure is circa £1m per year. The numbers requested by CTM are on the basis of immediate and ongoing asset management for licenses and devices and a paper has been submitted to employ 2 asset management related posts within ICT in order to both achieve and maintain recurrently these cost avoidance savings, plus identify further licensing cost avoidance opportunities.

There is a significant shift in the new MSEA license model compared to the previous MSEA, which will have a short to medium term impact on ICT resourcing. We are expecting to roll out the new license model in June/July 2022.

Power Platform

The digital team are receiving numerous requests from the wider business in regards to the Power Platform environment. This is a platform which has the potential to significantly help the organisational move to a digital approach to delivering its administrative and management functions. In addition to this demand, a scoping exercise has identified that there are numerous opportunities to replace currently "charged for systems/applications" with solutions using this platform.

Presently the department do not have a defined function and associated resources, or skillsets, within to be able to support this transformation, and guidance will be required from Digital Delivery Board as to whether the development of capability and capacity in this area is a priority and is likely to be affordable in the next 24 months.

2.5 Adoption and Exploitation

Improving the ICT user experience

Funding has been allocated this year to purchase Aternity which is a tool that proactively monitors end user devices. This will improve both user and ICT staff experience by identify issues quickly and accurately.

In addition, with the departure of the Head of Systems in early May, the digital team are going to take a review window of 6 months to allow time to consider ICT requirements and those of the wider Health Board in progressing the digital agenda.

To both maintain the service and start the redesign, we are working towards the steps below:-

- Appoint an interim Head of Systems while we go through the recruitment process
- Move Service Desk and Desktop Support to the Head of EUC
- Appoint interim Service Desk and Desktop Support managers while we explore our service redesign

We are hoping the initial/interim steps above will provide staff with an opportunity to develop in these acting up roles which will benefit them going forward.

Cyber Security

The digital team have now received the NIS-D cyber assessment report from the CTU. This is being reviewed and feedback will be provided in due course.

2.6 Digital enablers

Infrastructure plan

The first new SIMs on the Wavenet (EE) mobile phone contract have been rolled out to Mobile iPad Users in Bridgend. Procurement are also in the process of completing a direct aware for the voice only SIMs to Wavenet (EE) which will mean all 'Data only', 'Voice & Data', and 'Voice only' plans will be under one provider and now back in contract and support. The team will assess colleagues' handsets on the SIM refresh, and a tech fund has been secured to allow the UHB, at no extra cost, to replace or upgrade those handsets deemed too old or worn to continue.

The 1Gbps CTMUHB public Internet connection is now live in PoWH. All sites now are provisioned from their local DGH, either PCH, RGH or PoWH.

The BT PSBA 1 Gbps WAN link at PoWH speed is in the process of being increased from 1Gbps to 10Gbps and an additional 10Gbps resilient link is also being fed into the



hospital from a diverse route, and to a different physical location within the building. At present, the BT exchanges are not capable of handling more than 3Gbps per circuit, so the 10Gbps bearer will be rate limited for several months. Also, the current firewall is not capable of processing the full 10Gbps throughput, but the Network team has put together a design that will, using existing hardware, allow the firewalls to manage up to 2Gbps throughput until such time as funding is available to replace these for 10Gbps capable devices.

Since January 2022 the team have completed a 25-stage upgrade of the MITEL telephony system, that included hardware and software upgrades across all the servers and appliances that provide the service. The upgrade was completed and signed off as successful in early May 2022. To date, the system is operationally stable.

A structured rolling programme of edge switch replacements at the RGH site is currently under way, with expected completion late in the 2022/23 year.

Server and Storage requirements were defined and costed, in order to support replacement of approaching 'End Of Life' systems, increased resilience and Hybrid cloud models of delivering services. Orders were placed with the supplier in December, deliveries have now been completed, and commissioning plans being prepared with the supplier.

DPIF capital funding of £1.065m was awarded to the UHB by WG in December 2021, and was committed with suppliers, providing replacements for the legacy Polycom audio visual systems, additional network switches, servers, laptops and iPads. The equipment continues to be rolled out for the benefit of CTM users.

2.7 Risks to the digital programme

Since the last committee meeting, the key notable changes to the risk environment are considered to be:

- NIS – D. A recent report from Internal Audit, which noted satisfactory performance in our management of the Cyber Assessment Framework process, made recommendations that the UHB should note that non-compliance with NIS-D, remains a notable risk. We have accepted this recommendation and are continuing to seek to mitigate risk of non compliance by discharging our cyber security improvement plan.
- ICO enforcement / IG capacity / Stewardship of IG function – During the ICO's audit, members of the ICO's office raised verbal concerns around the organisation's understanding and attitude to IG and how this makes the DPOs role bordering on the untenable. Five months later, our DPO has resigned, leaving an IG team of 0.5 wte, which is considered insufficient to meeting our legal responsibilities.
- Bridgend PAS – Despite considering numerous data and messaging architectural approaches, a solution to safely, effectively and efficiently administering cross site working with pooled lists, in the near term, has yet to be identified.
- The state of our medical records and the management of the record from creation of the note of the clinical event to the curation & filing of the record is substandard, and is now resulting in wider risks, incorporating medical-legal

(absence of a documented record), clinical (No access to recent records) and fire (Libraries over flowing).

- The number of communication channels and the data they enable or generate, which are used within and, or, by members of the organisation is considered to be increasingly at risk of being unmanaged and unmanageable. Ways of working and communicating in the digital age, and within the legislative environment have not yet fully matured, resulting in loss of data and Mental Health problems as staff are overwhelmed.
- Single tenancy and data store arrangements, exacerbated by a closed architecture are putting the organisation at increasing risk of non compliance with the Data Protection Act (2018) and Common Law Duty of Confidentiality. Furthermore, they are constraining our ability to meet local needs and enable local requirements to be met in a timely manner.
- Staff training and skills in regards to digital competency, data literacy and appreciation of how to use digital and data tools safely (e.g. good IG & cyber discipline) are not mainstreamed across NHS Workers and, as a result of the excessive work programme required to support the UHB's covid response and the rapid evolution of technology during this period, digital professionals have not all kept up to speed.
- There remains a lack of functionality to digitally collect clinicians' and patients' information in an automated bi-directionally interfaced way
- The state of the network & infrastructure including the link between PoWH, PCH & RGH has improved but does still have vulnerabilities and limitations
- Resources allocated to digital programme are insufficient to deliver the infrastructure and services which underpin the organisation's annual plan, a situation which has been exacerbated by the significant rates of inflation observed across digital services.
- Presently the asset management resource within the organisation is insufficient to actively manage our estate. With the changes to the Microsoft Enterprise Agreement that come into effect in July 2022, it is possible that some users will see a significant loss of functionality. 12 months funding for 2 asset management positions is being funded to seek to mitigate this risk and deliver anticipated cost avoidance benefits in the region of c. £1m.

The strategic digital risk register is provided as an excel attachment to this document.

3. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	Yes (Please see detail below)
	Alerts and notifications not being acknowledged Discrepancies between the paper and electronic maternity record Backlog in coding
Related Health and Care standard(s)	Governance, Leadership and Accountability



Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below)
	Equality Impact Assessment to be completed as part of each project
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	There is no direct impact on resources as a result of the activity outlined in this report.
Link to Strategic Goals	Improving Care

4. RECOMMENDATION

- 4.1 The Committee is asked to **NOTE** the progress made in delivering the digital programme