AGENDA ITEM
(3.2.1)

DIGITAL AND DATA COMMITTEE **DIGITAL PROGRAMME ASSURANCE REPORT**

Date of meeting	14th October 2021

FOI Status	Open/Public

If closed please indicate reason	Choose an item.

Prepared by	Assistant Director - ICT
Presented by	Assistant Director - ICT
Approving Executive Sponsor	Executive Director of Public Health

Report purpose	FOR NOTING

Engagement (internal/external) undertaken to date (including receipt/consideration at Committee/group)		
Committee/Group/Individuals	**Date**	**Outcome**
		Choose an item.

ACRONYMS	
POW	Princess of Wales Hospital
UHB	University Health Board
CTM	Cwm Taf Morgannwg
WCP	Welsh Clinical Portal
RGH	Royal Glamorgan Hospital

PCH	Prince Charles Hospital `
ED	Emergency Department
CITO	UHB's Digital notes system
SCBU	Special Care Baby Unit
DPN	Digital Protection Network
WRRS	Welsh Results Reporting Service
WCRS	Welsh Care Records Service
NDR	National Data Resource
IRMER	Ionising Radiation (Medical Exposure) Regulations
CCU	Coronary Care Unit
WEDS	Welsh Emergency Department Information System
WICIS	Welsh Intensive Care Information System

1. SITUATION/BACKGROUND

1.1 A 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

There are hundreds of developments across the UHB which have a digital element to them. It should be acknowledged that management of these initiatives varies, reflecting both requirements and also capacities and capabilities.

Whilst recognising that we need to further strengthen our governance and programme management, we are attempting to maintain a project catalogue, summarising the projects within the digital programme and assessing the likelihood of delivery. This will be a living document and we anticipate will become more complete and informative as an assurance and management tool over time.

The catalogue is provided as an excel document attached to these papers, and identifies the scheme target end date and progress report.

Our subjective assessment as to whether a programme is likely to deliver on target and on time is shown in the table below, with comparison drawn to the September 2021 position. Commentary on some of the highlights is provided in the narrative below:

It is worth noting that due to capacity across the UHB the capability boards have yet to be established.

Strategic Capability Board	Key	Projects underway	Projects red	Projects amber	Projects Green	October Score	September Score
Clinical & Care	C&C	35	11	12	11	17/34	15.5/37
Citizen services	CS	4	2	1	1	1.5/4	2/4
Mobility, Connectivity & Business Services	MCB	27	3	6	18	21/27	19.5/27
Population Health & Analytics	PHA	11	3	7	1	4.5/11	4/12
Architecture, Design & Governance	ADG	3	1	1	1	1.5/3	1.5/3
Total		80	20	27	32	45.5/79	42.5/83

2.1 Digital Health Board & Single patient view

Electronic test requesting

Since August 2021 when the UHB re-commenced the roll out of e-TR for pathology in the Princess of Wales Hospital, the percentage of requests sent electronically has increased from 7% to 13%, driving the overall rate across CTM up to 67% from 61%. The ambition is to get the rate to over 90% by March 2022.

Site	%_requests_by ETR				
	May-21	Jun-21	Jul-21	Aug-21	Sep-21
Other	52	55	53	54	59
GP_Practices	53	56	61	63	63
PCH	80	83	81	83	83
POW	7	7	7	13	15
RGH	82	84	81	81	81
YCC	90	86	88	85	85
YCR	90	89	76	88	83
CTM Total	61	63	64	66	67

The number of Radiology ETR for September continues to decrease and is now 208. There are a few different reasons for this:

- WCP performance issues in late Spring 2021 had a significant impact on user trust in the system and clinical staff remain concerned.
- Teams working in the RGH ED require e-TR to be 24/7 and not only 9-5. This could not presently be supported by the radiology department at the start of the implementation as there was insufficient staff to support training, a matter exacerbated by Covid-19 and the ongoing IRMER inspection.
- Due to this 24/7 issue the implementation into PCH has been delayed whilst plans and preparations to enable 24/7 service availability are put in place

Alerts and notifications

In August 2021 7,823 results signed off electronically, which is the highest in Wales. But there is still a high number awaiting sign off.

To encourage sign off we currently have the below message on WCP log on:

WCP Results Notifications

All staff with a GMC number can have the ability to sign off tests electronically on the WCP. Please can all staff who would like access to this functionality raise a call on the IT helpdesk (http://ctm-ictportal/Portal/index.php) and include your GMC number.

The below video link will demonstrate how Results Notifications Work:

https://nhswales365.sharepoint.com/sites/DHCW-ODTC/SitePages/WCP--Result-Notifications.aspx

Reagrds,

WCP Support

Digitised Patient Notes (CITO)

The number of legacy records scanned to date is now c.30,800 (25,158 live patients, 5,628 deceased patients), with the number of day forward scans in August 21 amounting to 49,620 attachments / 402,322 images.

Promisingly all active clinicians in Merthyr Cynon and Rhondda Taff Ely now have clinics live on DPN. To address the deficit in the number of records that have been scanned, the UHB is continuing to scan legacy records using the Crewkerne site as well as Williamstown.

The second Gateway Review of the DPN project was undertaken by the Welsh Government in the week commencing the 20th September 2021The review was positive with the over, with the only material issue being the requirement for greater clarity and realisation of the benefits.

No.	Recommendation	Urgency	Target date
1.	The Project Team should Re-baseline benefits profile for the whole programme taking lessons learnt on go-live along with changes in operating practices (post COVID). Identify clear benefit owners and obtain senior leadership buy-in.	E- Essential	31st January 2022
2.	For strategic oversight, moving forward the SRO should be appointed at Executive level in the Health Board.	E- Essential	1st January 2022
3.	The Project Team should develop a new communications plan that improves communications and enhances user research with stakeholders focusing on the 'doing	E- Essential	31st January 2022

No.	Recommendation	Urgency	Target date
	with' rather than 'doing To'. This is continuous exercise.		
4.	The Project Team should plan and run frequent user feedback sessions and associated workshops to improve users perception of system and allow them to have a voice / learn lessons. Start by 8th November 2021.	E- Essential	8th November 2021 for planning and 1st workshop.
5.	The Project team should re-baseline E-forms project, with clear outcomes and when by and communicate with all stakeholders.	E- Essential	31st January 2022

Critical Care Services (WICIS)

The national programme has indicated that CTM (POW and old CT combined) will be the second UHB to go live with the new WICIC system, with a planned date of Q1 2022/23. An SRO and project manager have been appointed and connections to the national programme are being established. In old CT this programme will be incorporating the need for SCBU and CCU to continue to benefit from digital processes as these clinical areas are covered by the existing Phillips solution but are not within the funded scope of the national system.

There is a corporate risk in regards to funding or the removal of digital support systems for clinical practice arising from this national initiative. We anticipate that these will be mitigated by the development of a local business case, but this will be subject to funding to be available in Q1 of 2022/23.

The below table reflects the original implementation milestones, in grey, for Readiness of Service (RSn) and Stable Operations (Son) and the revision, in blue: ¶

Installation Site¤	Anticipated Readiness for Service (RSn) Milestone¤		Anticipated Stable Operations (SOn) Milestone Date¤		NEW RSn¤		NEW SOn¤		NEW Installation Site¤	¤
Princess of Wales Hospital¤	RS12¤	07/03/2023¤	SO12¤	06/04/2023¤	RS2¤	22/11/2022¤	SO2¤	24/12/2022¤	Royal Glamorgan Hospital¤	¤
Royal Glamorgan Hospital¤	RS13¤	07/04/2023¤	SO13¤	07/05/2023¤	RS3¤	26/12/2022¤	SO3¤	25/01/2023¤	Prince Charles Hospital¤	¤
Prince Charles Hospital¤	RS14¤	07/05/2023¤	SO14¤	07/05/2023¤	RS4¤	21/02/2023¤	SO4¤	24/03/2023¤	Princess of Wales Hospital¤	¤

¶

Although there are delays, due to the outcomes of the readiness criteria completed in December 2020, Cwm Taf Morgannwg revised dates are ahead of the original timescale. Following consultation with the local Project team, the deployment order of sites has been amended. ¶

Ophthalmology (OpenEyes)

There is now a CTM project board and SRO in place. The initial board meeting on the 28th July **2021** has highlighted 2 major concerns that will affect the CTM go live.

- The programme plan developed, based on the national material, is not suitable for CTM and requires further work, however there is insufficient capacity to undertake this within CTM,
- User Acceptance Testing in Aneurin Bevan UHB has identified a red risk relating to the deletion of patient records that may delay the implementation timescales for the national programme. Further issues have been raised by ABHB and other organisations resulting in a patient safety review of the application which is due to report before the end of September.

A business change and Process mapping day was undertaken on the 6 August 2021 in POW. There is pressure from Welsh Government to go live by October 2021, however at this time our local board have agreed this is to be an aspirational date and noted this will only be enacted if it is safe to do so

Community Services (WCCIS)

The WCCIS platform update is now on target for September 2022.
The deployment order for the movement of users from Local authority to Health is in its final stages after clarification of some points with the supplier and it is anticipated that the UHB will sign the order in the first week of October 2021.

The project to move Mental Health onto WCCIS has commenced and has a project manager and task and finish group to establish the scope and roll-out order of the project in place.

Discussions have also been undertaken with Health Visitors regarding their use of WCCIS and agreements have been reached on the steps required to improve their current process and map out their future needs.

Emergency Medicine (WEDS)

The project board has decided to postpone the WEDS go-live originally planned for September in PCH to February 2022 at the earliest. Due to the departmental re-organisation of the PCH ED, the RGH will now be the first site in CTM to take the system. User Acceptance Testing (UAT) is being undertaken in September and events to increase clinical awareness are in the process of being scheduled.

Due to the uncertainties of national and local issues, the project in CTM is being re-planned to account for progress so far, risk and available resources.

Swansea Bay (exclusive of POW) are planned to go live in November with CTM following in January or February 2022.

Welsh Nursing Care Record (WNCR)
The WNCR system successfully went live in Ysbyty Cwm Cynon on the 16 August 2021. Within a month 168 patients have had their nursing care entered digitally, by the bedside. In total, there have been 27,254 patient care documents completed and 183 users have accessed the system.

The go live in Ysbyty Cwm Rhondda has been delayed by a week, with implementation across all four wards now due to commence on the 11 October 2021. Preparation work has started with the Royal Glamorgan Hospital for a planned go live in early 2022.

The onsite support team are helping ward staff with their digital skills including use of iPads, laptops and access to systems; this will prepare the workforce for future digital implementations including e prescribing.

A major impact of the digitised nursing notes is that these were previously paper copies in the patient notes and would have been included in the DPN project and scanned.
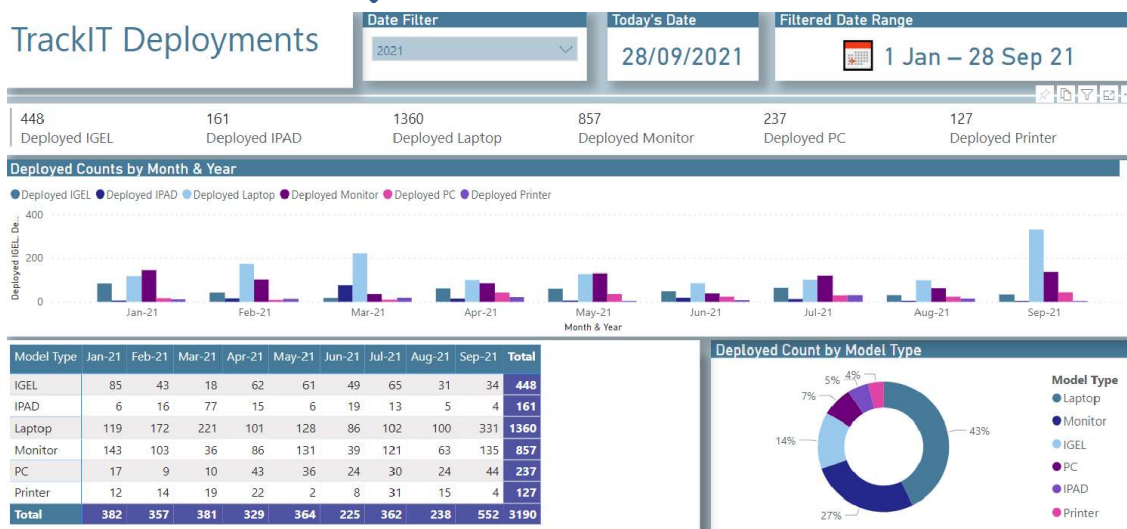
Diabetes module of WCP

The Diabetes module has been very well received by the clinical teams with 1598 forms created in August. A new e-form incorporating Ante Natal care has recently been agreed, and is anticipated to be made available shortly. However there remains bugs within WCP resulting in the Diabetes view displaying incorrectly within the Pathology tile which is delaying further roll out.

Mobile Users

The UHB continues to deploy kit to enable mobile agile working. The volume of kit deployed is shown in the chart below. Due to WNCR implementation September 2021 has been the busiest month of the year thus far, with 331 laptops deployed.

TrackIT Deployments

Date Filter: 2021

Today's Date: 28/09/2021

Filtered Date Range: 1 Jan – 28 Sep 21

448	161	1360	857	237	127
Deployed IGEL	Deployed IPAD	Deployed Laptop	Deployed Monitor	Deployed PC	Deployed Printer

Deployed Counts by Month & Year

● Deployed IGEL ● Deployed IPAD ● Deployed Laptop ● Deployed Monitor ● Deployed PC ● Deployed Printer

Model Type	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Total
IGEL	85	43	18	62	61	49	65	31	34	448
IPAD	6	16	77	15	6	19	13	5	4	161
Laptop	119	172	221	101	128	86	102	100	331	1360
Monitor	143	103	36	86	131	39	121	63	135	857
PC	17	9	10	43	36	24	30	24	44	237
Printer	12	14	19	22	2	8	31	15	4	127
Total	382	357	381	329	364	225	362	238	552	3190

Deployed Count by Model Type

Model Type: ● Laptop 43% ● Monitor 27% ● IGEL 14% ● PC 7% ● IPAD 5% ● Printer 4%

2.2   Insights-driven healthcare

Population Health

We have yet to receive advice from Welsh Government as to whether the Minister has supported the business cases for population health management which were submitted in July 2021.

Clinical Coding

The coding position continues to deteriorate in September. This is due to the following confounding challenges:

- Retention & Recruitment issues, loss of three trainee coders to higher paid jobs. (this year there has been a 20% loss of Clinical Coders across Wales to higher paid jobs)
- High rate of Annual and Sick Leave amongst Coders and Admin Support, the effects of Covid-19 are still having an impact on the department.
- Quality issues of the digitized note stored in CITO which has markedly reduced productivity, coding managers and supervisors have been in discussions with the CITO project managers regarding the issues.
- Inability to source contractor staff with fill rates at 2 to 3 out of 7 (28-42%). This is driven by Aneurin Bevan UHB or Hywel Dda UHB chasing the same contract coders and a UK wide demand surge.
- Data quality issues around uncoded episode volumes at POW, where consultants work for both Swansea Bay and Cwm Taf Morgannwg Health Boards.

Uncoded FCEs	September	August	Change
2021/22	18,484 (31.7% uncoded)	17,540	944

2020/21	4,372 (4.7% uncoded)	4,615	-243
2019/20	13,474 (8.8% uncoded)	13,641	-167
Total	35796	35204	592

The deterioration has resulted in greater focus on the coding position. We have been working closely with our trusted partners in DHCW to establish APIs to WCRS and WRRS which will provide us with access to the documents and results, subsequently enabling greater use of automated and data science approaches to coding, data quality and data completeness.

National Data Repository and Clinical Data Respoitory (NDR/CDR)

Rapid progress is starting to be made in acquiring data from the clinical systems and opening up the architecture. The NDR board has recently agreed to publish a logical component architectural model to provide greater standardisation and understanding of the strategic intent.

This is shown below:
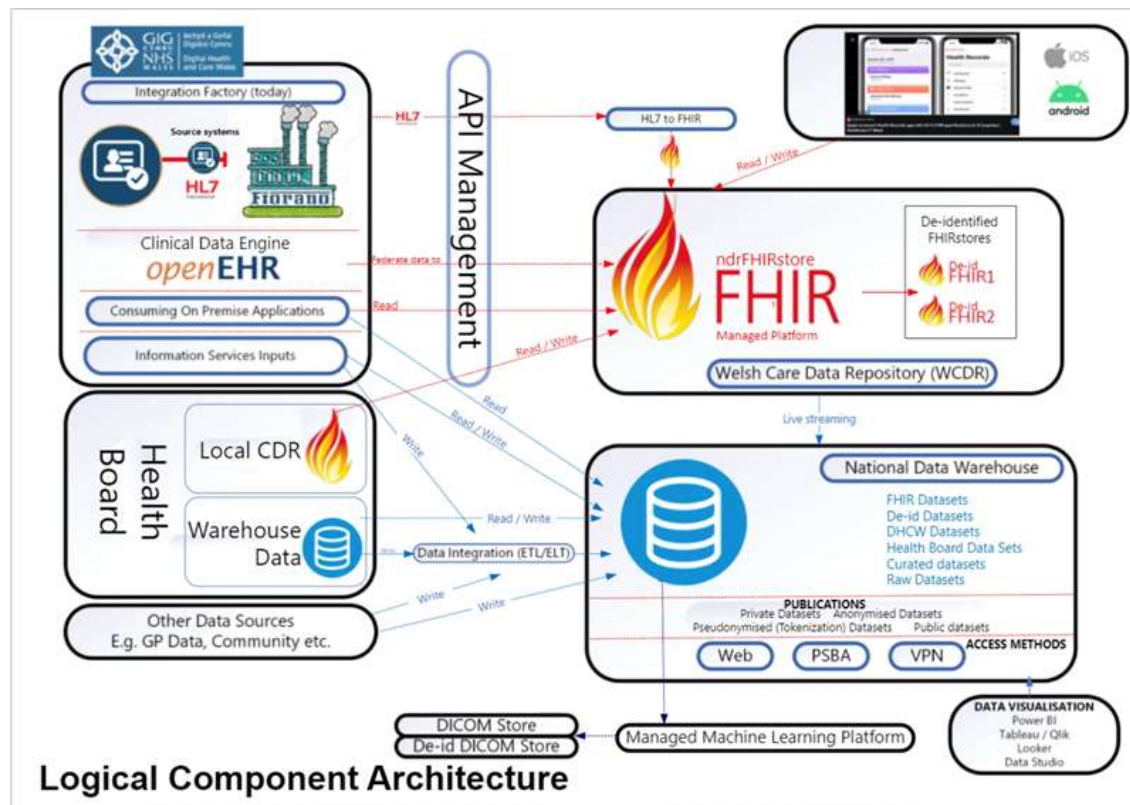
Furthermore, a series of half day workshops to design the road map for the core architectural building blocks in a federated manner has been approved

by all of the Wales NHS organisations and these are due to take place in the fortnight commencing the 4 October 2021

Analytics

Analytical capacity continues to fall woefully short of the demands being placed on it over the past month, causing delays to many service improvement initiatives.

In regards to the prostate AI programme, the meeting with Betsi Cadwaladr University Health Board (BCUUHB)has been postponed as the elective care programme now wish to see the full pilot in BCU being completed before CTM join the initiative, as opposed to after BCU have completed Phase 1 trials.

The Data Democratisation outline is planned for draft in Q3, however as per the NDR report, significant progress in acquiring our clinical records from DHCW is being made.

2.3 Intelligently integrated healthcare

Bridgend & CT aggregation

A separate report has been provided on the Bridgend / Cwm Taf aggregation programme.

Integration services

The major incident reports for the Fiorano integration engine issues has not yet been shared with the HB. This has been escalated to the National Service Management Board. The impact on the clinical services is being dealt with by each Service Management Board. The issues are also now being escalated to the cyber resilience unit as required by the NIS – D directive

Community optometry

Specsavers Merthyr Tydfil has gained successful access to the CTM Forum server in order to treat possible glaucoma patients in the community, resulting in a decrease on patient flow from primary into secondary care. Work has been ongoing to roll out this capability out to four additional community optometrists following a successful PSBA line installation.

The service makes it as easy and convenient as possible for local patients to be monitored with all assessments visible in real-time by hospital consultants.

The work in Mountain Ash has been completed also and they will start seeing hospital patients imminently. Working closely with the primary care team to develop a new working and support model with the private optometrists.

Parc Prison

CTM will be responsible for healthcare in Parc Prison in December 2022. There have been discussions with the HB team and DHCW on the best option regarding delivery and support of the IT. As the prisons are run under the same principle as a GP or Health Centre the preferred option is to continue with DHCW supporting the equipment and delivery of the desktop. This is consistent with other HB in Wales

2.4 Digital workforce

Microsoft 365

The refresh of the medical education sharepoint site has been completed. this has included providing the department with a new room booking system, enabling direct financial savings to be made. The site was handed over at the start of September and user training is near completion.

A programme enabling the automated resetting of Passwords by the user, which is the single biggest reason for requests to the helpdesk, has now commenced.

2.5 Adoption and Exploitation

Improving the ICT user experience
Helpdesk
We are continuing to improve the user experience by closely monitoring the performance of the calls. The dashboard enables real time view on the call levels and identifies response times. As can be seen the service desk managed 7,236 calls in the first four weeks of September 2021, resolving 90% of them to date.
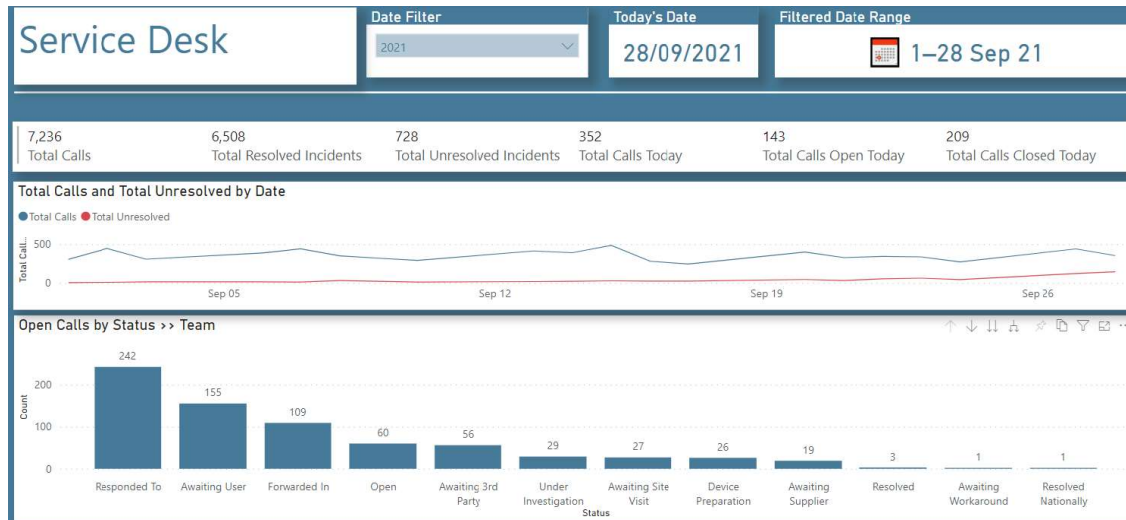
The number of abandoned calls in September 2021 was 684 out of 2997 attempted, equating to 23%. As soon as analytical capacity allows, these data items will be analysed in greater detail to inform our approach to improving service management.
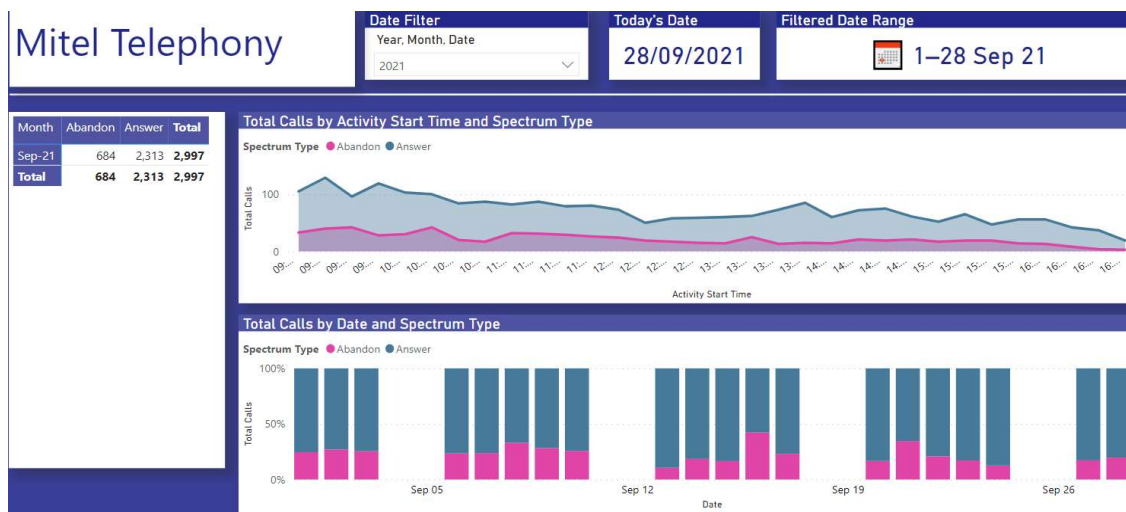
Cyber Awareness

The formal Welsh Government / Cyber Resilience Unit's assessment of our cyber readiness commenced on the 7 September 2021. The first stage incorporates a review of the Service Catalogue and identification of the "critical systems" which are in scope for the assessment.

Progress to date on the objectives of the assessment:
Objective A The board and staff awareness done and the report submitted
Objective C The review of critical systems has commenced with meetings being arranged with the Clinical system managers
Objective D The cyber incident response was submitted on the 1st October with ongoing work on the incident response plan

A draft indication of our stature in respect of part A has highlighted our greatest deficiencies lie in managing our supply chain.

2.6   Managing Innovation

Robotic Process Automation

The Human Resources team are investigating the use of Robotic Process Automation using Blue Prism to undertake some administrative tasks. Initial discussions have been instigated and there is work on going on technical feasibility with regards to compatibility with virtual private networks.

Welsh Ambulance Services NHS Trust (WAST) have agreed to allow us to use their Virtual Private Network (VPN) to be able to reach the cloud application until DHCW put a VPN in place. The work t enable this has commenced.

2.7   Digital enablers

Infrastructure review
The deep dives, which form the second stage of the independent assessment of CTM's digital infrastructure are nearing completion, with the first draft of the reports, including a prioritised action plan expected at the end of October 2021. The five areas are:
- Citrix / Application Delivery / End User Devices
- Network performance / Wi-Fi coverage (including Internet breakout)
- Telephony, UC & Paging
- Wider data centre / hosting strategy
- Print & Digital Strategy

Infrastructure plan
The firewall and PSBA circuits/routers upgrade at PCH has been completed, and the RGH upgrade is due for completion by mid-October 2021, having been delayed for two months due to BT supply issues.

A new contract for the provision of mobile telephony is currently being procured. A review of the sites was undertaken w/c 6th September, and evaluation of supplier responses will take place after submissions close on the 4 October 2021.

A new public Wi-Fi solution has started to be rolled out under the Welsh Government PSBA contract. This significantly increases the capacity for both patients and staff. Currently the bandwidth is 200Mbps per Integrated Locality Group (ILG), and this will increase to 1Gbps per ILG. A new landing

page has been developed to a design that allows us the UHB to proceed on a phased go live basis across the ILGs.

PCH went live on the 13th September 2021, with RGH scheduled in October 2021 once the firewall and routers work previously noted has been completed. PoW will follow once the PSBA capacity constraints have been addressed, as noted below.

Work is progressing on the components of the new paging system that will be provide a common paging solution across all three ILG DGHs, addressing a number of legacy and diverse existing solutions. Funding has just been made available to address PoW.

A high level review of the network provision and capability in and between the Morgannwg sites is under way, with a particular emphasis on the PoW site. Funding has now been made available to upgrade the main PSBA link into the PoW site. This will provide higher bandwidth connectivity to PoW, over new resilient circuits that are physically diverse.

Internal Audit

A review of the Bridgend disaggregation is being undertaken by Welsh audit as well as an update on the service management review performed earlier this year. This is nearing completion, with a draft report expected in the first week of October 2021.

3. KEY RISKS/MATTERS FOR ESCALATION TO BOARD/COMMITTEE

3.1 Funding for the disaggregation of Bridgend from Swansea Bay UHB
3.2 Coding performance is deteriorating and this is likely to accelerate in the immediate future
3.3 Staffing levels within the department are stretched with no flexibility to consume any net increases in demand on the digital programme.

4. 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

	If more than one Healthcare Standard applies please list below:
Equality Impact Assessment (EIA) completed - Please note EIAs are required for all new, changed or withdrawn policies and services.	No (Include further detail below)
	Report for noting
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.
	However funding to continue both infrastructure and Bridgend disaggregation are risks
Link to Strategic Well-being Objectives	Provide high quality, evidence based, and accessible care

5. RECOMMENDATION

The Committee are asked to:
NOTE the progress made in delivering the digital programme