DHIC Committee Meeting

Tue 14 February 2023, 09:00 - 12:00

Agenda

09:00 - 09:10
10 min

1. Standing Items

David Edwards

1.1. Welcome & Introductions

1.2. Apologies for Absence

1.3. Declarations of Interest

1.4. Minutes of the Committee Meeting held on 4 October 2022

1.4 Draft Public DHIC Minutes 4.10.22MD.NF.pdf (11 pages)

1.5. Action Log following the Committee Meeting held on 4 October 2022

1.5 DHIC Public Action Log - February MD.pdf (3 pages)

1.6. Chair's Action taken since the Committee Meeting held on 4 October 2022

09:10 - 10:30
80 min

2. Items for Review and Assurance

2.1. Digital Transformation Progress Report (Digital Dashboard)

David Thomas

2.1 Digital Strategy update Feb 2023.pdf (4 pages)
2.1a Appendix A.pdf (4 pages)
2.1b Appendix B.pdf (3 pages)
2.1c CAV Digital Strategy Final.pdf (37 pages)

2.2. Digital Strategy Update

David Thomas

2.2 Digital Strategy update Feb2023 DT1.pdf (5 pages)

2.3. Joint IMT & IG Corporate Risk Register

David Thomas

2.3 Joint IMT IG Risk Register Cover.pdf (3 pages)
2.3a Combined Risk Register Sept 2022 Master v4.0.pdf (4 pages)

2.4. IG Data & Compliance (SIs, Data Protection, GDPR, FOI, SARs, Staffing & Mandatory Training)

James Webb

2.4 IG Compliance DHIC Feb 2023.pdf (6 pages)

2.5. Digital Services Key Performance Indicators

David Thomas

- 2.5 Digital Services Key Performance Indicators DT1.pdf (2 pages)
- 2.5a Ivanti Scorecard Appendix 1.pdf (2 pages)
- 2.5b Ivanti Scorecard - Jan 2023 Appendix 2.pdf (2 pages)

2.6. Framework Policies, Procedures & Controls Update

David Thomas

- 2.6 Framework Policies Procedures and Controls.pdf (3 pages)

2.7. Clinical Coding Update

David Thomas

- 2.7 Clinical Coding Performance Paper Feb 2023.pdf (4 pages)
- 2.7a Clinical Coding - Appendix A.pdf (17 pages)
- 2.7b Clinical Coding - Appendix B.pdf (3 pages)

2.8. Board Assurance Framework – Digital Risk

James Quance

- 2.8 BAF Covering Report DHIC.pdf (3 pages)
- 2.8a BAF Digital Strategy and Roadmap Jan 2023.pdf (2 pages)

2.9. Break - 5 mins

10:30 - 10:40
10 min

3. Items for Approval / Ratification

3.1. Committee's Annual Work Plan and Terms of Reference for 2023/24

James Quance

- 3.1 Cover report for DHIC ToR and Work Plan 23.24.pdf (3 pages)
- 3.1a DHIC Terms of Reference - Feb 2023 Draft.pdf (9 pages)
- 3.1b Draft DHIC Committee Work Plan 2023.24.pdf (1 pages)

3.2. Digital & Health Intelligence Committee Annual Report – 2022/23

James Quance

- 3.2 DHIC Committee Annual Report Cover.pdf (2 pages)
- 3.2a Draft DHIC Annual Report 2023(1)MD.pdf (6 pages)

3.3. Policies (Verbal Update)

David Thomas

10:40 - 10:45
5 min

4. Items for Noting and Information

4.1. Minutes: Digital Directors Peer Group

David Thomas

- 8.11.23
- 6.12.22

- 10.01.23

4.1 Digital Directors Peer Group Cover.pdf (3 pages)
4.1a Directors of Digital Peer Group Meeting Notes - November 2022.pdf (4 pages)
4.1b Directors of Digital Peer Group Meeting Notes - December 2022.pdf (4 pages)
4.1c Directors of Digital Peer Group Meeting Notes - January 2023.pdf (5 pages)

10:45 - 10:45
0 min

5. Agenda for Private Digital & Health Intelligence Meeting

David Edwards

5.1. Minutes from the Private DHIC Meeting held on 4 October 2022

5.2. Cyber Security Update (Confidential discussion)

5.3. Digital Budget and Investment (Confidential discussion)

5.4. Caldicott Guardian Requirements (Confidential paper – contains personal data)

5.5. All Wales IM Digital Network Highlight Report (Confidential document)

10:45 - 10:45
0 min

6. Any Other Business

10:45 - 10:45
0 min

7. Items to bring to the attention of the Board / Committee

David Edwards

10:45 - 10:45
0 min

8. Review of the Meeting

David Edwards

10:45 - 10:45
0 min

9. Date & Time of next Meeting:

David Edwards

Tuesday 30 May 2023 via MS Teams

10:45 - 10:45
0 min

10. Declaration

To consider a resolution that representatives of the press and other members of the public be excluded from the remainder of this meeting having regard to the confidential nature of the business to be transacted, publicity on which would be prejudicial to the public interest [Section 1(2) Public Bodies (Admission to Meetings) Act 1960]

Unconfirmed Minutes of the Public Digital & Health Intelligence Committee Meeting
Held On 4 October 2022 at 9 am
Via MS Teams

Chair:		
David Edwards	DE	Independent Member - Digital
Present:		
Gary Baxter	GB	Independent Member - University
Michael Imperato	MI	Independent Member - Legal
Sara Moseley	SM	Independent Member – Third Sector
In Attendance:		
Suzanne Rankin	SR	Chief Executive Officer
Nicola Foreman	NF	Director of Corporate Governance
Angela Parratt	AP	Director of Digital Transformation
David Thomas	DT	Director of Digital & Health Intelligence
Daniel Jones	DJ	Information Governance Manager
James Webb	JW	Information Governance Manager
Bryn Harries	BH	IT Project Manager
Russel Kent	RK	Head of Digital Operations
Observers:		
Timothy Davies	TD	Head of Corporate Business
Marcia Donovan	MD	Head of Corporate Governance
Secretariat		
Sarah Mohamed	SM	Corporate Governance Officer
Apologies:		
Hywel Pullen	HP	Assistant Director of Finance
Mark Wardle	MW	Consultant Neurologist

Item No	Agenda Item	Action
DHIC 04/10/001	**Welcome & Introduction** The Committee Chair (CC) welcomed everyone to the public meeting and confirmed the meeting was quorate.	
DHIC 04/10/002	**Apologies for Absence** Apologies for absences were noted. **The Committee resolved that:** a) The apologies were noted.	
DHIC 04/10/003	**Declarations of Interest** **The Committee resolved that:** a) No Declaration of Interest were noted.	

DHIC 04/10/004	**Minutes of the Meeting Held 7 June 2022** **The Committee Resolved that:** a) The Minutes of the Meeting held on the 7 June 2022 were confirmed as a true and accurate record.	
DHIC 04/10/005	**Action Log – Following the Meeting held on 7 June 2022** The Action Log was received. **The Committee Resolved that:** a) The Action Log was discussed and noted.	
DHIC 04/10/006	**Chair's Action taken since the Committee Meeting held on 7 June 2022** **The Committee Resolved that:** a) There were no Chair's Action.	
	Items for Review and Assurance	
DHIC 04/10/007	**Digital Transformation Progress Report** The Director of Digital Transformation (DDT) presented the Report and highlighted the following: • It included a list of projects that were reported against in the IMTP. • At the last DHIC meeting in June, there was a discussion about the draft Roadmap. • The report had been made a lot more explicit this time. • Projects in train included this year's Roadmap items as reported in Appendix 1. • There was good progress with PROMS. Four services were live. The Digital PROMS team was in discussion regarding the next 10 services. That team had been fully funded. Integration started in Q1 and it was planned to be completed in Q3. • It was noted that the Power BI project was "off track" at the moment due to a lack of resourcing which had prevented it from being up and running. • Recruitment was ongoing. However, there was competition with many others for similar resources.	

	The Independent Member – University (IMU) commented that the update was helpful and the format was easy to read. The IMU queried if there was a better way to track the progress of projects. The DDT responded that she would prepare a presentation which included previous trends of projects. The Independent Member – Third Sector (IMTS) commented that it was good to see that progress was being made in many projects. The IMTS queried whether any of the projects that were going "off track" were critical. The DDT responded that everything on the Roadmap was important and was on the Roadmap for a reason. For example, Power BI was important because it put capability into the hands of colleagues and allowed them to serve up their own data. The DDT added that WIFI was hugely critical for many items referenced in the Roadmap, such as Welsh nursing care records to enable nursing staff to move away from paper. The interoperability was also critical to progress digital maturity. The Director of Corporate Governance (DCG) noted that based upon the priorities that the DDT had raised, a number of those were "off track" due to resources. The DCG queried whether the lack of resources was covered in the business case in the Private session, and, if so, did the business case resolve the lack of resource. The Director of Digital & Health Intelligence (DDHI) responded that there was a combination of matters in relation to resources. There were some unfunded business cases and longstanding issues around investment. The Independent Member – Digital (IMD) commented that whilst it was good to see so many projects "on track", where there were underlying issues with other projects those should be brought to the attention of the Board. **The Committee Resolved that:** a) The Digital Transformation Progress Report was noted.	**DDT** **IMD/DCG**

DHIC 04/10/008	**Digital Strategy - Update on Roadmap and Associated Funding** The Director of Digital Transformation (DDT) presented the Report and highlighted the following: • The report explained where the Health Board was at in terms of digital maturity. • At the DHIC meeting in June 2022, there was a discussion about 3 key pieces of work. That included the following: - A new relationship with the organisation, building on the Digital Strategy core principle of co-production. - An enterprise architecture that would give the Health Board a blueprint for the changes and modernisation needed in the technology stack, including infrastructure, applications and data to meet the Health Board's needs and aspirations. - EPR business case. • The Roadmap had been separated into strategic and tactical items. • The EPR could not be progressed at the moment in the desired way. There was still activity ongoing that contributed to the EPR business case. • It was noted that Digital Directors (all Wales) have made a commitment that all Health Boards would undertake a HIMMS EMRAM assessment on digital maturity in the next few months. <u>2022/23 roadmap</u> • Several items had been completed. • In terms of EPR, the solution architecture had been completed. Enterprise architecture would be next. • PROMS had been noted as a strategic item because it was part of value-based healthcare. **The Committee Resolved that:** a) The paper and presentation and recommendations for improvement were discussed and noted.	
DHIC 04/10/009	**IG Data & Compliance (SIs, Data Protection, GDPR, FOI, SARs, Staffing & Mandatory Training)**	

	The Head of Information Governance and Cyber Security (HIGCS) presented the Report and highlighted the following: • The Information Governance (IG) department continued to operate at stable but limited resources. • There were 5 whole time equivalents which was low for an organisation of this size. That continued to be addressed. • The IG team continued to review a large number of Health Board data incidents via the Datix system. • There had been a total of 257 information governance related incidents. 4 data breaches had met the threshold to be reported to the Information Commissioner's Office (ICO). Details of those breaches would be outlined in the Private section of the Committee meeting. • The average number of FOIs received during the last 12 months remained at 48 requests per month and an average compliance of 86%. That did not represent much of a change and was over the expectations for compliance. • As requested, since the last Committee meeting, the IG team had analysed the requests received. Out of the 53 requests received during July 2022, 22 (42%) were submitted by members of the public, 22 (42%) were submitted by the private sector (including solicitors), 7 (13%) by political parties and the remaining two requests (4%) by a journalist and a charity. • Compliance for requests made for medical records had dropped beneath the 50% mark during the last three months. That was being addressed urgently by the digital front door. That would allow the Health Board to streamline requests and to understand where delays existed. A lot of the requests were currently paper based and could not be monitored properly. • It was noted that during July 2022, 57% of healthcare record requests came from solicitors on behalf of patients.19% were made directly by the patient and 9% were made by the police. • It was noted that the number of complaints received was low. The backlog was also relatively small. The IML queried how health care record requests could avoid being passed from department to department. The HIGCS responded that the requests received from patients were more direct and specific. However,	

	requests received from solicitors had tended to use a more generic letter to allow any department to respond. The HIGCS added that no single department should be responsible for subject access requests. The new Digital front door that was being developed should make the process smoother. It would also allow crucial identity checks to be performed. Under the GDPR, requests could be made in any way so people could not be forced to use specific means. The IML queried whether communication regarding the Digital front door could go out via the Law Society's Cardiff office. The HIGCS responded that as part of their analysis, the IG team would identify which law firms were making the most requests. The success of that would come down to communication. The DCG queried the data breaches to the ICO. The DCG stated that only four breaches were reported for the whole of last year and there were now four reported in just one quarter of reporting. The HIGCS responded that he would go into more detail in the Private session. However, it was linked to the NIAS monitoring. There had been an increase in breaches which were considered reportable to the ICO. The Chief Executive Officer (CEO) queried those breaches where there had been inappropriate access to records by staff. The CEO queried whether the actions, such as communication and letters issued to staff, had improved the position. The HIGCS responded that it was a much better position and he would discuss this in the Private session. The DDT stated that part of the challenge was that information was being held in lots of different places. The IMTS stated that 57% of FOI requests were being made by solicitors. Law firms were commercial organisations and the process was free. The IMTS queried whether the scope could be tightened up and made narrower together with other Health Boards. The HIGCS responded that requests could be received by any means and the Health Board could not charge for it. The GDPR meant that requests could not be narrowed down. **The Committee Resolved that:**	

	a) A series of updates relating to significant Information Governance issues was received and noted.	
DHIC 04/10/010	**Review on processes and systems for Data, Information Management Report** The DDHI presented the Report and highlighted the following: • This was part of the plan to move away from too much paper and towards more visual digital presentations of the work being done. • The local data repository was being used for Looked After Children assessments and to share information between the Health Board and local authorities. • A digital care region had been established. • It was noted that the Health Board did apply for digital priority investment money from WG to move this at pace but the application was not successful. • Another WG bid would be made in January 2023. • This had also been discussed with DHCW. The Head of Digital Operations (HDO) highlighted the following: <u>Ivanti Service Management Background</u> • The previous HEAT help desk had been replaced because of the end of support for adobe flash player, an old interface and limited functionality. • Instead the Health Board had opted to use an extension of the Ivanti product. • A cloud-based solution had been adopted. • It was modular in design and would give flexibility on multiple devices. <u>Highlights</u> • 7 Digital and Health Intelligence departments had migrated to Ivanti. • Change management had started to be used. • A key benefit was that a new starters NADEX which had previously taken 1-3 days to set up, now took less than 5 minutes. <u>Future / potential enhancements</u> • Customisable reporting functionality via dedicated Ivanti Reporting Server was available.	

	• Asset management had been extended beyond workstations to the Digital operations team. • A service desk mobile application launch was being looked into. • The Digital team was in the adoption phase of the new service desk. A lot of the reports were generic reports which contained many fields that were not being used. • It was noted that there were no fixed SLAs yet. The Digital team was looking to create more meaningful SLAs. • An Ivanti reporting server had been purchased. That allowed for reports to be more customised, using common query designer formats, and would give more flexibility going forward. The IMTS queried what the impact of the service desk was on users' working lives and morale. The HDO responded that they have been trying to collect feedback of the service desk and the practical elements of using a Digital front door. The CEO commented that many teams would not have an idea about what the new Ivanti system could do. It would be useful to put out information on CAV Connects, such as positive user case studies. The HDO advised that the Digital team wanted people to report the problems and make it as easy as possible. The DDHI updated the Committee on the data to knowledge programme. The Health Board was about to start the partnership with Cardiff University to look at the data modelling capacity and capability. The IT Project Manager (IPM) updated the Committee on the MS Office 365 Programme. It was noted that since the last DHIC meeting, the Board and Finance Committee had approved the renewal of the all Wales Microsoft Enterprise Agreement. It was noted that the local and national teams had since coordinated to move all staff across to the new licencing model. The Board had also asked for feedback on the realisation of benefits through the agreement to ensure the organisation was seeing value from the expenditure. In addition, the case for a permanent resource to support Office 365 specifically had been agreed. The six posts outlined would make up a core team supporting the adoption and utilisation of new features and functionality. Those posts were currently in recruitment, and the agency staff who had supported	**HDO**

	adoption for the last 2 years remained in place until the recruitment was completed. **The Committee Resolved that:** a) Progress against the workplan and the areas of exception which required further attention and consideration were noted.	
DHIC 04/10/011	**Information Governance Training, Communications and Engagement Plans Presentation** The DDHI highlighted the following to the Committee: • Information governance training was one of 13 training modules that staff were required to complete. It could be completed annually or on a 3-year cycle. • There was a struggle to reach the higher levels of compliance. • There was discussion about whether some modules could be prioritised over others. • The compliance rate across the Health Board was 66%. • There was a challenge on how to increase the information governance compliance rate. • The main challenge created by this was that as soon as a breach was reported to the ICO, the ICO would query what was the compliance rate. The HDO advised that a new SharePoint had been created to replace the aging intranet and to make it more readily accessible for staff. It allowed for videos to be imbedded into it. The DDHI stated that they would work with Comms to target low information governance levels. The IMU queried whether the mandatory training was a one size fits all training package or could it be adapted to different working groups within the organisation. The DDHI responded that it was a one size fits all and that could cause part of the problem. The modules were available on ESR. There were other ways to conduct the training which could be looked at. **The Committee Resolved that:** a) Progress against the workplan and the areas of exception which required further attention and consideration was noted.	

DHIC 04/10/012	**Framework Policies, Procedures & Controls** The DDHI presented the Framework Policies, Procedures & Controls Paper. It was noted that the Information Governance and Cyber Security Department had identified two specific SOPs that were not included. Those had now been prioritised over the updating of existing long-standing policy documents. Those SOPs included Cyber Incident Response and Patch and Vulnerability Management. It was noted that the DDHI had been notified of 28 policies that were out of date. The Digital team was currently working through those and they would be reflected in the next report. **The Committee Resolved that:** a) Progress was noted and the verbal update at the Committee meeting was noted and received.	**DDHI**
DHIC 04/10/013	**Joint IMT & IG Corporate Risk Register** The DDHI presented the Joint IMT and IG Corporate Risk Register Paper. It was noted that there was one risk at “red” which related to Cyber Security. Most of the risks on the Register had stayed the same. There were two to be removed from the Risk Register. Two risks that were a “yellow” status had been reduced to zero. The DDHI proposed to remove these from the Risk Register because there had been mitigations. **The Committee Resolved that:** a) Progress and updates to the Risk Register report were noted.	
DHIC 04/10/014	**Clinical Coding Performance Data** The DDHI presented the Clinical Coding Performance Data Paper. The DDHI would speak with the CEO and Executive Medical Director about where clinical coding should sit within the Board’s Committees. It would be more suitable to sit within the QSE Committee.	**DDHI/DCG**

	The HIGCS stated the clinical coding performance levels were above WG requirements but had remained low. The IMU stated that DHCW was due to audit clinical coding that month and asked whether it would place extra stress on an already understaffed team. The HIGCS responded that it would. However, clinical coding was only useful when it was complete and accurate. **The Committee Resolved that:** a) The performance of the UHB's Clinical Coding Department was noted.	
DHIC 04/10/015	**Policies** No policies were presented to the Committee for approval.	
DHIC 04/10/016	**Minutes: Digital Directors Peer Group** **The Committee Resolved that:** a) The Minutes of the Digital Directors Peer Group of the meetings held on 7th March 2022 and 4th April 2022 were received and noted.	
DHIC 04/10/0017	**Agenda for Private Digital & Health Intelligence Meeting** *i. Minutes from the Private DHIC Meeting held in June 2022* *ii. Digital Strategy Case for Investment Update* *iii. Caldicott Report* *iv. Cyber Update*	
DHIC 04/10/018	**Any Other Business** No Other Business was discussed.	
DHIC 04/10/019	**Items to bring to the attention of the Board / Committee** No Items were brought to the attention of the Board / Committee.	
	Date & Time of next Meeting: 14 February 2023 via MS Teams	

Action Log
Following the Digital Health & Intelligence Committee
Held on 4 October 2022
(For the meeting 14 February 2023)

Minute Ref	Subject	Agreed Action	Lead	Date	Status
Complete Actions					
DHIC 07/06/007	**Digital Transformation Progress Report**	The10 year Digital Forecast Plan to be shared with Board Members.	David Thomas	4.10.2022	**Completed** Updated on 4 October 2022
DHIC07/06/008	**Access to Medical Records**	The IGM would ask Medical Records for a breakdown of who was making the requests for medical records	David Thomas/Daniel Jones	4.10.2022	**Completed** Updated on 4 October 2022
DHIC 07/06/008	**FOI requests**	The IGM would provide more detail on the level of FOI requests rate, including who was making the same.	David Thomas/Daniel Jones	4.10.2022	**Completed** Updated on 4 October 2022
DHIC 07/06/012	**Framework policies review**	Framework Policies, Procedures & Controls would be reviewed by the next Committee.	David Thomas	4.10.2022	**Completed** Updated on 4 October 2022
Actions in Progress					
DHIC 04/10/007	**Digital Transformation Progress Report**	The DDT would present projects that were both on track and off track.	Angela Parratt	14.02.2023	Update to be provided in February meeting. - Item 2.1

Minute Ref	Subject	Agreed Action	Lead	Date	Status
DHIC 04/10/010	**Processes and Systems for Data, Information Management Report**	To issue information regarding the new Ivanti system to staff via CAV Connects.	Russel Kent	14.02.2023	Update to be provided in February meeting. - Item 2.5
DHIC 04/10/012	**Framework Policies, Procedures & Controls**	The DDHI would present an update on the out of date policies that were being worked through.	David Thomas	14.02.2023	Update to be provided in February meeting. - Item 2.6
DHIC 04/10/014	**Clinical Coding Performance Data**	Discussion to be held with CEO/Executive Medical Director to determine which is the most appropriate Board Committee to receive assurance re clinical coding.	David Thomas/James Quance	14.02.2023	David Thomas will speak to Meriel Jenney. Update to be provided on 14 February 2023.
Actions referred from another Committee					
AAC 8/11/22 007	**Digital Strategy Audit**	Internal Audit re the Health Board's Digital Strategy recommended that it was good practice to have Clinical Board attendance at the DHIC Committee meetings.	James Quance	14.02.2023	New terms of reference for the Committee will include clinical board attendance. - On February agenda item 3.1
Actions referred to the Board / Committees of the Board					
DHIC 21/06/013	**Digital Strategy – Case for Investment**	The DCG stated that this could be taken to Strategy review session so that when strategic programmes are considered digital is then highlighted which would then feed into the Strategy & Delivery Committee.	Nicola Foreman David Thomas	4.10.2022	**Completed.** An update was provided to the DHIC Committee in the Private session.
AAC 6/9/22 008	**IT Service Management**	Standing reports regarding the Ivanti System are to go to the Digital Health Intelligence Committee	David Thomas	7.02.22023	**Update on 14 February 2023** Internal Audit Final report on the Ivanti system (the new IT service desk system) is due to be presented

Minute Ref	Subject	Agreed Action	Lead	Date	Status
					to the Audit Committee on 7 February 2023.
DHIC 04/10/007	**Digital Transformation Progress Report**	To share with the Board's the Committee's concerns with regards to the level of limited resources and the impact this has on progressing a number of projects.	Committee Chair/Nicola Foreman	24.11.2022	**Completed.** Board Members were made aware of this via the DHIC Committee Chair's Report which was presented to the Board at its meeting on 24 November 2022.

Report Title:	**Digital Transformation Progress Report**				Agenda Item no.	2.1
Meeting:	**Digital and Health Intelligence Committee**		Public	x	Meeting Date:	14th February 2023
			Private			
Status *(please tick one only):*	Assurance	x	Approval		Information	
Lead Executive:	**Director of Digital and Health Intelligence**					
Report Author (Title):	**Director of Digital Transformation**					

Main Report
Background and current situation:

Background and current situation:

Following the October DHIC meeting, good progress has been made with what we set out to achieve in the year 22/23 across most projects. The latest update is shown at Appendix A to this paper. This excludes projects that were paused in-year (previously reported upon). Our main constraint in pace is limited by resource availability e.g. diverted to respond to operational needs.

23/24 The IMTP priorities are summarised with milestones at Appendix B and described below.

What Digital needs to do

The Digital and Health Intelligence team is integral to the UHBs ability to respond to the pandemic and pressures arising since which are in extremis.

The Shaping our Future Wellbeing strategy and Shaping Our Futures aspirations are also dependent upon our abilities in digital, data and technology to deliver on the needs and requirements of the communities which Cardiff and Vale UHB serve.

We continue our journey towards delivering digital capability and building digital maturity.

The Board approved a strategy for the organisation in September 2020 which can be found attached as CAV Digital Strategy Final. The Strategy clearly sets out that CAVUHB aims to become a learning health and care system.

We are part way through delivering against a high-level roadmap designed to lay the foundations for creating this Learning Health and Care System. This roadmap continues to evolve in response to national and local requirements for responses to our patients and citizens. The roadmap is dynamically refreshed to reflect changes in priorities as the UHB switches gears.

Its initial emphasis is to deliver capability which includes improving our architectural foundations.

Digital maturity will accelerate by way of hybrid Electronic Patient Review functionality. Taking a strengths-based approach, we have undertaken solutions architecture work and conducted some soft market testing in support of this. A business case will be produced in 2023 as part of the UHW2 Digital Strategic Outline Case (SoC) as we look to secure funding.

Despite the inevitable shifts in priorities, progress is being made albeit not at the pace we would like. Our major projects pipeline, organisational priority project responses and business as usual work still advance our digital maturity.

Priorities for the next year

The following major projects are prioritised for 23/24. There are also local projects being implemented as part of business as usual or for 6 Goals such as the e-triage proof of concept, developing the Digital Care Region and shared records and concluding/continuing the projects reported on in last year's IMTP to name a few.

CAV UHB: IMTP DIGITAL PRIORITIES 2023/24

UHW2 **Digital SoC for a SMART healthcare system**
Major infrastructure projects ESSENTIAL WORKS
Wales critical care information system NATIONAL PROGRAMME DHCW
Welsh Nurse care Record NATIONAL PROGRAMME DHCW
Scan4Safety NATIONAL PROGRAMME NWSSP
ePMA National DMTP portfolio, local purchase and implementation
Common demographics store Local - Acute and Community
PROMS VBHC, ViH
DSPP NHS Wales App – PROMS microservice NATIONAL PROGRAMME DSPP

The milestones summary is shared at Appendix B to this paper and which will be reported upon regularly in the next financial year (quarterly progress updates).

Strategic focus in 23/24

To support clinical pathway & redesign transformation ambitions, we must continue to challenge ourselves and apply our thinking system wide. The digital SoC will build upon our Digital Strategy ambition to be a Learning health and care system and develop a SMART healthcare system (the combination of multiple data sources e.g. estate, environmental as well as patient, staff data) to deliver it and the wider SoFs programmes.

This will allow us to re-imagine how we can use all of the data available to us in support of how we run our business and deliver patient care across the UHB. This will be described in the digital SoC for UHW2 planned to commence April 2024 (dependent upon WG funding).

We are in the process of completing several pieces of work which will support these plans including an Enterprise Architecture review, a HIMSS self-assessment (all UHB Digital Directors have agreed to undergo this process) which may be followed by a similar assessment in community and we have already concluded an initial Solutions Architecture for EPR functionality. Digital has also been engaged in over 40 business intelligence meetings with organisations undergoing similar journeys to our own which we will use to help shape our future digital services.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

New business case(s) to be aware of
D&HI supported the introduction of e-triage and secured funding with the clinical area via the 6 Goals (Urgent and Emergency Care) programme. It has been agreed to fund a 12-month pilot for e-triage. Subject to approval at internal investment groups, the programme is in the pre-implementation planning stage and led by the clinical service with digital supporting this work.

Recommendation:

The Board / Committee are requested to:

1. NOTE the progress report

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	x
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	x
4. Offer services that deliver the population health our citizens are entitled to expect	x	9. Reduce harm, waste and variation sustainably making best use of the resources available to us	x
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered
Please tick as relevant

Prevention		Long term		Integration		Collaboration	x	Involvement	

Impact Assessment:
Please state yes or no for each category. If yes please provide further details.

Risk: Yes

Safety: No

Financial: Yes

Workforce: No

Legal: No

Reputational: No

Socio Economic: No

Equality and Health: No
Decarbonisation: No

Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

DHIC 2.1 Appendix A

IMTP PROJECT	PLANNED Q3 MILESTONE	UPDATES	STATUS	TREND
Electronic Patient Record	Business case	Folded into UHW2 Digital SoC. No further reporting here	Reprogramme	
Digital front door	SNOMED CT work scoped and planned	SNOMED CT – EDQDS (dataset) has been superseded by the WECDS dataset, see below. SNOMED CT development in EU Workstation complete but not released, PMS work to be completed Q4. UI/UX work for next generation EU Workstation ongoing. Foundational work has been completed that will allow further development. Progress is as resource allows given organisational priorities E-Whiteboard – Medicine completed, SDEC (5 specialties) completed, and cardiology completed. T&O and Psychiatry next in line for Q4. eTriage integration – initial talks have taken place with supplier Q4 Virtual inpatients - ED side complete, WCWS work in final stages to be completed Q4.	On track	→
DSPP NHS Wales App (from DSPP) - PROMS as a microservice behind NHSWapp *(this is not reporting on the DSPP programme, only CAV involvement as a Pathfinder)*	Meeting DSPP, MCO, CAV	Discussion restarted with MCO, Kainos & DSPP to plan & start the work for NHS Wales App PROMS jump off. DSPP to advise when workshops can begin to scope out solution(s) and works.	National programme	→
PROMs	Estimated - alignment with national PROMs ViH programme and target aerchitecture	ENT built pending service resource to start contacting patients to onboard. Further 2 services going live Community Dietetics, Lymphoedema. Integration completed with LDR. Recruitments underway for PROMs team. New SRO for PROMs and formal alignment with C&V VBHC. Integration slower than planned (capacity) replanned for Q4.	Going off track	↑
Shared health and care records using LDR	Common demographics store for the region uHB with a stretch target being common 'flagging' (alerts, risks, allergies)	Not possible to access DPIF funds for RPB *digital requirements* , which is a significant constraint to DCR. This is being raised to W.G. 2022/23 Q3 - Digital Care Region (DCR) established (team, governance, cross organisational steering board), as a primary enabler of Regional Partnership Board (RPB) ambitions. 2022/23 Q4 – Procurement of 'discovery' consultancy from BlackPear (technology partners for the Somerset Digital region), to work on Vale CRS care record sharing improvements. 2022/23 Q4 - Strategic review of DCR complete by Swansea University for October Steering Group. 2023/24 Q1 – Pathfinder interface transacting demographic between 2 regional care record systems. 2023/24 Q1 – Recruit regionally funded care records officer.	On track	→
Outpatients transformation	Iteration	Attend Anywhere (V.C) Implementation/Stakeholder group re-established. 2 Development of algorithms (PIFU & FAB) to manage electronic communication with patients to be completed by Q4.	On track	→
Community, Mental Health and PCIC services	Clinical Letters to CCP and WCP – is a significant deliverable, giving visibility to 'acute' and 'primary care/GPs' of activity Outpatient Therapies rolling onto the PARIS e-care record.	Resource constraints have delayed this work which is now 90% complete, aiming Q4 completion. Paris will make use of the new document web service that uses the latest but now defunct meta-data standards. Work will need to be revisited once national standards have been decided upon. Internal Programme: PARIS contract Extension for 2023/24 agreed. Staff Diary rolled out completed to Maternity services. 8 Outpatient Therapies launched upon PARIS. 12 further outpatient Therapies aligned for 2023/24 dependent upon CD&T funds (to be agreed Jan'23).	On track	↑
Digital dictation & Transcription	Reprocurement	Initial integration meeting held with supplier and documentation provided. The work needs to be scheduled. National document metadata standard needs to be adhered to as part of the integration, this is currently in draft with an aim to complete Q3 which put us slightly off track, now revised to Q4. No resource to support this work.	Going off track	↓
eTR radiology & GPeTR	Review WCP etr for secondary care if suitable/appropriate	WCP etr requires work from DHCW - local solutions continue in interim, slightly delayed due to combination of additonal functionality requirement and operational pressures in services. GP radiology live, acute - Go Live pilots Q4.	On track	→
Clinical/specialty applications	Internal referrals work extended to all appropriate specialties	Feb 2023 - ePMA pre implementation team have been employed and scoping exercise is underway for digital requirements (working closely with the WNCR team) throughout the estate . Procurement for the system has commenced and due to be complete by end of Quarter 1 23/24 and detailed process mapping is due to begin which will clarify the digital requirements for clinical areas and suggest timelines for implementation. Feb 2023 - WICIS Funding bids for both Capital and Revenue requirements have been submitted to support the infrastructure requirements and implementation of the application. Waiting approval. Ongoing national UAT in underway and due to be complete February 2023 Feb 2023 - WNCR is now live in both Barry and CRI hospital – Digital readiness to support go lives in both UHW and UHL is ongoing inc: Nadex & email accounts being set up and iPad charging units being deployed. Dependency on corporate wifi. SNOMED CT in context of DSCN for WECDS. DHCW questionnaire for SNOMED CT within the ED dataset has been completed and sent back. Awaiting final specification before work can progress. Was initially targeted for Q1 2023, DHCW have pushed timescales back as still in information gathering stage. WCP/COMII resource has been allocated, waiting on DHCW regarding configuration issues. Aiming for Q4 but dependent on DHCW	Mixed across initiatives	→
Interoperability	NDR, LDR and shared record work	FHIR Message for PROMS completed Q3. PMS and PARIS feeds to MCO will be completed and operational Q4. Return feed from MCO – development ongoing, aiming for Q1/Q2 2023. As of Q3 2022, work completed for 5 feeds to third-party systems. WRAPPER – interoperability with National systems – Demographics completed Q3. For Q4 – Referrals, Outpatients, Pathways, MDT scheduling between WPAS and CAV PAS. Demographics – FHIR Profiler has been recruited until end of March to map Patient resource for PMS/PARIS. Profiling to be completed by end of Q3.	On track	↑
Scan4Safety	Implementation in line with plan agreed Q4 2021/22	Progressing in Cardiology. "As Is" state agreed by service manager, "To Be" awaiting sign off beginning Q4. Stock Audit and catalogue for Cardiology inline with implementation end of Q4. Awaiting estates for room to be in a fit state for racking to be fitted. SSSU gearing up for pre-implementation works in Q4. SOPs being developed by NWSSP for All Wales and then use in CAV. Benefits plan needed from NWSSP beginning of Q4. Slight delay on timeline due to NWSSP resource challenges and estate work needed	On track	↑
Vein2Vein transfusion (all Wales)	Discovery work concludes and report for WG produced	Managed by the Blood Transfusion manager - production of an all Wales business case. No further reporting.	Closed	
PowerBI	Secure funding and resource to support decisions	Now subsumed into the EA work. No further reporting.	Reprogramme	
Use Your Own Device	AWD virtual desktop built and in test	AppProxy work complete. Virtual desktop is a discussion as part of the EA work. No further reporting.	Reprogramme	

IMTP DELIVERABLES SUMMARY: 2023/24							
Critical Deliverable	**Brief Description**	**Success Measures**	**Main Risks**	**Milestones**			
				Q1	**Q2**	**Q3**	**Q4**
Major infrastructure projects ESSENTIAL WORKS	• PMS Upgrade • Corporate WiFi upgrade • Paris server upgrade • Video Conferencing Infrastructure • Storage Infrastructure upgrade • DR Infrastructure upgrade • Firewall rationalisation programme	Solutions continue on supported hardware	Funding – CAV, WG Resource and capacity	Install and Configuration	Testing	Implementation and go Live	Future design work
Wales critical care information system NATIONAL PROGRAMME DHCW	Fully digitised CCU and PICU (Latter assumed) – national programme	Improve patient safety, financial efficiency, release time to care, paper free	Funding - CAV Implementation on time DHCW Resource and capacity	Procure relevant infrastructure to support implementation. Clinical UAT of application	Readiness for implementation – Go live July 2023	Support post implementation	Support post implementation
Welsh Nurse care Record NATIONAL PROGRAMME DHCW	• DHCW national solution to digitise nursing documentation • Fully digitised CCU and PICU (Latter assumed) – national programme	Improve patient safety, financial efficiency, release time to care, paper free	Corporate WiFi Funding - CAV Resource and capacity	UHB Wide implementation	UHB Wide implementation	Support post implementation	Support post implementation
UHW2 Digital SoC for SMART healthcare system	• Digital SoC to sit alongside the SOFCS & SOFHs SoC	Digital SoC that sets out how a smart estate and healthcare system can support and help deliver clinical transformation	Funding - WG Resource and capacity	Resource secured to produce SoC Research, Gathering intelligence & expertise	Data gathering and modelling	Drafting Working with a partner on options, decisions	SoC submitted to WG (may be Q1 2024)

IMTP DELIVERABLES SUMMARY: 2023/24							
Critical Deliverable	**Brief Description**	**Success Measures**	**Main Risks**	**Milestones**			
				Q1	**Q2**	**Q3**	**Q4**
Scan4Safety National (local) PROGRAMME NWSSP	Inventory and stock management system – national programme NWSSP	Less stock held, less stock waste, financial efficiency, safer care , release time to care	Funding – CAV, WG Resource and capacity - CAV NWSSP resourcing	Cardiology Live with Scan4Safety WIFI available in all upcoming go live areas Stock Audit and catalogue for SSSU complete SSSU ready for Go Live	Stock Audit and catalogue for Neuro and Radiology complete Neuroscience and Radiology ready for go live	Wards – commence gradual rollout Dental and Endoscopy ready for go live	Audiology and Catering/1estates ready for go live
ePMA National DMTP programme, local purchase and implementation	Electronic prescribing and medicine administration in hospital settings – Ministerial priority	Improve patient safety, financial efficiency, release time to care, paper free	Funding – WG Resource and capacity Major change initiative	Procurement complete, Contract awarded to provider, WG bid for hardware, software & implementation team	Build training resources, system configuration, Interfacing built & testing underway, drug file build, recruitment of implementation team	User testing Train pilot site, purchase hardware, recruitment of implementation team	Pilot and identify roll out plan
Common demographics store	• Common repository for uHB demographics fed by Acute and Community&Mental Health PAS systems also by Regional social care record solutions	Better for patients, safer for staff, building block for shared care records, improved IG	Funding Resource and capacity	Demographics Architecture documented and processes drafted	Demographic processes signed-off, and PoC system interface built.	Involvements and risk flags become shared between acute and non-acute.	Involvements and risk flags become visible to regionalcare partners.

IMTP DELIVERABLES SUMMARY: 2023/24							
Critical Deliverable	**Brief Description**	**Success Measures**	**Main Risks**	**Milestones**			
				Q1	**Q2**	**Q3**	**Q4**
PROMS Part of VBHC	• Patient reported outcome measures collected and analysed, used to deliver better value in health care • VBHC to set priorities	Better outcomes for patients, financial efficiency, service improvements, patterns & trends of patient healthcare activity to help inform future health board demands.	Remaining funded Disparity in PROM collection and recording	• Current out of box platforms migrated onto integrated pathway • Recruitment of PROMs project team • Phase 2 integration complete (triggers for changes in diagnosis / treatment) • Onboarding of at least 4 new clinical conditions onto integrated platform • CAV FHIR PROMs repository able to receive PROMs with local data standards • Plan in place to manage paper based PROMs and migration of existing data into CAV repository	• Phase 3 integration complete (Feedback loop between MCO/CAV) • Onboarding new clinical conditions onto integrated platform • Routine submission (frequency still TBC) of NPROMs data collected on MCO • Linking of PROMs data with other clinical data held within LDR • Initial VBHC focused analytics on PROMs data (services TBC) • NHS Wales App final design & development of MCO PROMs jump off button. (DSPP milestone)	• Integration of MCO to other clinical systems • Onboarding of new clinical conditions onto integrated platform • Development of Health Board BIS analytics & visuals. (Power BI) • CAV patients using NHS Wales App to complete PROMs	• Planning of spread to Primary Care and integration to their systems • Onboarding of new clinical conditions onto integrated platform • Plan in place to ensure CAV is compliant with all mandatory PROMs

Delivering Digital

Building a learning health and care system
A Five Year Strategy

Cardiff & Vale University Health Board

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

- Section One — Overview
- Section Two — Achieving the Vision
  - 2.1 — Achieving the Vision: Stuff
  - 2.2 — Achieving the Vision: Staff
  - 2.3 — Achieving the Vision: Adaptive Change
- Section Three — Delivery

1. Overview

Our vision,

Our Principles

Introduction

This digital strategy is being produced to provide a clear roadmap for how digital technology will enable the transformation of clinical services described by the Cardiff & Vale University Health Board overarching strategy, ‘Shaping Our Future Well-being’.

The ambition of the NHS in Wales has been set out in the Welsh government document a healthier Wales published in 2018, declaring the ambition for an integrated health and social care system which enables seamless care and the ability to promote health and well-being as close to home as possible. The document very clearly sets out the need for a modern digital infrastructure to enable this transformational change.

The strategy has been written after engagement with staff across the organisation, taking particular note of the attendees of the clinical information management and technology group, the clinical boards, the executive board and information available to us from patient feedback.
The strategy sets out a significant step change in the approach that Cardiff and Vale University health board will take towards a digital future for healthcare services.

Digital services should not be regarded as an end in themselves. The Parliamentary Review into Health and Social Care in Wales, informed by extensive public and service engagement, called for a transformation in the way we deliver services, and this has been accepted by the Welsh Government in the ‘A Healthier Wales’ strategy document. Both recognize that Digital services are a key enabler to transforming the way health and Care services are delivered in Wales, and in enabling patients to have greater involvement in managing their health and well-being.

CTRL-ALT-DEL

Digital as an enabler, not a blocker

Mohamed,Sarah
08/02/2023 16:36:00

Time to reset – Local driver

A staff engagement event (Amplify) in the summer of 2019 to review progress of Shaping Our Future Well-being at its halfway point of five years. A clear message at this event is that many people appreciated the great potential of digital technology to transform our services, but those same people felt that inability to deliver the technology itself and become a significant block to progress. A similar picture had emerged nationally, and in 2018 the Welsh audit office followed by the public accounts committee delivered to hard-hitting and critical reports into the failure of the health system in Wales to deliver at scale or that piece many of the elements set out in the national digital strategy, informed health and care.

Time to reset – National driver

In 2019 following those national reports, the Welsh government accepted the recommendations of an informatics architecture review, and also announced significant changes to the governance arrangements for the NHS Wales Informatics Service, and the relationship between and the Health Boards and Trusts responsible for delivering services. Importantly, Welsh Government has made available significant increase in funding levels specifically directed towards transformational change, with digital technology as its enabler.

The strategy described here is in line with the architecture review and maintains and updates the direction of travel set out in informed health care.

Our vision: A Learning Health and Care System

High Level Aims

- Digital First for patients and carers
- Digital First for staff.
- Seamless information sharing across professional and organisational boundaries.

Principles

- Co-production through user-centred design
- Digital as the enabler, not digital as a goal in itself
- Iterative, agile design
- Innovation aligned to startegy
- Democratise data, democratise knowledge

We are all used to using digital services in many areas of our life – banking, shopping, booking a table at a restaurant, leaving feedback about holiday accommodation etc. Health seems to be lagging compared to all other areas. This is a global phenomenon, and not unique to Wales. Health care is acknowledged by information technology experts to be especially complex, with information having to be shared over a large number of organisational boundaries, and tracking many different types of user-experiences through time. And yet it is possible to deliver and track those services digitally. The Baltic country of Estonia adopted a 'digital first' philosophy for its public services, including health, several years ago, and is held up as an international example of what can be achieved.

Closer to home, the UK Government Digital Services has revolutionised the way in which we can now use digital solutions to perform many functions which required extensive paperwork and trips to the post office or other government buildings – renewing a driving license or passport, completing a tax return or applying for state benefits for example.

We set out to adopt a similar 'digital first' philosophy for Cardiff and Vale University Health Board, enabling users and staff to use digital technology to access services.

A Learning Health and Care System

By collecting timely, accurate data, we will understand how our system works. We will be able to follow patients through care pathways, learning how we can make them more efficient, and ensuring their journeys are safe. The ability to collect and record patient outcomes means that we can compare ourselves to other organisations to ensure we are providing good quality outcomes.
By collecting patient reported outcomes we will see what works, and what doesn't work. This enables us to put Value Based Healthcare into practice.

D2K	K2P	P2D
• By analysing the data we collect it turns into information and knowledge. We can only change and improve our system if we understand it.	• We must then use the understanding we gain to inform , improve and transform practice. This is the most important step, and the hardest to achieve.	• To collect our data, we will need to enable clinicians and patients to record their activities digitally without interfering with the processes of care. Data must be collected and used in 'real-time' to maximise its usefulness in operational as well as planning services

In 5 years

Patients will have much more control over how and when they access services, and will be able to access more closer to home

Patients

- Patients will access their own health and care records, reports, and results.
- They will be able to see who else has accessed their information. They will be able to view appointments and re-schedule them via digital channels. They will be able to communicate securely with clinicians providing their care. They will have access to supporting health and care information designed tailored for their needs. They will have the power to share their information with anyone they wish to. They will be able to upload information from wearable devices, or care devices which are part of the 'Internet of Things'.

Clinicians

- Clinicians will access information about individual patients
- They will be able to communicate securely with other members of their clinical team, and in multi-disciplinary teams. They will be able to communicate securely with individual patients and will in many cases be supporting patient care in 'virtual' clinics using video communication technology familiar in other walks of life. securely and reliably via digital channels, which will include their own devices.

Local/National Data Resource

- The data collected will be used to build the foundation for a Learning Health and Care System
- Timely, high quality data on patient outcomes is used to enable the service to understand what works well, and what needs to be improved. Teams of trained data analysts will work closely with clinicians and service planners to derive knowledge from data. The focus will have moved further towards outcomes rather than the more traditional process measures.

Our promise

- Patients will be able to choose which information to share, and which they do not wish to share.
- Information will be visible across Wales, and across previous boundaries between primary and secondary care, health and social care, and public and third sector. Appropriate safeguards will ensure personal identifiable data is not shared where it should not be, or where patients have requested it should not be, but the default expectation will be that information will be shared to enable safe continuity of care seamlessly across the system.

Guiding Principles

A system built on data, delivered with care

Persistence and re-use of data

- Whenever digital information is collected, it will be stored in a form that enables it to be re-used by other appropriate applications. For example, if a patient has had an allergy recorded in a hospital clinic, that information will then be updated and re-used by another application used by a pharmacist, GP or other care provider. This will greatly enhance efficiency and safety.

Co-production through user-centered design

- The introduction of a digital process requires and understanding of what it means to the service users – both patients and clinicians. When introducing new digital solutions, patients and clinicians will therefore be involved in deciding what it should look like, where it fits in to their view of the service, and what benefits it might bring.

Digital as the enabler, not digital as a goal in itself

- Simply digitising a process seldom brings any benefits. It should instead provide an opportunity to review and change the care process, which will have been established around paper-based processes.

Iterative, agile design

- It is tempting to try and do everything at once, and to sponsor large-scale centrally controlled projects to achieve this. The so-called 'waterfall' approach does not generally work in digital health care. By the time the required governance and procurement cycles have been worked through, the digital landscape has often changed, and the solution acquired (and committed to) has been superseded. Instead, it is better to break projects down into smaller chunks using small, focused teams working in 'sprints' to achieve digital solutions which will be 'good enough' (although safe) rather than perfect initially, but which will then be changed in response to user-feedback in an iterative manner.

Innovation aligned to strategy

- CAV will continue to foster and encourage innovation, but will ensure that it is aligned with the digital strategy, and that any digital elements of innovation projects fit in with the digital architecture, and are capable of being scaled-up if they prove successful.

Democratise data, democratize knowledge

- The data collected by the organisation will produce large pools of 'big data' which is the foundation for the learning health system. With appropriate safeguards, this data will be made available to clinicians, managers and analysts across the organization. There are myriad ways of using, visualizing and interpreting data, and even in 5 years we will still only be beginning to understand how to do this. We need therefore to permit multiple stakeholders to innovate in making use of this data and turning it into knowledge. We will not constrain ourselves by assuming there is only one way of interpreting data – there are many mays to the truth!

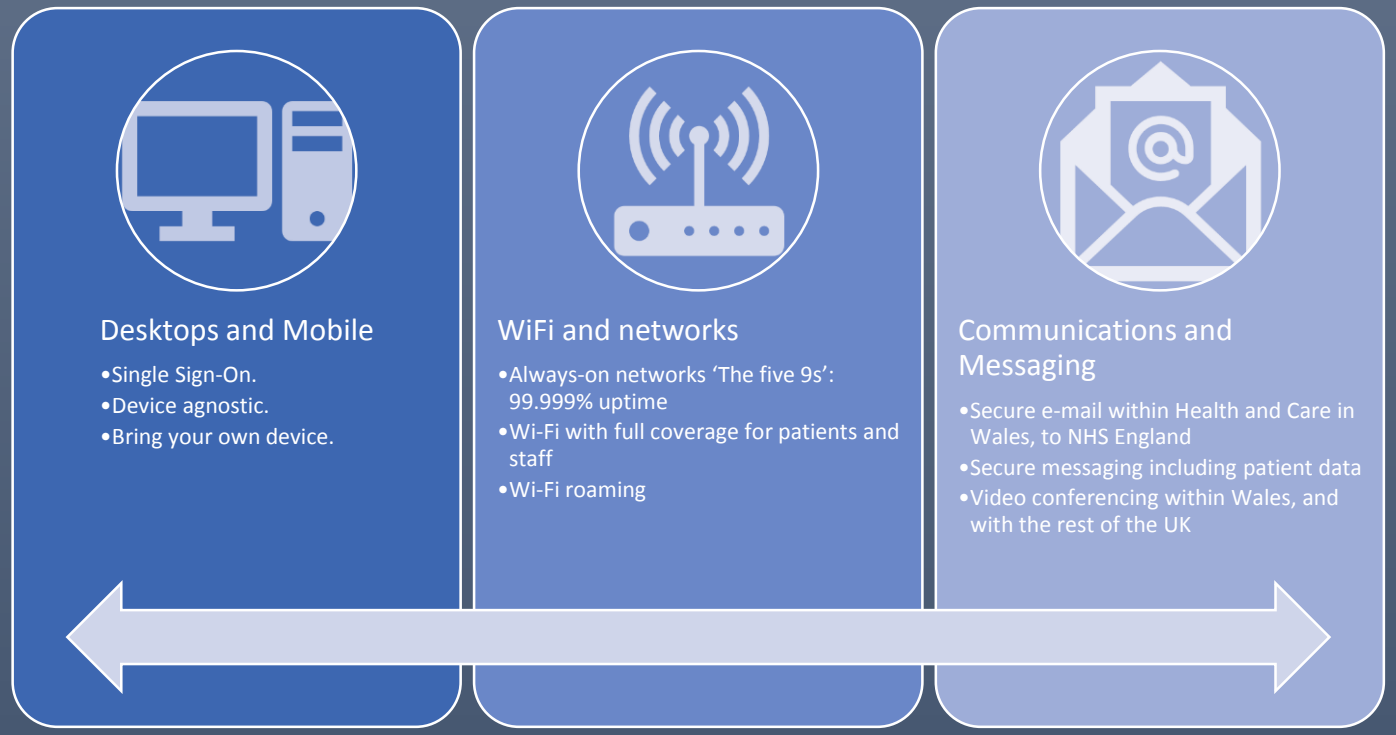
2. Achieving the Vision

Stuff, Staff, Adaptive Change

TWO: Achieving the Vision

Stuff

Infrastructure



Without the basics, nothing else will be possible.

Before going further in this document, the importance of adequate infrastructure has to be highlighted. Without up to date devices, networks and wi-fi, any attempts to digitise the future will fail. We operate, and will always operate, in a resource limited environment. In those circumstances it is often tempting to cut costs in the less visible foundations of our services, and this has included technical equipment, associated staff and cybersecurity. This was recognised in the Welsh Audit Office review of Health Informatics in organisations across Wales in 2018. We recognise that failing to invest in and maintain infrastructure is ultimately counter-productive. It weakens the foundations of our digital system, and without these foundations no sustainable developments can take place. We will have to accept that much of the initial investment in our digital future will be used to address the under-investment of the past. Once that balance is restored, it can't be allowed to slip again.

Information Governance

This section provides a summary of the approach we wish to take to information governance.

Collecting health and care data on patients and service users requires then to trust our organisation to look after their data carefully, ensuring that only those who need to see the data access it, and that we safeguard it against inappropriate access or inappropriate sharing.

Legislation requiring us to do this in terms of common law duty of confidentiality and the general data protection regulation as well as the computer misuse act as an important safeguard for the public's trust. If we preach these rules we lose the trust of the public, and we will therefore not be able to use the information they share with us to benefit then and the system as a whole.

It is also important that data provided to us by clinicians is shared appropriately. Most patients think that we readily share information between clinicians, teams and other carers involved in providing services, and are often surprised if the discover this is not the case. In the past there has been a tendency to take a very restrictive approach when interpreting data protection legislation.

We need to take note of the general data protection regulation intention which is to enable information to be shared much more easily when it is appropriate to do so, but to give patients and carers the ability to control this without interfering with the processes of care. We are seeking to strengthen our information governance processes, and to ensure that important organisation level decisions about information sharing are taken in a proportionately taking into account both the clinical risks and their information governance risks, and involving legal and patient informed processes.

The working in this section to be modified by James, and also have a section about relationship with research.

Digital Inclusion

Digital Inclusion is a social determinant of health

Like other inequalities, this means we need to ensure we take steps to address this imbalance so everyone in our community can take advantage of the digital future, and nobody is left disadvantaged
We will adopt the recommendations of the Gann report: 'Digital Inclusion in Health and Care in Wales'.

The Inverse Care Law applies to digital inclusion as it does to other aspects of healthcare. Sections of the population most in need of improved access to health care are also those less likely to be 'digitally included'.

85% of people in Wales use the internet – that means 15% do not.

Mainstream Digital Inclusion	Digital inclusion needs to move from the margins to the mainstream. The Gann report describes how local authorities have been more effective in digital inclusion than health care organisations. We will work with local authority partners to develop a more detailed and a more robust strategic approach to digital inclusion.
Use levers and Enablers	We will ensure that Wi-Fi is available freely across our health and care settings for patients and carers to use. We will invest in the Digital health literacy of our health and care staff to help ensure digital adoption by patients and service users., and frontline staff will be supported to become digital champions for their patients.
Scale Up Inclusion	We will sign up to the Digital Inclusion Charter. Without digital inclusion, the potential benefits of the patient channel work will not be realised. We need to learn from existing initiatives like Digital Communities Wales so we can ensure vulnerable people are not excluded from the benefits of digital.
Improve our knowledge	We will use the framework and tools available in the NHS Digital Inclusion Toolkit, and adopt any similar initiative that is developed in Wales. Even with digital skills and access to technology, people will not use digital health tools if they are not accessible and meaningful to them. Our promotion of user-centred design of all digital health products will include people who are less experienced digital users.

Internet use in Wales

People with a long-standing illness or disability	74%
Without disability	90%
Age 65-74	72%
Age 16 – 49	97%

2a. Achieving the Vision

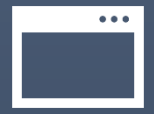
Stuff

How we will build the digital vision

The Digital Architecture:
understanding the lingo

Data repository
At the heart of any informatics or digital system is data stored on a computer hard drive, or where there is a lot of data, an array of hard drives (called a server).
Ories. The data held in these drives is usually organised in the form of a database or a collection of databases into which data can be added, removed, rearranged and analysed, either by programmes within the database or separate computer programmes.

Applications
The interface on the computer or mobile device which puts data into these databases or allows the data to be viewed are often called applications.
These applications are sometimes associated with programmes that manipulate the data in the ways described above, but increasingly such programming takes place ‘server side’ making the applications much simpler, and enabling easier ‘plug and play’ potential.
When used on mobile devices, these are usually referred to as ‘apps’.



Application Programme Interfaces (APIs)
These are, in effect, the connections or plugs which allow an application to interact with the data repositories and associated programmes.

Systems
Where a series of databases and applications exist for a particular ‘business domain’, for example pathology laboratories, the collection is referred to as a ‘system’. Each of these individual systems can either be acquired individually in a modular fashion, or as part of a large mega suite of many systems.

The Digital Architecture

Option One: the status quo

Once for Wales: modular ‘systems’

An enterprise architecture can be built up gradually, using the best available versions for particular business domains. The disadvantage of this ‘best of breed’ strategy is that the systems are often, in effect written in different languages, and in order to communicate with other systems, translation is required. In the digital world this is referred to as ‘interoperability’. This is complicated by the fact that many of the health organisations in Wales already had some modular systems of their own.

Cardiff and Vale have many dozens of information silos or information systems which have evolved over the years. In order to derive the full benefit of all this data, all of the systems which share information, but this would require very complex and labour-intensive translation. In fact, this requirement is so complex that experts question whether achieving interoperability for a health enterprise architecture in this way is even achievable.

This is broadly the approach that has been taken over the last few years in NHS Wales. This approach sought to either self-build or procure modular ‘systems’ to be implemented, usually as large national level projects rolled out across health boards in a staged fashion. These projects were centrally controlled and co-ordinated, but beset by delays, hampered by differing informatics architecture in different health boards and trusts, differing levels of digital maturity, and differing opinions as to the suitability and need for a given system in each organisation. Local organisations were unable to develop at their own pace, and to address their local priorities, but instead were constrained by a slower, less agile national approach. The Welsh Audit Office and Public Accounts Committee reviews of 2018 were critical of this way of working, and called for change. The architecture review commissioned by Welsh Government and published in 2019 calls for an end to this approach.

One positive benefit of the national level approach has been the ability to share information across health board boundaries, and is the envy of some of our neighbours.

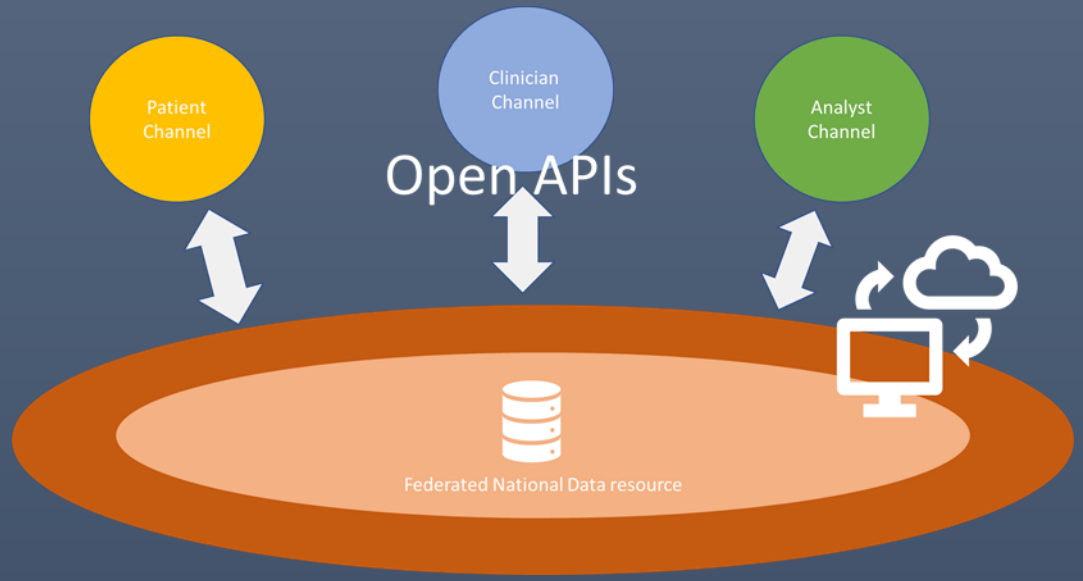
Option Two: Megasuite

Cerner, Epic, System C…

The second approach described is where a large provider has suite of systems written effectively in the same language and able to communicate with each other, providing digital part for several business domains, such as an electronic health record, electronic prescribing and decision support, and a laboratory system. The disadvantage of this approach is that such systems are very expensive, and even at best the provide less than 50% of the digital components for a typical healthcare organisation. Furthermore, these implementations, which are often called platforms, will generally only communicate with platforms created by the same provider. Thus if you are neighbouring health or care organisation uses a platform from a different provider you will not easily be able to share information, and it takes the service back to the interoperability problem. These can be considered closed platforms. This is an increasing problem for healthcare systems who have implemented mega suites.

This is the approach that has been taken over the past few years in NHS England where mega suite implementations using suppliers such as Cerner, Epic and Lorenzo have been implemented in the most digitally mature organisations (i.e. those with the infrastructure to support them), so called Global Digital Exemplar organisations and latterly, Fast Followers.

The Digital Architecture
Option three: Open Platform



Open, but not uncontrolled
Health data includes sensitive personally identifiable information. It is important to be clear that what is meant by 'open APIs' is that the configuration of these virtual plugs is made available only to developers of products who are trusted to hold such data by satisfying strict Information Governance requirements, and stringent Cyber-security standards. The APIs being 'Open' means that if they have achieved this status, they can design their solutions consistently with APIs made available to them, which increases the speed at which solutions can be developed.

What is an Open Platform?
The approach advocated by the architecture review is based upon the concept of an open platform. In this central collection of data is maintained according to a set of strict information and technical standards. This is particularly important because by ensuring that everything is recorded and described in the same way, and stored in the same format, the information can be retrieved and used reliably without the interoperability problems discussed above.

Mandated standards
The information platform can be imagined to be surrounded by a series of interfaces or virtual plugs the application program interfaces (APIs). These enable applications to contribute, view and analyse data in the way described above in applications integrated with other systems. However, the applications in this model are not specific to a particular system, but rather conform to the data and technical standards of the platform. This makes the process of introducing new applications when they emerge, and replacing old ones when they are superseded much easier.

Encourage innovation
By making the APIs open to trusted organisations and trusted suppliers, they can develop applications much more quickly and easily to the benefit of the service. This enables a flexible and agile approach for how our organisation and others in Wales collect, view and analyse patient information. The APIs can be designed to communicate with devices such as fitness trackers, heart rate monitors, medication pumps et cetera so that data can be provided in real-time without the need for staff for patients to input anything themselves. Much of the growth in the wider Digital Economy has occurred because suppliers have made their APIs 'open'.

The 'Single' Electronic Health and Care Record
The data collected on this platform can be used to inform individual patient care, as each element of data is identified as belonging to a unique patient, in this way you can see that the concept of a single electronic health record becomes difficult to visualise, because over time so much information and data could be gathered not just from individual interactions in clinic or hospital admissions in the way that traditional hospital wards are, but including information recorded on monitoring devices as described above. The single electronic health record actually becomes an enormous collection of data which can be visualised in a number of different ways according to the application suitable for the purpose at hand.

Clinician Channel

The ‘Electronic Health Record’

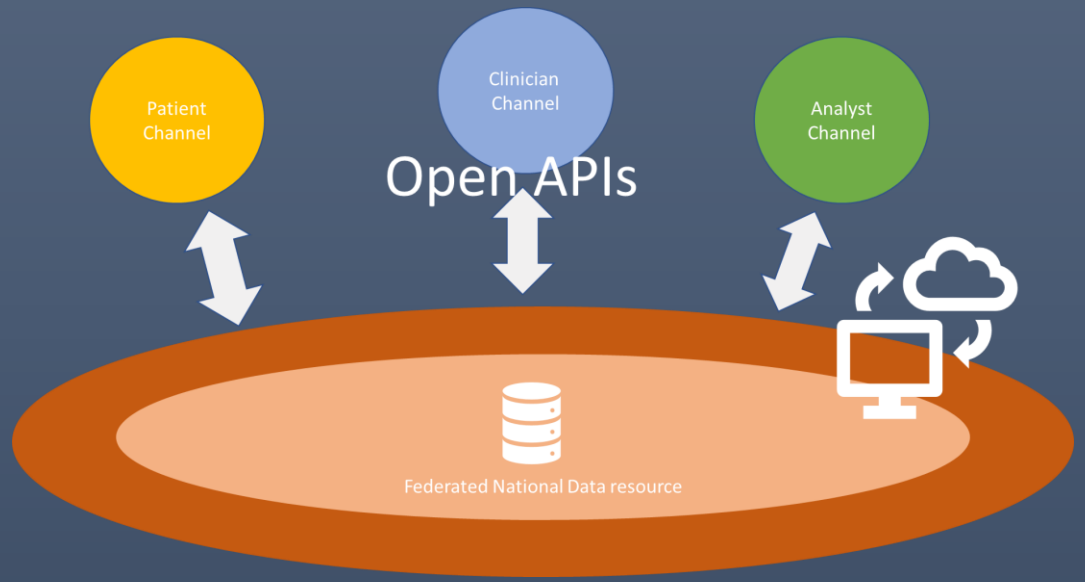
Applications used by clinicians to view results and reports, record clinical interactions and procedures, view images, prescribe medications, communicate with other clinicians.

Patient Channel

The ‘Personal Health Record’

Applications used by patients to book appointments, view results and reports, record outcomes, communicate with clinicians.

In effect, this creates a personal health and care record. Patients may upload information in symptom diaries, data from wearable health and fitness devices, and may choose to share some or all of this with clinicians providing their care.



Analyst Channel

Data to Knowledge

The applications which can intersact with data at various levels of aggregation from individual to population level which enable data to be turned into knowledge to understand, learn from and re-design the system.

Data Resource

Persistent and re-usable data

This is the pool of data held in accordance with strict information and technical standards so that it can be understood by and interact with applications via APIs . It is supported by an infrastructure that ensures its security.

It’s physical location. The resource will actually comprise several ‘local’ data resources created by Health Boards and Trusts together with some nationally hosted resources – a so-called federated model. Although physically disparate, they exist in a single ‘cloud’ architecture.

Bear in mind that these ‘Channels’ are a conceptual representation to help understand how things fit together. In reality, many applications will overlap in terms of the users.

Once for Wales?

Alignment to National Strategy

One of the reasons highlighted in the Welsh Audit Office report of 2018 as leading to a lack of pace and scale in digital implementation in the Welsh health service relates to numerous attempts to ensure our Once for Wales approach to large systems.

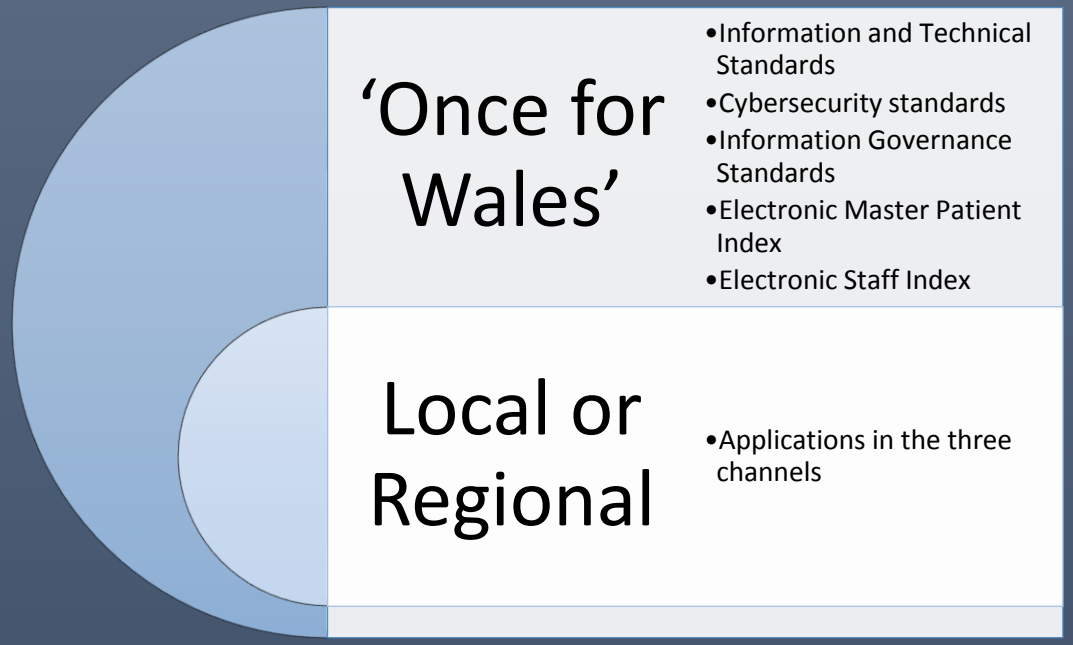
Lessons from abroad, lessons from home

It was clearly very attractive to think that for particular business domains one system across the country could be implemented very easily and with rapid agreement. This approach has been demonstrated in health systems across the world to be very difficult or impossible to achieve. The reality is that all organisations are at a different point in their digital journeys, and some have good systems for one business domain, and pure systems for another, but these won't necessarily correspond to those of the neighbours. The open platform approach requires that everyone agrees to provide information using the same standards and using the same technical organisation structure for the data, but leaves organisations free to source their own applications in a forum and at a time that suits them, and doesn't interfere with the operation of any other organisation.

Cultivate collaboration, mandate sparingly

Of course it may be the case that because applications become smaller and easier to design using open APIs, it may be easier to reach a national agreement to use a particular application for a particular business domain where there is a shared need and shared opinions, but importantly it need not be a mandatory requirement. Collaboration is probably more likely to occur as these applications, and the markets around them evolve in the next few years, but while that process is taking place it makes more sense to allow some flexibility at local and regional level.

Because of the importance that information in the platform is effectively written in the same language as explained previously, then it becomes very important that organisations agree to adhere to the information standards and the technical standards describing how that information is organised. It therefore means that once for Wales means the platform in the middle, but doesn't necessarily mean the applications around the outside.

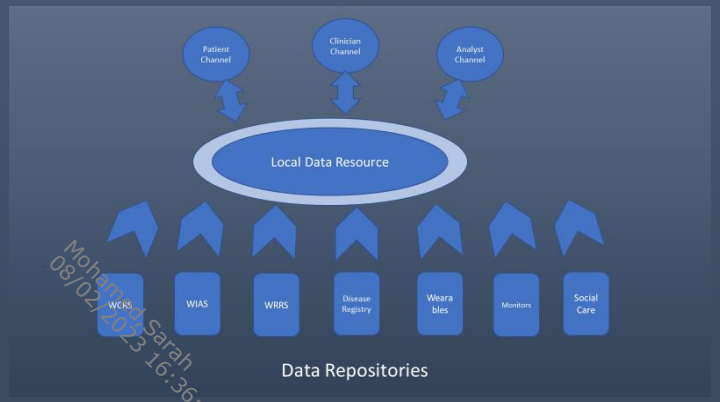


Working with our neighbours

Some of the elements required to build a Digital First approach may be more efficiently achieved by collaborating with our regional neighbours in Aneurin Bevan Health Board, Velindre NHS Trust and Cwm Taf University Health Board.

We will seek to build close working relationships around shared infrastructure, and seek to share learning with these organisations.

Local and National Data Resource



Building a Local Data Resource

Legacy data

In order to build a useful local data resource, which will in turn become part of the national data resource we need to make data we currently hold in individual data repositories available. This is not a simple matter of 'emptying' data into a new set of databases, unfortunately. The data needs to be 'translated' into a form that makes it available in a standardised format. This is called making the data 'interoperable'. This makes the data available to applications in the three channels referred to earlier.

The widely adopted standard for interoperability across health systems is called Fast Healthcare Interoperability Resource (FHIR) – pronounced 'fire'.

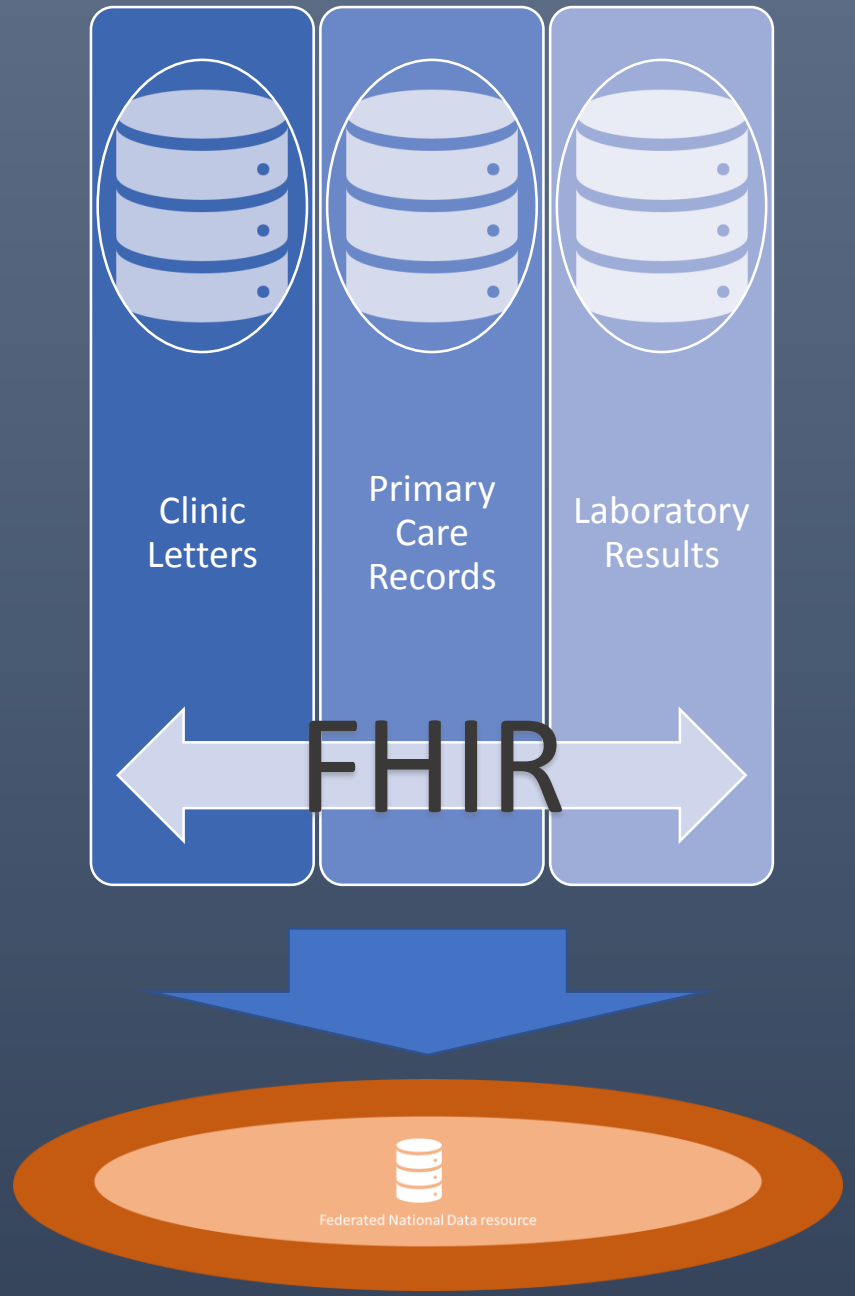
We will need to procure FHIR servers to store this data, and undertake work to convert legacy data into this format. This data varies from large stores of clinic letters, to smaller disease registers and bespoke team-specific databases.

New data

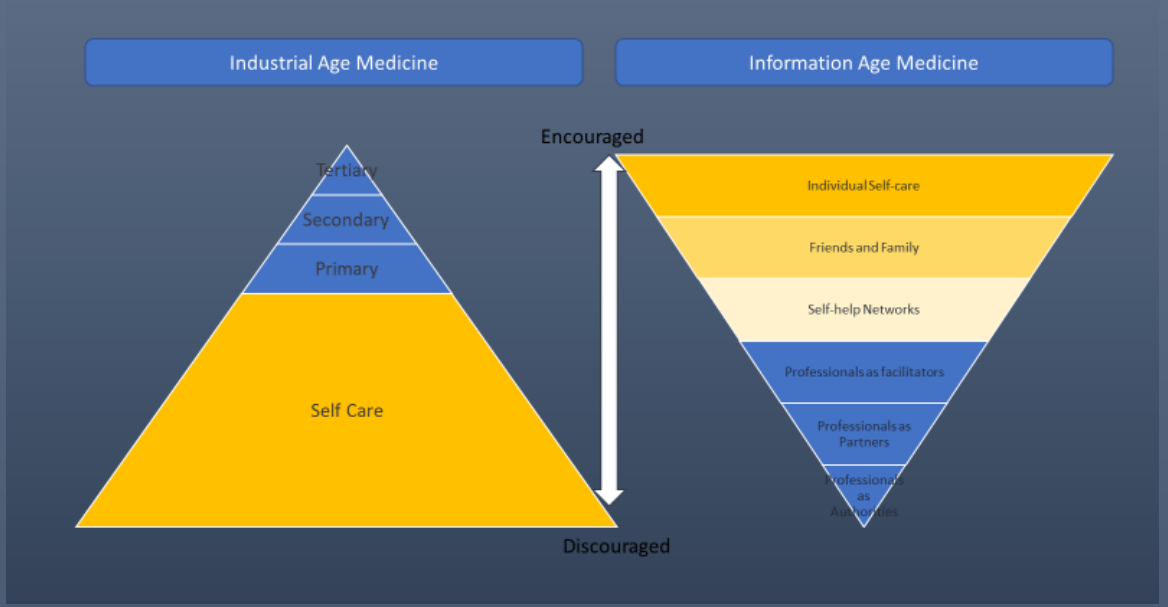
The disjointed silos of information we now seek to harmonise must be avoided in the future. Our strategy will be to avoid the creation of any information silos, and instead require that the data is FHIR compliant, and this will be essential for any third-party suppliers to comply with.

Open EHR

We will also look more favourably on products that use the Open Electronic Health Record structure. Using this approach, the data is effectively placed straight into the data resource without the need for translation.



Patient Channel



Giving patients control

A famous diagram represented on this page shows Tom Ferguson's inverted triangles model when he forecast the likely effect of technological advances on patients' expectations of care.

This is entirely aligned to Prudent Health Care principles, and the strategy described in A Healthier Wales of enabling care closer to home, and providing support for patient's to maximise their well-being.

By allowing patients the ability to control their own journeys through healthcare, they benefit, and the whole system benefits. We can start to re-shape outpatient services such that patients are seen only when they need to be seen, and enabling interactions to take place remotely using video communication.

What will patients be able to do?

We want to allow patients to access test results without needing to come to clinic or to phone a service desk. We want them to be able to book and change appointments, record their outcomes (Patient Recorded Outcome Measures) and experiences (Patient Recorded Experience Measures).

They will be able to give access to carers or relatives, as they wish, and to be able to see who has access to their data.

There will be some information which it is inappropriate to share online, and where it may be harmful to see results without a face to face explanation, they can still be hidden, so the applications we use will need to allow some control of sharing from the clinician's as well as the patient's side.

National Patient Portal

We will collaborate with the national Patient Portal programme, which will provide a single secure portal which authenticates a patient's identity, and then allows access to various applications providing some of the functions mentioned. There will be more which evolve in future, and we will want to enable flexibility in enabling many applications to address functions which serve patient care as they become available.

But we don't have to wait until the portal is developed – we can go ahead and start to use some available applications in the meantime, using the principles described for the open platform approach.

Clinician Channel

Electronic Patient Record for Secondary Care
Community Care Record
Mental Health Care Record
Social Prescribing
Patient observations
Electronic prescribing

Viewing data

Clinicians must be able to see comprehensive information to inform the best care decisions for their patients. This will include information from their GP and community services, different secondary care settings, social care and third sector organisations. Many of our services are provided across a regional or National footprint, so the information must be visible across health board boundaries. 30% of our organisation work in the community, and it is vital that they can access this information via mobile devices. We know that increasingly our challenges relate to patients with multiple conditions, and in this group, care information is created in a large numbers of different settings.

Many patients would expect that we already allow information to flow seamlessly across these boundaries, and it is starting to. By putting our information onto one platform based on a Local and National Data Resource we can achieve this for everything.

We are already good at sharing clinical information, including laboratory results, clinical letters and reports and radiology images across health boards. We share images across primary care to secondary in Dermatology, and images of eye-conditions taken by local optometry services with secondary care ophthalmology services, but these are still pockets of digitally-enabled care rather than mainstream. We need to ensure that where such initiatives have proven successful, they will be scaled-up. This will be helped by improving our business change processes to ensure appropriate evaluation of project success, and also by describing scale up plans (and resource) in development cases.

Clinician Channel

The importance of coding

Making sure that information is recorded in a consistent way, and that each data item's meaning is interpreted correctly across applications, we need to fully implement the SNOMED-CT system. This stands for Systematised Nomenclature of Medical and Clinical Terms, and is the international standard, and has been formally adopted by the NHS in all Home Nations. Any systems we implement to act as data entry points to the Local and National Data Resource will need to have SNOMED-CT capabilities, and we will be working with local projects and with NWIS to enable this. Clinicians using the system will be able to pick from bespoke lists of commonly used terms to speed up data entry. The advantage of SNOMED-CT comes when data is aggregated, and clinicians want to understand features of patients with the same diagnosis, groups of diagnoses, particular procedures etc. It's hierarchical and conceptual nature will revolutionise how individual clinical team members can start to do their own exploration work for their patient groups, and it will greatly improve how the system can learn. For a better explanation of some of the detail see the NHS Digital website. For a simple animated explanation try this from NWIS

Entering data

Although we are getting better at sharing data across boundaries, that data is often not 'rich'. Much of our clinical information is held in the forms of clinical letters and discharge summaries. The information contained in these 'flat files' is not available to a computer to use – it needs to be read by a human being. All a computer can see is a document title, and some other coded information attached to it as 'metadata'. Our Patient Management System (PMS) records some information in a coded way where each item of data can be 'computed'. This is only a fraction of the clinically meaningful data we should be collecting, and in fact most of it is demographic content and a description of 'episodes' (admission, discharge, new clinic visit etc.). We Also know that even this small amount of data is not always correctly 'coded', and provided in a form that computers can do useful tasks with it, and we know that a lot of this coded information is incorrect. This, in turn makes information derived from it inaccurate or misleading.

We need to collect much richer data, we need it to be more accurate. We can do so by using a 'virtuous circle' effect of making data more visible. By improving the detail in information we 'code' (i.e. put into computable form), we will need to ensure it is entered in 'real-time, not as a bulk exercise from memory at a later time. This requires much more readily available devices to enter the data – but that also makes it easier to see pre-existing data. Because we will be using a platform around the national data resource, information which already exists (demographics, medicines, allergies, advanced care plans, problem lists), fields in data entry applications can be ready-populated making the update process more efficient. The process of real-time data entry will make the data more accurate.

Aggregated information will be available to clinical teams, and because this information is timely, any inaccuracies can be corrected quickly, and the data become useful. Much time currently is spent trying to derive information from data that we know is unreliable – over the period of this strategy, the quality of data will be driven up, its usefulness will be driven up, and the conversation will move away from disputing the data's accuracy, and onto converting what the data says into knowledge.

Clinician Channel

The electronic patient record (EPR)

For most of our clinical users in secondary care, a big gap in our digital capability is the ‘front end’ for putting this coded information into the LDR/CDR. We have some ability to put information in via either Welsh Clinical Portal and CAV portal, and some bespoke systems which input particular clinical-service information, often as part of a disease registry. In Mental Health and Community services we do have better functionality using PARIS, and we will evolve to contribute information collected in this way into a Welsh Community Care Information System (WCCIS).

Our strategy will be to develop a single entry portal where clinical information can be entered via any device from any location, but behind this portal the user will have the ability to access the information most important to them for a particular type of clinical interaction. This will involve a library of applications bespoke to particular user-requirements, but for the clinical user it will simply appear as one single interface, and will avoid the need to log in to multiple ‘systems’. This may or may not be Welsh Clinical Portal. The Architecture review requires that some work is done to ‘re-platform’ WCP to enable they type of arrangement just described, but it would also enable the use of another portal providing exactly the same functionality, giving us a choice as an organisation to adopt the interface our users prefer.

We are already starting to develop such a ‘front-end’ EPR for use in outpatients, currently called COM-2. It uses SNOMED-CT, and provides and retrieves data stored in the appropriate standards for the LDR/NDR.

Further into the future

This is a very rapidly evolving area. We know from health care systems that have had long-standing EPRs that the clinical users are not always in love with them. There is a feeling that the computer can start to come between the clinician and the patient. In the USA, hospitals have begun to employ teams of ‘medical scribes’ who record and enter information on behalf of clinicians who are better able to converse and make eye-contact with their patients rather than their computer screens. This is not a viable long term solution, but another emerging digital technology is. Natural Language Processing (NLP) is a use of machine learning/artificial intelligence algorithms which can ‘listen’ to a conversation and ‘understand’ what is being discussed, and what the outcomes are. If the current pace of evolution continues, then NLP may become our data entry assistants. We will continue to watch this space.

Analyst Channel

1. The learning health system
2. Outcomes over process
3. Analysts and data science working closely with clinicians
4. A ‘learning’ environment
5. Partnership with Universities and Industry

in this section talk about the fact that data is the most important way in which would be able to understand the services that we provide, whether being provided well whether the being provided in a timely fashion and whether the outcomes of good. The conversation here about how we make business systems visible to all clinicians across the organisation and there is a conversation about how we maximise the benefit of modern business informatics systems to generally automatic reports as well as self-service stuff

We also need to have a discussion in this section about the fact that telling the data into information is extremely important, but is quite difficult. That involves four relatively basic data good visualisation and an ability to have informed conversation with clinical users who actually unable to interpret what might be going on to explain some of the patterns described in the information.
Beyond this we need to make point that artificial intelligence requires data as its fuel and its only with this data resource that will be able to fully benefit from a high as it evolves.

WE NEED TO TALK ABOUT AI
This will be a short section emphasizing that AI is something to embrace, not fear.
Sometimes we are already using it because applications may be engineered using AI or Machine Learning.
The substrate for AI that we want to develop ourselves and with partners is good quality data held in a computable format. That is largely only available for images currently – we need to move to a world where it can be true of other clinical information recorded during care episodes.

Turning data into knowledge

$y = f(x)$

Data doesn't turn into knowledge by magic. It is a process. It starts with good quality data, and requires people with different skill sets to visualise and explore patterns in the data. Features of interest may then be studied, and statistical learning techniques applied to this data to turn it into knowledge, and enable a deeper understanding of what happens to our patients, and of the services we offer. This requires clinicians working closely on a data to day basis with data analysts.

At it's most advanced level, the so-called 'statistical learning techniques' include machine learning, deep learning and artificial intelligence.

Currently we do visualisation, but then tend to jump straight to the end of the process, assuming we have understood the data and turned it into knowledge. For example, we look at historical activity data and extrapolate it to 'forecast' the future. This has utility, but is only scratching the surface of what we could do.

Quality 'real time' data

- An electronic health and care record
- Structured data
- Local and National Data Resource

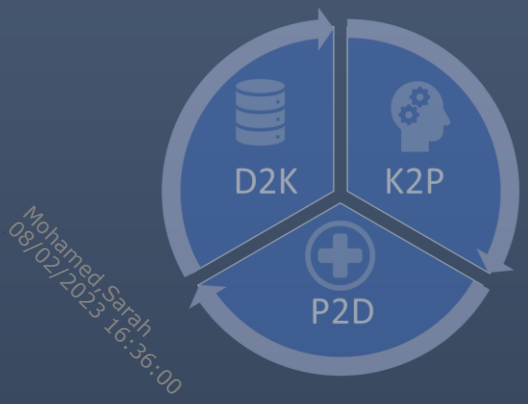
Analytic capability and capacity

- Analysts
- Clinicians to work with analysts
- University partners
- Industry partners

2b. Achieving the Vision

Staff

Who will build the Digital Future?



Wachter principles

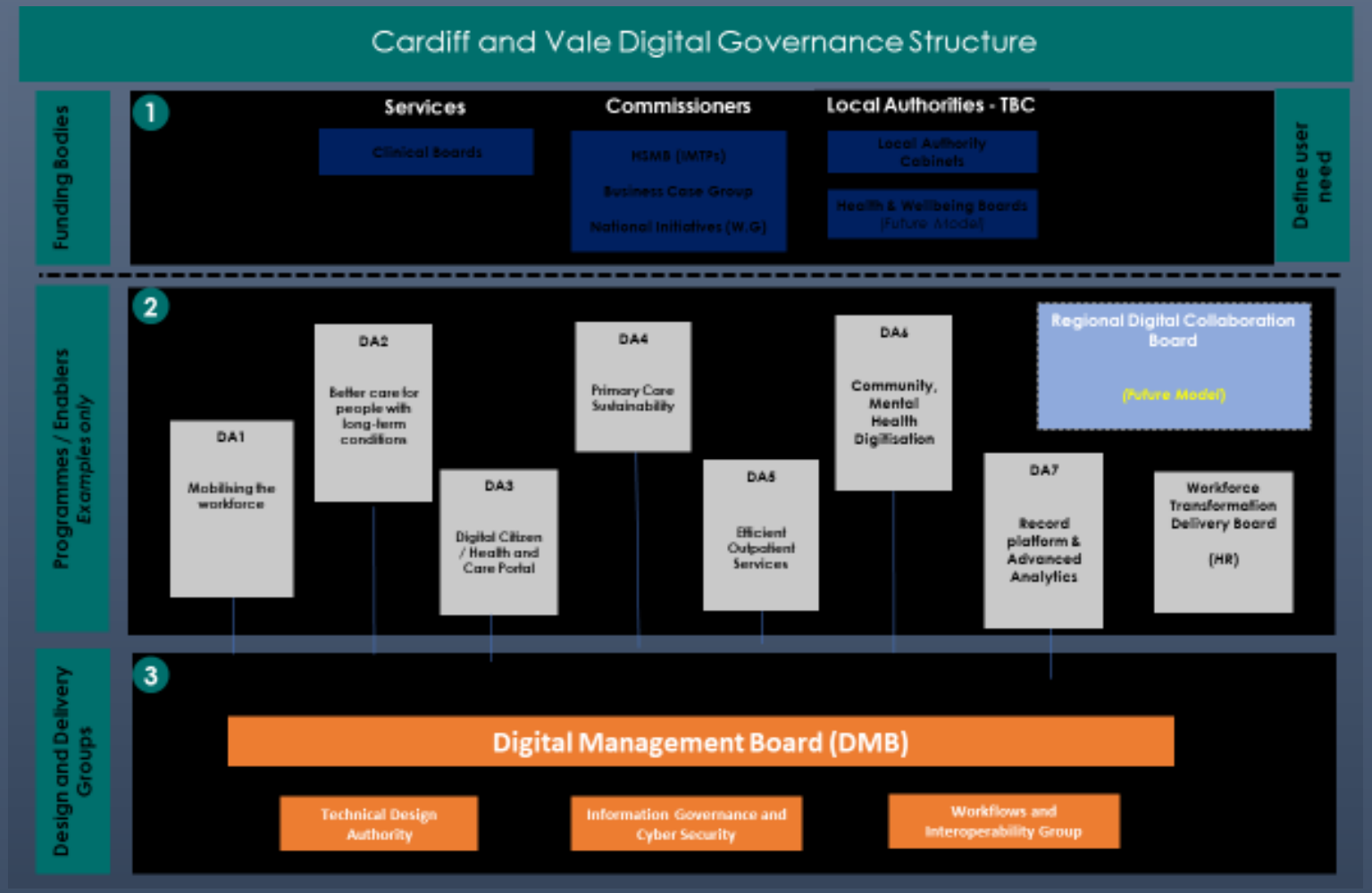
It’s about the people, stupid

Dr Robert Wachter’s seminal report into the failure of NPfIT in England established ten basic principles to learn from. We recognise that these lessons are not unique to England, but are generic, and apply to Health and Social Care digitalisation in Wales as elsewhere.

The overarching message from this report is the essential need for clinical engagement in the process of digital transformation.

Digitise for the Correct Reasons.	•Don’t digitise for the sake of it – digitise to re-imagine how things can be done
It is Better to Get Digitisation Right Than to Do it Quickly	•Balance the immediate operational drivers with the overall strategic aim.
Return on Investment from Digitisation Is Not Just Financial	•There is a productivity paradox. It will take time to bed-in, it will take to transform – be patient, and evaluate against more than the bottom line
Balance appropriately between local/ regional control and engagement versus centralisation.	•Standardise the central architecture, but allow organisations and teams to innovate and set their own pace and prioirities
Interoperability Should be Built in from the Start	•Today’s solution is tomorrow’s legacy. We know that our information systems need to speak the same language, so don’t make life difficult for those who will inherit what we create.
While Privacy is Very Important, So Too is Data Sharing	•Information Governance Legislation (GDPR) has been introduced to encourage sharing of data safely and securely, not hinder it. Patients expect us to share their information to enable seamless, safe, efficient care.
Health IT Systems Must Embrace User-Centered Design	•Start from the patient’s perspective, and involve patients in re-designing systems.
Going Live With a Health IT System is the Beginning, Not the End.	•This is probably the most common mistake, and the biggest contributor to failed digital implementations. Digital solutions only work when people understand them, can use them, and know what they can enable – and that involves time and effort.
A Successful Digital Strategy Must be Multifaceted, and Requires Workforce Development	•If we want our users to benefit from digital solutions, our staff have to be enabled to use them. If we want to build a Learning Health System, we need to train and retain staff to analyse and derive knowledge from the data we collect.
Health IT Entails Both Technical and Adaptive Change	•Health and care systems are complex. Technical fixes alone cannot solve their problems. Staff and users must be able to transform the way they interact with services to achieve the quadruple aim of health and care. Clinical engagement is the key.

Governance



The diagram here illustrates one potential model for a governance structure to implement our strategy.

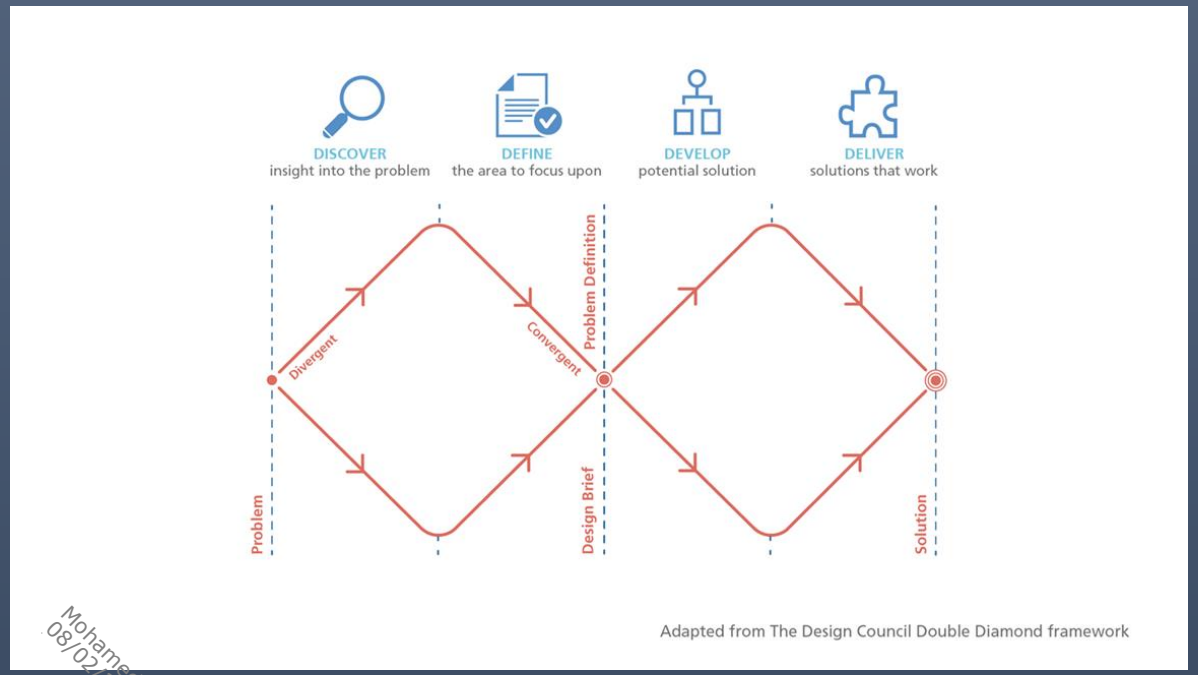
As we move into defining a roadmap for delivery, this structure will emerge more definitively, but it will broadly align to the model shown here where the funding bodies responsible for the overall organisational and regional partnership strategies will determine direction of travel for the design authorities, with these bodies having their goals enabled by the Digital Health and Intelligence strategy delivery programme- this last part being overseen by the DSMB

2c. Achieving the Vision

Adaptive Change

Using digital to transform the future

Design Principles

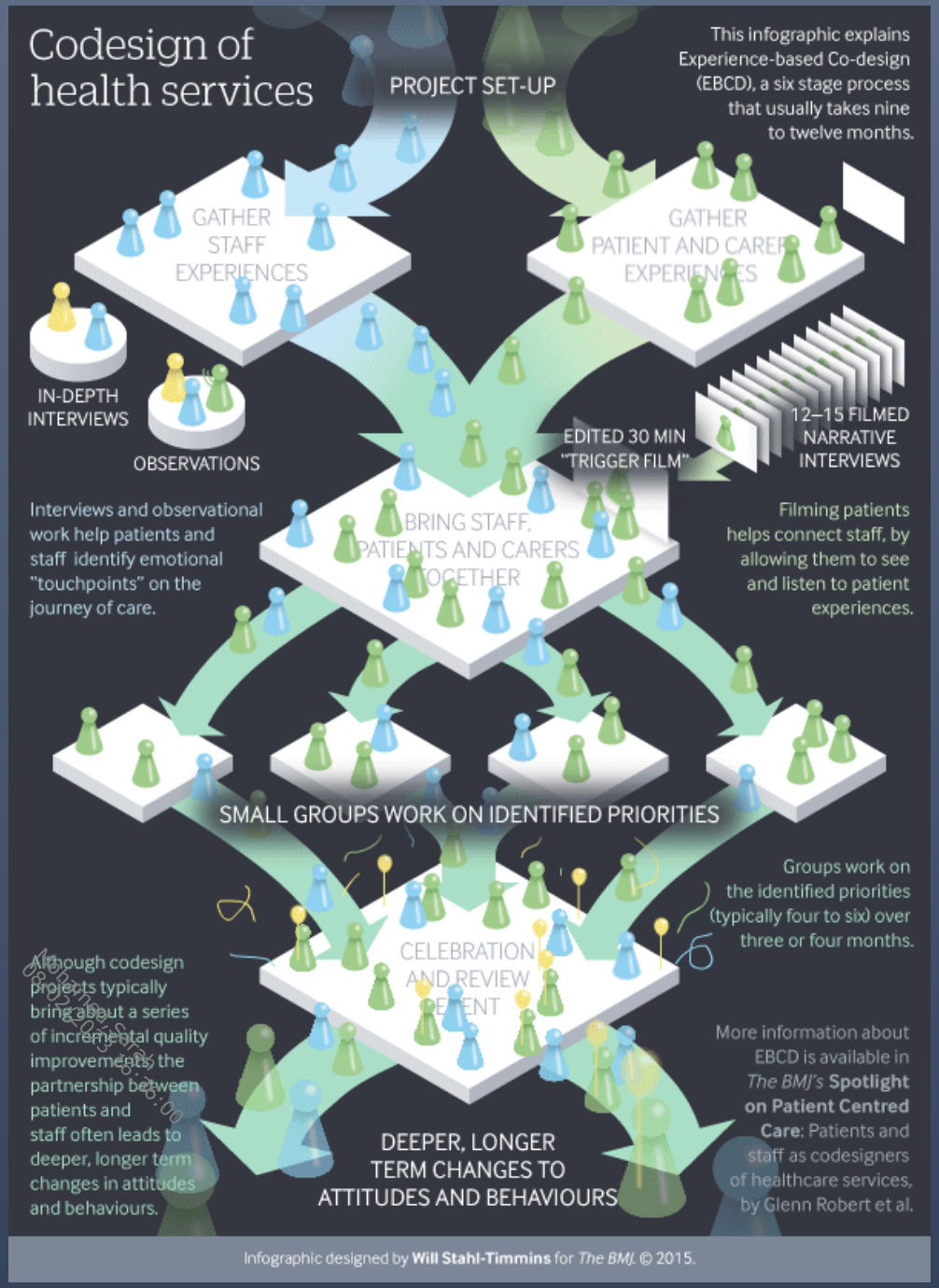


Pathway re-design comes first

Before procuring, deigning or implementing digital solutions, teams will be asked to consider how a digital solution will change the way that patients experience a service and the way that the teams work. Patient experience must be the guiding principle, in lign with Shaping Our Future Wellbeing.

Once the problem as been suitably defined by an initial discovery process, then conversations can begin around the potential solutions which might work.

The Design Council diagram illustrates this concept

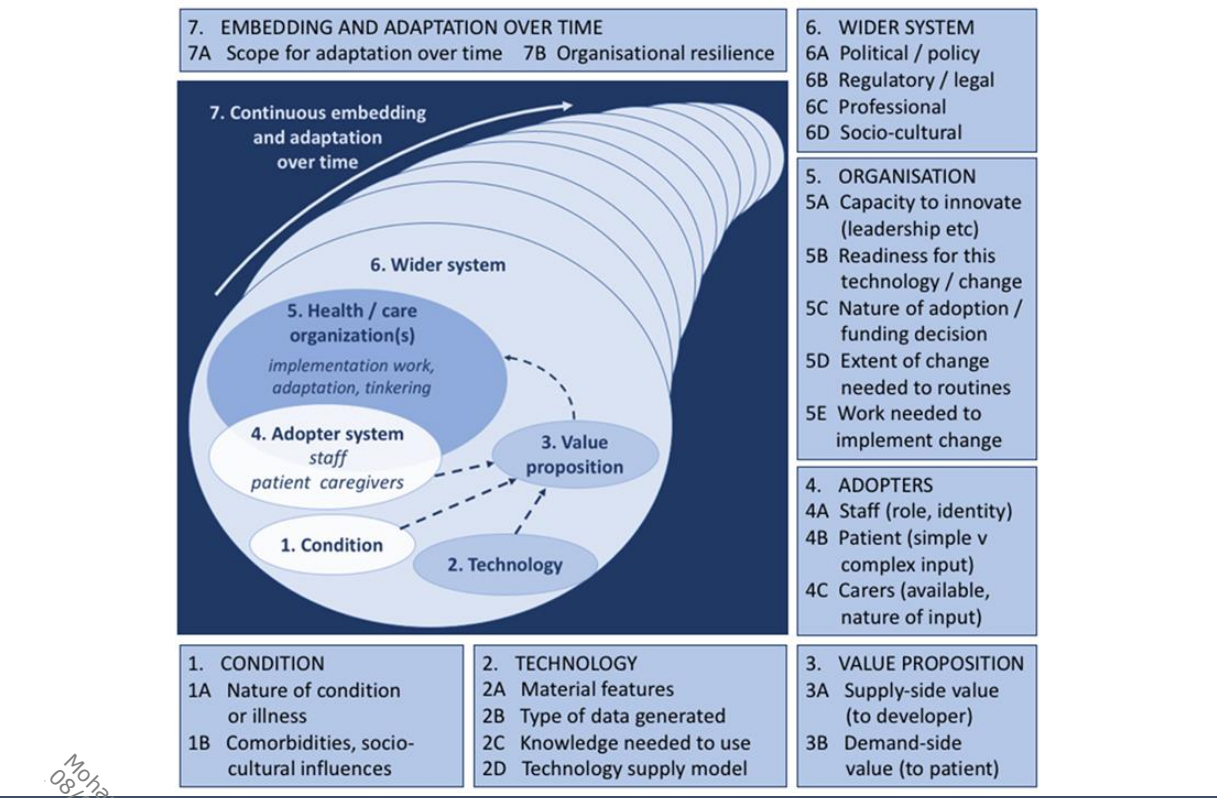


Co-production, co-design

The infographic opposite illustrates this ‘double diamond’ design process – but also shows how patients and communities can be included in it.

It is not necessarily that all the elements shown here are reproduced literally, but that they show the principle of an ‘empathetic’ design process that involves service users. This provides much more meaningful engagement of patients, carers and their families than appointing representatives to projects or programme boards.

Evaluation



Broader evaluation methods

Digital technology implementation often deonstartes a ‘productivity paradox’. The implementation of a new digital way of working to improve efficiency and experience is often accompanied by a dip in performance as staff adapt and explore new ways of working and overcome technical obstacles and unanticipated consequences. This may take a few years until service improvement is seen to improve on a ‘bottom line assessment’.

We will adopt a broader evaluation process, seeking to learn lessons throughout an implementation as to where obstacles occur, why there may be variations in adoption and difficulties in scaling a solution form one area to others, and using those lessons to inform the process. Sometimes this will inform us to continue with an implementation, but to change or re-focus approach. Sometimes it might tell us it is not going to work. But this needs to be prepared for in advance, and our organisation needs to ‘buy in’ to the concept that a rapid return on investment will not always occur, but does not mean failure.

The diagram here represents the NASSS framework; the ‘Non-adoption, Abandonment, and Challenges to the Scale-Up, Spread, and Sustainability of Health and Care Technologies’ framework described as one way of approaching this. We suggest this and other emerging methodologies are how we will determine success, failure or a change in approach.

We will work with other sectors of the organisation developing improvement and transformation methodology.

Planning to deliver

How do we get to the Digital Future?

Next steps

Roadmap

- A roadmap will be created to describe elements that will be delivered by each channel of the strategy

Governance Structure

- How the Programme Boards are constituted and arranged will be determined and used to oversee implementation

Clinical Engagement

- The most important enabler, apart from adequate funding. Will be clinical engagement.
- A plan will be drawn to develop a more formal structure of clinical engagement across the organisation
- Clinical Informatics will be developed as a discipline in its own right, in line with national strategy and the recommendations of recent important national reports e.g. Topol, Wachter, Nuffield Trust.

This strategy document is only the first chapter of what the organisation needs to do.
It is important as a reference point and in setting a direction of travel.

What comes next is more important – a map to show how the strategy will be implemented, and a broad increase in involvement of clinical staff of all professions and all levels of experience in implementing it.

David Thomas, Director of Digital Health and Intelligence
Dr Allan Wardhaugh, CCIO

July 2020

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Report Title:	**Digital Strategy Update**				Agenda Item no.	**2.2**	
Meeting:	**Digital and Health Intelligence Committee**		Public	X	Meeting Date:	14th February 2023	
			Private				
Status *(please tick one only):*	Assurance	X	Approval		Information		
Lead Executive:	**Director of Digital and Health Intelligence**						
Report Author (Title):	**Director of Digital Transformation**						

Main Report
Background and current situation:

Background and current situation

At the October 2022 DHIC meeting 3 items were updated on

- A new relationship with the organisation, building on our digital strategy core principle of co-production
- an enterprise architecture that will give us a blueprint for the changes and modernisation we need in the technology stack including infrastructure, applications and data to meet UHB needs and aspirations. This will ensure that we move forwards to the new architecture and don't reinforce the legacy. Planned, timely investment needs to follow this architecture - year end funding is time constrained and reactionary
- Electronic Patient Record (EPR) business case

And, to secure the appropriate funding for staffing and solutions.

Update at February 2023

<u>Co-production</u>

- the etr radiology app has been slightly delayed due to a combination of operational pressures, additional asks. It will be in production February for UEC and inpatient settings.
- e-whiteboard fully implemented in Medicine and sSDEC, cardiology and moving through clinical boards. This facilitates and tracks referrals from ED to other specialties and shows status of the referral.

<u>Enterprise Architecture</u>
Work has progressed in this area and is detailed in Appendix 2.2 Roadmap High Level to this covering paper.

There has been good engagement across the senior management team. We are now starting to review emerging outputs, provide check and challenge and undertake some further deep dive discussions in specific areas. We will then take receipt of the outputs:

- Enterprise Architecture diagrams (pack of PDF diagrams)
  - Target Operating Model for the department (and summary slide)
  - Enterprise Architecture for the scope of control of the department (and summary slide)

    - Viewpoints (for example data stack, infrastructure, system suppliers etc.)
    - list of standards (as a diagram in the Enterprise Architecture)
- Route map
    - Ideas captures (courses of actions, priorities)
    - Report and recommendations
    - Key decisions we will need to take
- Executive Pack (PowerPoint deck)

This can then be turned into a more detailed workplan to take us through the things we need to do in the next 18-24 months. The plan may change along the way because as previously stated, EA is a journey and we know that in any organization, nothing stands still. New organisational and WG priorities will appear and we will need to continue to be flexible without compromising on our EA.

<u>EPR business case</u>

- Following the October update, this work is folding into the Digital SoC. We are awaiting confirmation on a funding bid to support its production, anticipating a work start of April 2023

HIMSS EMRAM Assessment

Work has been commissioned by the NHS Wales Digital Directors Peer Group, bunded by DHCW, for Healthcare Information and Management Systems Society (HIMSS), to conduct an Electronic Medical Record Adoption Model (EMRAM) assessment of the UHB's hospital systems using the EMRAM technique and its' survey tool.

An online baseline assessment has been completed by Digital and Clinical staff across a wide range of questions and is in the Quality Assurance process pending the full one-day site visit taking place in early March 2023. This visit will involve an initial visit with the hospital senior leadership team before site visit to medical and surgical units in our outpatient department, a lab, Pharmacy and Emergency Department visit.

This will culminate in a gap assessment report, highlighting strengths and weaknesses and opportunities for improved performance and recommendation for achieving level 6 of the EMR Adoption Model.

This external assessment will be key in making our case for investment and help inform the Digital SoC work.

Roadmap

Following the format from October 2022, this is shared as Appendix 2.2 Roadmap High Level to this covering paper and includes IMTP priorities.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

The digital strategy approved by the Board in 2020 set out the vision of a learning health and care system. The vision set out in that strategy remains consistent as the programme of work (the roadmap) continues to evolve and develop, driven by our Shaping Our Futures strategic programmes and our major aspirations for UHW2 and the Digital Strategic Outline Case (SoC) that will support the aim of a SMART health care system.

The current activities described in this paper will enable the digital components to move forward and will help articulate the investment that will be necessary to realise the ambitions within the UHB's strategic programmes.

Recommendation:
The Committee is requested to: • NOTE the update within this paper

Link to Strategic Objectives of Shaping our Future Wellbeing: *Please tick as relevant*			
1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	x
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	x
4. Offer services that deliver the population health our citizens are entitled to expect	x	9. Reduce harm, waste and variation sustainably making best use of the resources available to us	x
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	x

Five Ways of Working (Sustainable Development Principles) considered *Please tick as relevant*									
Prevention	x	Long term	x	Integration		Collaboration	x	Involvement	

Impact Assessment: *Please state yes or no for each category. If yes please provide further details.*
Risk: No
Safety: No
Financial: Yes
Benefits realisation from smarter working practices using digital solutions
Workforce: Yes
Supports our ambition of a digitally enabled workforce
Legal: Yes/No
Reputational: Yes
Supports ability to manage our resources/data effectively
Socio Economic: Yes/No
Equality and Health: Yes/No
Decarbonisation: Yes

Improved use of digital solutions will reduce travel by staff and by patients (home working and virtual appointments)	
Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

APPENDIX 2.2 ROADMAP HIGH LEVEL

Updated Feb 2023		2022/23		2023/24			
		Q3	Q4	Q1	Q2	Q3	Q4
STRATEGIC ITEMS	**COMPLETED**						
EPR	Solutions architecture	Enterprise Architecture		EPR Business Case (as part of UHW2 digital SoC)			
Enterprise architecture	Scoping	•Workshops •Draft EA in Archimate for further discussion •Outputs agreed	•Deeper Dives - 4 sessions •Challenge from SMT members •Refine & receive outputs •Key decisions &	TBC - priorities taken from EA outputs •Governance •Standards •Key decisions •TOM •Route-map for priorities identified - data, infrastructure, systems etc			Costed plans for future investments
NHS Wales App	Build	Await & support DSPP rollout plans					
PROMS (part of VBHC)	Procurement	Onboarding & prioritisation methodology	VBHC priorities	Integration NHSWApp microservice (estimate)	BAU - to be informed by VBHC Steering Group		
	Pilot services live						
Shared health & care records	Proof of concept - looked after children	LDR	Pending Digital Care Region discussions and decisions				
Interoperability		Principal PAS demographics, alerts, flags	LDR & project specific e.g. e-triage				
LDR	High Level SA proposition; LACS pilot; base build	Solutions/Technical architecture		Prioritised workplan aligned to EA and organisational requirements			
TACTICAL ITEMS	**COMPLETED**						
Digital Front Door	Winter 2021	Virtual wards & hospital; Winter 22 priorities	Digital triage (dependent on BC & funding)	•Implement e-triage •STAMP •SNOMED for WECDS •Work driven by 6 Goals			
	SDEC	Discharge letters		WECDS introduced			
Outpatients transformation	SoS & PIFU	Implementation as part of Outpatients Transformation programme - ongoing					
	Clinic booking algorithm		BAU				
	Virtual consultation		BAU				
Community, Mental Health and PCIC services	Digital Therapies launched to both co-ordinate and sequence work packages for Q1 & Q2.	Refreshed prioritisation model to inform	Commence full scale rollout of e-Diary (e-community scheduling) for non Malinko services (CRTs, Midwifery, Community M.H, Primary Care Liaison services initially)				
E-tr radiology		Inpatients &UEC			V2.0 of app to include Outpatients		
Clinical/specialty/applications		Replaced with IMTP priorities (section below)					
Digital dictation and transcription	2 Lite versions widely used	Integration decisions		New business case			
IMTP priorities		UHW2 Digital SoC; Major essential infrastructure works (e.g. ISE, asset refresh); Welsh critical care system (WCCIS); Welsh Nurse care record (WNCR); Scan4Safety; electronic prescribing and medicines administration (epma); common demographics store; patient reported outcomes (PROMS); NHSWales App					

Report Title:	**Joint IMT & IG Corporate Risk Register**			Agenda Item no.	2.3
Meeting:	**Digital and Health Intelligence Committee**	Public	x	Meeting Date:	14th February 2023
		Private			
Status *(please tick one only):*	Assurance		Approval		Information x
Lead Executive:	**Director of Digital and Health Intelligence**				
Report Author (Title):	**Director of Digital and Health Intelligence**				

Main Report
Background and current situation:

The joint IMT Risk register is a combined register consisting of digital / Information Governance and Information / Performance risks.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

There are currently 14 joint IMT/IG risks identified on the report:

1 x Risk is in red status with a score of 20 which include:

- Cyber Security

6 x Risks have remained in amber status with scores between 10 and 12 which include:

- Server Infrastructure
- Insufficient Resource – Capital & Revenue
- Non-Compliance with data protection legislation
- Outcome Measures
- Governance framework (IG policies and procedures)
- WLIMS

1 x Risk has moved from amber status to yellow status with a score of 8

- Data Quality

4 x Risks remain in yellow status with scores between 8 and 9.

- UHB Standard Data Processing
- Effective resource utilisation
- Clinical Records Incomplete
- WCCIS Local team not resourced

2 x Risks have remained in yellow status but the scores have been reduced from 9 to 6

- NWIS Governance
- Data availability (Accessibility of Data)

Recommendation:

The Board / Committee are requested to:

NOTE progress and updates to the Risk Register report.

Link to Strategic Objectives of Shaping our Future Wellbeing: *Please tick as relevant*			
1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	x
3. All take responsibility for improving our health and wellbeing	x	8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	x
4. Offer services that deliver the population health our citizens are entitled to expect	x	9. Reduce harm, waste and variation sustainably making best use of the resources available to us	x
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	x

Five Ways of Working (Sustainable Development Principles) considered *Please tick as relevant*									
Prevention	x	Long term		Integration		Collaboration	x	Involvement	

Impact Assessment: *Please state yes or no for each category. If yes please provide further details.*
Risk: Yes/
As outlined in the risk register
Safety: Yes
Financial: Yes
Non-compliance and less efficient ways of working
Workforce: Yes
Impacts on ways of working
Legal: Yes
Compliance with regulatory requirements
Reputational: Yes
Trust of staff and patients/service users
Socio Economic: Yes/No
Equality and Health: Yes/No
Decarbonisation: Yes

Green IT and digital solutions that support greater virtual working	
Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

RISK REGISTER TEMPLATE

CLINICAL BOARD/CORPORATE DIRECTORATE: CORPORATE

SPECIALITY/DEPARTMENT: Digital & Health Intelligence

Risk Ref.	Strategic Objective	Date risk added dd/mm/yyyy	Risk	Exec Lead	Initial Risk Rating			Controls	Assurances	Current Risk rating			Gaps in Control	Gaps in assurance	Actions	Who	When	Target Risk rating			Date of next review	Assurance Committee
					Consequence	Likelihood	Total			Consequence	Likelihood	Total						Consequence	Likelihood	Total		
A4/0023	8	06/08/2011	**Cyber Security** - Due to prevailing national and international Cyber Security threats there is a risk that the Health Board's IT infrastructure could be compromised resulting in prolonged service interuption and potential impacts on the safety of patients due to an inability to access electronically stored data.	Director of Digital and Health Intelligence	5	4	20	The UHB has in place a number of Cyber security precautions. These include the following: - The implementation of additional VLAN's and/or firewalls/ACL's - Segmenting and an increased level of device patching. - The use of Monitoring and Vulnerability Softare - Health Board wide Mandatory Cyber Security Training and Phishing Campaigns.	Regular Cyber Security updates that review the Health Board's preparedness for a cyber attack and the controls in place are undertaken in the following forums: - at fortnightly Operational Cyber Group Meetings - at monthly Cyber Security Meetings - at each private and public Digital Health and Intelligence Committee An Assessment of the Health Board's Cyber Assessment Framework was undertaken in January 2022 with 4 Critical Priority Areas and 6 Significant/Moderate Priority Areas recommended.	5	4	20	Additional resources is required to fully implement recommended areas of best practice. Completion of mandatory Cyber Security training is below the required level.		The requirements to address the resourcing of Cyber Security Management have been acknowledged in an approved but unfunded UHB Business Case. (May 2022: Successful business case bid made to BCAG to ensure appointment of dedicated Cyber resources. Roles are currently being advertised and recruited to. Global cyber threat increase in response to events in Ukraine. Implementation of NIS Regulations provides powers to WG to penalise organisations who are non-compliant with fines up to £17m or 4% of turnover. Continued efforts need to be made to improve compliance with the Health Board's Cyber Security Mandatory Training and to increase awareness of and engagement with the Health Board's Phishing Campaigns. Compliance with/completion of Cyber Resilience Unit Recommendations. September 2022 update: Two of the 4 roles have been appointed to. The remaining posts are in the recruitment process. **Jan 2023 - We have successfully appointed a Cyber Security Manager and we anticipate a start date mid February.** **One of their main priorities will be to implement the improvement action plan**	Head of IG & Cyber Security	August 2022 Ongoing	5	3	15	01/07/2022	Digital Health Intelligence Committee

A3/0110	8	13/12/201	**Server Infrastructure** The IM&T Department is actively implementing a vFarm infrastructure that significantly reduces costs whilst dramatically increasing resilience of Server Systems. However, the cost savings are to the Health Board as a whole and Service Departments in particular and come at an increased cost to IM&T specifically. This infrastructure requires core investment to complete and revenue based support to maintain. There is a requirement to also retain a minimal number of physical servers for those systems not capable of virtualisation.	DT			0	The UHB continues to address priority areas in relation to its infrastructure management and strategic programme.		4	3	12			May 2022: The final 21/22 digital capital investment allocation total exceeded £6M and is being used to provide for significant improvements in resilience as infrastructure upgrades and replacements are implemented. Sept 2022: Additional server/communications racks, power disribution and electrical work has been requested, financed and in progress for two disaster recovery designated sites. These are located in Woodland House and UHL. This work is scheduled and planned to be completed by Oct/Nov 22. **Jan 2023: Servers, racking and UPS devices have all been purchased. We are waiting for electrical work to be completed in Woodland House and UHL to implement. This action is currently sat with CAV CEF.**	Head of Digital Operations				0		
	8	28/09/2015	Risk:- **Non compliance with Data Protection** & Confidentiality Legislation - the UHB's progress in taking forward the action plan to reduce the risk of non compliance following the ICO's assessment of our 'reasonable assurance' with the GDPR/ DPA is not sufficient to mitigate the risk of non compliance with Data Protection Legislation. Consequence: Mistrust of our population and other stakeholders resulting in their unwillingness to share / divulge essential information, Significantly financial penalties - and increasing post BA case	DT			0	Clinical Board assurance and co-ordinated mitigation of risk being developed via quality and safety meetings. Ownership and community of practice anticipated to develop across IAOs/IAAs from this. GDPR awareness being used to ensure Leaders and asset owners are reminded of existing requirements and mandatory nature of the asset register. Options for enabling messaging in compliance with legislation has been considered by clinical and executives on a number of occasions, and UHB close to agreement.		4	3	12			Restructuring of IG department will increase amount of expert resource. Resolution of long term absence will also increase available expertise and resource to support GDPR plan, and manage the operational requirements on the corporate department. Ongoing implementation of GDPR/ICO action plan. The Information Governance team have developed a work plan to review and update all outstanding policy and procedure documents in the CDF and these are scheduled to be complete by December 2020. Implementing the action plan will reduce the risk, May 2021: policies are being reviewed and an update will be reported to DHIC in June 2021. Sept 2021: Business case being presented to appoint further IG support to support with CB engagement. Jan 2022: Additional non-recurring funding made available until 31.03.22. Recurrent funding bids are being prepared for consideration by the Business Case Assessment Group (BCAG) May 2022: Review of all mandaorty training being done in June to ensure that IG and cyber training are prioritised. September 2022 update: Following a 6 month program of work, staff accessing their own records and family records has fallen by 76% and 65%, respectively. The UHB is required to ensure that it has appropirate security controls in place to protect patient data. **January 2023 update: There continues to be a decrease following targetted comm in the number of staff accessing own and family records (80% & 75% respectively)**	Head of IG & Cyber Security				0		
	8	19/02/2018	**Data Quality** High level risk - core business activities potentially compromised as a result of weaknesses in assurance framework in areas listed below: Absence of Standard Operating Procedures to administer patient activity, Low take up of staff training in Standard Operating Procedures to administer patient activity, Incorrect/incomplete/late recording of activity Absence of ISO 27001 certification. Consequences: Potential for poorer patient outcomes and experience, analysis and benchmarking flawed resulting in poor decision making, under recovery of income, inability to maximise potential of R&D	DT			0	Further re-invigoration of the role out of COM2 will increase clinically validated data. Updates and training programme scheduled for mental health and our partners in order to address issues identified in recording and reporting compliance with parts 2 and 3 of the mental health measures. New dashboard release will expose greater amount of data to users, in a more user friendly way, enabling validation by relevant clinicians. Data quality group has established a work plan to improve quality and completeness of data and how it is presented.		4	3	12			Data Quality Group needs to be refocussed. It is currently not meeting due to IG staffing pressures. Sept 20 Data Quality will be addressed via the new governance arrangements - specifically the Analyst Channel Programme Board; plans to establish this board in October 2020. Jan 2021: the Analyst Channel Programme board is holding its inaugural meeting in February, chaired by a clinician. May 2022: Working with the CCIO and service leads, a data strategy is being developed to support the digital strategy roadmap plans, which will be produced by Q3 2022/23. September 2022: Data Quality as part of the Data Strategy is being addressed at UHB level comprising baseline position of info/data by November 2022 and a complete audit by March 2023. **Jan '23 - CAV UHB position made clear in a written response to the Senedd's sub committees relating to the adoption of the WCCIS' system**	Head of IG & Cyber Security				0		
	8	28/09/2015	**Outcome Measures:** Risk: Unavailability of full, consistent care delivery information results in an inability to ascertain outcomes of care we provide, and commission, plan and improve services accordingly. Consequence - Low assurance on safety, quality and effectiveness of services and satisfaction with services, sub optimal decision	DT			0	Analysis and wider engagement and communication of outcome and audit data, triangulated with efficiencies and effectiveness data as part of Medical Director led programme established. UHB and national investment in data repositories and clinical forms will support programme		3	4	12			Acceleration of programme. This will be addressed via the Digital Strategy enablers programme and clinician and analyst channels programme boards (Oct 2020). Jan 2021: both channel programme boards established and will drive the programme. September 2022: Digital Strategy seen as a key enabler to support the UHB's wider strategic programmes. Raodmap and investment plan shared withg Execs, SLB and Board. **Jan '23 - Data Implement Group established by Director of Digital and Health Intelligence Director and Director of Finance; initially baselining of patient data that is captured across the UHB - will then focus on completeness and quality of the data.**	Head of IG & Cyber Security and Director of Digital & Health Intelligence				0		
	8	16/02/2018	Risk: **IG policies and procedures** are not up to date/do not cover all relevant areas. Procedures are not aligned to relevant national policies. Consequence: Lack of clarity in terms of how the UHB expects its staff to work to in order for relevant accountabilities to be discharged.	DT			0	Update: Controlled document framework requirements delayed due to resource constraints - Integrated IG policy is live and covers a number of existing policies.		4	3	12			Restructuring of IG department will increase amount of expert resource. Investment in training will also increase available expertise to support the review of policies. A formal review of policies and procedures is underway as per risk #7. May 2022: Controlled documents are reviewed and action plans for refresh or updates are routinely captured and reported on at each DHIC meeting. September 2022 update: A third party has been enlisted to update existing policies and implement new SOPs were we are have identified gaps in our processes. This work is progressing with updates reported to DHIC. **January 2023 update: A number of existing procedures have been updated and two new ones created. These will be presented to DHIC in February 2023.**	Head of IG & Cyber Security				0		
A4/0024	8	29/01/2021	**The Welsh Pathology Information management system (WLIMS)** implementation has taken longer than envisaged. As a result of this all Health Boards will not have migrated off their legacy pathology systems (Telepath) by end of March 2018, which is when their current telepath contracts will expire (contract currently in extension).	DT			0	The UHB engaged with NWIS and other Health Boards to evaluate options available to mitigate this risk.		5	2	10			May 2021 : WLIMS continues to fall short of the full range of functionality. Therefore Telepath system will need to continue in use and be monitored providing mitigation to the new LINC system in the future. Jan 2022 update- Telepath Contract was extended to end of 2020 (including Hardware refresh) but the Service are in discussion with the supplier to extend further to a date that will see C&V onto the new LINC system in 2023 May 2022 update: HW and SW contract extended to end of 2025 Sept 2022: Risks associated with the LINC programme ability to deliver have been raised at national CEO level. **Jan 2023: No further updates.**	Head of Digital Operations				0		
	8	02/02/2018	**Governance arrangements** for overseeing and challenging NWIS are weak. There is insufficient transparency, blurred lines of accountability and they lack a clear set of priorities Consequences: The significant resource we provide to NWIS is not optimally used to support the UHB in delivering its statutory obligations nor in supporting us to deliver our strategic objectives as identified in "Shaping Our Future Wellbeing"	DT			0	UHB is engaged with WG and NHS peers to take forward the recommendations of the WAO review of NWIS with a view to addressing the numerous risks identified in the report.		3	2	6			CAV involvement in National programme activities and Governance review**.** Opportunity to influence the new SHA replacing NWIS via the consultation exercise which has commenced (Sept 20). Jan 2021: Feedback submitted to WG in response to the new SHA consultation document launched in Nov 2020. May 2021: DHCW committed to quarterly stakeholder Exec to Exec meetings to share plans and strategic ambitions (initial meeting held in May 21) Jan 2022: Regular DHCW execs to exec meetings scheduled for 2022. May 2022: Exec to Exec meeting held in May 2022, agreed regular director level engagement and collaboration meetings in diaries. September 2022: Regular DHCW/CAV meetings diarised at Director level. **Jan '23 - Annual plan of digital programme agreed with DHCW, to be reviewed at Exec to Exec meeting in February 2023.**	Head of IG & Cyber Security				0		

	8	16/02/2018	**UHB Standard Data Processing** Risk: obligations and accountabilities relating to the way data is handled are not formalised Consequence: the UHB could suffer detriment and/or have difficulties applying remedies against a third party if data is not handled appropriately	DT			0	Library of outline documents for sharing data available, with completion of these supported by corporate information governance department. Requirements to use and refer to are being emphasised within the training.		4	2	8			Procurement are greatly assisting process by referring all issues involving data sharing to the corporate IG department. September 2022: Procedures improved via the IG Working Group whereby new data requests for data sharing are reviewed and actioned in a consistent manner. **January 2023 update: IG Dept due to provide a presentation to the Procurement Dept January 2023 on requirements to ensure IG and cyber security are satisfied when third parties are enlisted.**	Head of IG & Cyber Security				0		
	8	01/10/2018	**Effective Resource utilisation** :With an increasingly restricted resource, the UHB requires assurance that digital effort is expended in the most benefits laden workload. Benefits based prioritisation requires robust and matured benefits tracking and a matured reprioritisation mechanism. This requires some changes of technique within the Digital department.	DT			0	Establishment of a formalised corporate prioritisation mechanism based on benefits and corporate drivers for change.		4	2	8			May 2022 - D&HI continue to prioritise infrastructure work based on the UHB Digital Strategies. These are also in conjunction with the National Infrastructure Management Board and All Wales Infrastructure Programme. A digital front door process has been developed and is being tested before launching in June 2022, utilising the new Ivanti IT service management tool. Sept 2022: Work continues on the Digital Front door. Late Aug 2022 has seen the soft launch of the Digital work request icon via the Ivanti Self Service portal. All work and project requests for Digital are going through this method, this in turn is providing improved workload visibility and planning benefits. **Jan 2023: A PM for the DFD project has been employed until Mar 23. The project has come to a partial completion awaiting recruitment of a dedicated staff member to assist with request triaging.**	Head of Digital Operations				0		
A4/0025	8	10/07/1905	**WCCIS** Risk: The delivery and implementation of a single instance of national Mental Health, Community and Therapies System (WCCIS) requires significant local resource to co-ordinate work streams and implement key deliverables across the UHB. Consequence: Delayed milestones, poor quality deliverables and ultimately delayed realisation of benefits. Critical deliverables are being held up, including: local business case; delivery of full functionality against the Statement of Requirements; delivery of essential product enhancements; infrastructure, system configuration, service management, ongoing support, integration with other national systems, testing, data migration.	DT			0	Update 18/11/2019: Temporary posts have been funded from regional ICF monies, including 2 Business Analyst posts, regional technical , programme and project lead resources. Implementation in the UHB remains dependent on delivery of extensive functional enhancements, for which there is currently no delivery roadmap.		4	2	8			UHB is working with NWIS, WG and Regional IHSCP on review of WCCIS deliverables including health functionality, information standards, data migration and reviewed commercial arrangements. ICF funding has been confirmed for 2019/20 and 2020/21 based on assessment of WCCIS impact for integrated Vale of Glamorgan teams and for paper-based therapeutics teams in the UHB. Jan 2021: changes to structures and reallocation of workload for CAV staff being implemented to manage the expected cessation of funding for WCCIS for CAV. May 2021: changes within the D&HI directorate structures reflect the redcution in ICF funding available for 2021/22 without adversely impacting ability to support the programme. Sept 2022: The work of the national WCCIS programme remains primarily focussed on the implementation of the single CareDirector product in ABHB for Mental Health Services, a small Community Nursing trial in BCU, and in restabilising the platform following the migration of records from ABHB's epex record system. Work packages to address other recommendations made in the strategic review have been scoped, with actions being sub-contracted to Channel 3 consulting. No funding has been made available to support activity outside of the single-platform approach. A new Director has been appointed to DHCW with responsibility for this area, which presents an opportunity for CaV UHB to refresh discussions around the WCCIS programme. **Jan '23 - In the absence of a future upgrade path for the WCCIS (CareDirector) system , the UHB is currently unable to adopt the WCCIS system as a digital platform for the scoped services. The UHB is partnering with its local authorities through the Regional Partnership Board (RPB) and has set up a Digital Care Region (DCR) Steering Group to own the governance foundations for record sharing between local health and social care organisations. This approach is consistent with, and supportive of the National and Local Data Resource (NDR, LDR) programme aims for the sharing of data, and guided by the National Digital Strategy 2021 in its aspirations to address RPB challenges through the delivery of data agility. Our approach, is to work towards ensuring that data within the PARIS system can be shared via appropriate interoperability which means that not all organisations have to use the same system in order to be able to share relevant data across systems.**	Senior Programme Manager and Director of Digital and Health Intelligence				0		
	8	28/09/2015	Risk: **Accessibility of data**: UHB does not have an ability to access and use the data it requires to carry out its full range of statutory obligations and enable delivery of our strategy and IMTP. . Specific risks - lack of access to GP data and the UHB's data residing in NWIS supplied applications (e.g. WCRS, WRRS) Consequence - Inability to deliver strategic UHBs, namely - Supporting people in choosing healthy behaviours, - Encouraging self management of conditions, - Enabling people to maintain or recover their health in or as close to home as possible, - Creating value by enabling the achievement of outcomes and	DT			0	Approach identified to work with C&V GPs to share data across care sectors to inform improvement and to gain a better understanding of need, demand and the capacity available to meet it. National data repository programme will provide access to tools and expertise		3	3	9			National Architectural design group and interoperability group being set up in line with Once for Wales agreement and WG Informatics statement of intent should provide medium term solution. HB taking forward data acquisition programme in line with the development of the electronic care record. May 2021: in support of information sharing outside of direct care purposes, agreement has been reached with WAST and Cardiff Council (Social Services) for data to be shared; a similar request to include GP data is currently being considered by the Wales GPC/DHCW. May 2022: Data sharing between CAV UHB, WAST and Cardiff Council's social services being piloted following successfyl test. GP data remains out of scope pending WG review of governance for cross-setting information sharing. September 2022: Information sharing between CAV UHB, Cardiff Council and WAST established. Additionally, the Digital Care Record Group has been established reporting to the RPB Board. **Jan '23 - Digital Care Record Group scoped out a work plan for delivering the sharing of information - initially for the "Looked After Children" utilising the LDR**	Head of IG & Cyber Security				0		
	8	28/09/2015	**Clinical Records** Risk: Clinical records are not joined up across disciplines, care settings or geographical boundaries resulting in incomplete and out of date patient information. Summary information is not routinely shared across systems. Differing local service models which are also going through a period of significant change mean access to appropriate data is an increasing need. Consequence is unsupported clinical decision-making, introducing patient harm and/or disadvantage and failure to meet NHS Wales	DT			0	UHB architectural design to be reviewed to consider local data repository for bringing together in a usable way clinical information held in numerous clinical systems. UHB working through a programme to implement once for Wales requirements for data and technical interoperability standards.		3	3	9			National prioritisation for NWIS to open up the national data repositories. Jan 2020: NDR & CDR workshops to understand the technical roadmap this will be picked up via the national IT infrastructure review being undertaken in Feb / March 2020 . The new governance model supporting the Digital strategy delivery will address via the clinician channel programme board, which is being established in October 2020. Jan 2021: The clinician channel programme board has been established and will drive direction and priorities for the NDR/LDR in CAV. May 2021: All Digital strategy channel programme boards established and led by a senior clinician, overseeing the delivery of the CAV Digital Strategy roadmap plans. Jan 2022: NDR Programme Board re-established with a smaller focussed group. CAV represented via Director of Digital & Health Intelligence. September 2022: CAV LDR plan being formalised. **Jan ' 23: CAV LDR now live, data started to be ingested, albeit to support mostly operational reporting. Low head count in LDR stifling pace of delivery, in particular the development of a summary record shared across multiple domains.**	Head of IG & Cyber Security				0		

A2/0004	8	13/12/2013	**Insufficient Resource:** The delivery of the IM&T Strategic Work plan is based on the UHB being able to ensure that the IM&T Department is appropriately resourced to manage infrastructure and deliver projects. All bench marking information indicates that the UHB is significantly under resourced in this area. Consequence: Inability to support operational and strategic delivery at pace required, reliance on outsourcing at enhanced cost, non compliance with legislation (FOI / GDPR)	DT			0	The UHB continues to address priority areas in relation to its infrastructure management and strategic programme.		3	3	9			Jan 2021: Discretionary capital allocation for Digital has been restored to £500K for 20/21. The UHB is also actively engaged with Welsh Government in undertaking a review of National Infrastructure requirements as part of the plans to increase Digital investment in Wales. In addition the Digital infrastructure 5 year sustainability plan has been updated to ensure that highest priority risks are addressed first with any available funding. The D&HI directorate has also been successful in gaining in excess of £1m additional revenue funding from the UHB for 20/21 and there are bids being considered for recurring additional revenue. May 21 Update: Year end funding of in excess of £2m plus earlier allocations in support of COVID has allowed to HealTh Board to plan to enahnce its Digital Device infrastructure. There is however a great deficit going forwards between the anount of Discretionary capital allocated to Digital and the requirements to sustain our infrastructure. This has been highlighted to Capital Management Group and included in the Digital services Case for Investment plan submitted to management excecutive in December 2020. Sept 21 - A staff gap analysis has been carried out in DH&I. Significant shortfalls has been identified and formalised within the report being presented to CAV UHB Exec Board by the Director of DH & I Jan 2022 update: A submission on resourcing was submitted to management Exec in November but was only funded on a non recurring basis to end of March. Further submissions are being prepared for consideration by the Business Case Assessment Group (BCAG) May 2022: D&HI and Finance teams have reviewed current structures and cost base and developed a plan to resource priority areas already idetnfiied as critical ; these are under consideration by the DoF and likely to require business cases for submission to BCAG. Sept 2022: succesful bids to BCAG have resulted in additional investment in the Digital Operational team, 365 team and WiFi team. Unfunded cases comprise of information and project/service delivery requirement resources. These will be reviewed and built into the longterm financial model work being led by the Director of Finance. **Jan '23: Implementation of the Digital Stragies work plan (Road map) continues to be dependant on addequate resources; a process of prioritising organisational programmes of work is currently undertaken**	Director of D&HI				0		

Report Title:	IG Data & Compliance (SIs, Data Protection, GDPR, FOI, SARs, staffing and mandatory training)				Agenda Item no.	2.4
Meeting:	Digital & Health Intelligence Committee		Public	X	Meeting Date:	14 February 2023
			Private			
Status *(please tick one only):*	Assurance	X	Approval		Information	
Lead Executive:	Director of Digital & Health Intelligence					
Report Author (Title):	Head of Information Governance and Cyber Security					

Main Report
Background and current situation:

This report considers key information governance issues considered by the responsible Executive Director, Senior Information Risk Owner (SIRO) and Data Protection Officer (DPO). Specifically, it provides information on the following areas of Information Governance within Cardiff and Vale University Health Board (the UHB).

- Information Governance (IG) Staffing levels and capacity
- Data Protection Act - Serious Incident Summary and Report
- Freedom of Information Act - Activity and Compliance
- Data Protection Act (DPA) - Subject access requests (SAR)
- Compliance monitoring/National Integrated Intelligent Auditing Solution (NIIAS)

Each individual report contains specific details relevant to the subject area, and includes updated information since the previous report to the Digital Health Intelligence Committee (DHIC) on how the UHB has complied with the obligations of each piece of legislation that satisfy the information governance requirements.

Cardiff and Vale University Health Board (the UHB) is required to ensure that it complies with all the legislative requirements placed upon it. In respect of Information Governance, the relevant legislation which largely impacts on this work are the Data Protection Act 2018 (DPA), UK General Data Protection Regulation (UK GDPR) and the Freedom of Information Act 2000 (FOIA).

Quarterly reports are produced for the DHIC to receive assurance that the UHB continues to monitor and action breaches of the UK GDPR/DPA 2018, FOI requests and that subject access requests (SAR) are actively processed within the legislative time frame that applies and, that any areas causing concern or issues are identified and addressed.

ASSESSMENT

1. **Information Governance Staffing Levels and Capacity**

Information Governance staffing levels are stable. The staffing structure is as follows:

- David Thomas, Director of Digital and Health Intelligence is the Senior Information Risk Owner
- Professor Meriel Jenney, Medical Director, is the Caldicott Guardian
- James Webb is the Data Protection Officer
- The Information Governance Department is currently resourced at 5 WTE.

2. Data Protection Act – Serious Incident Report

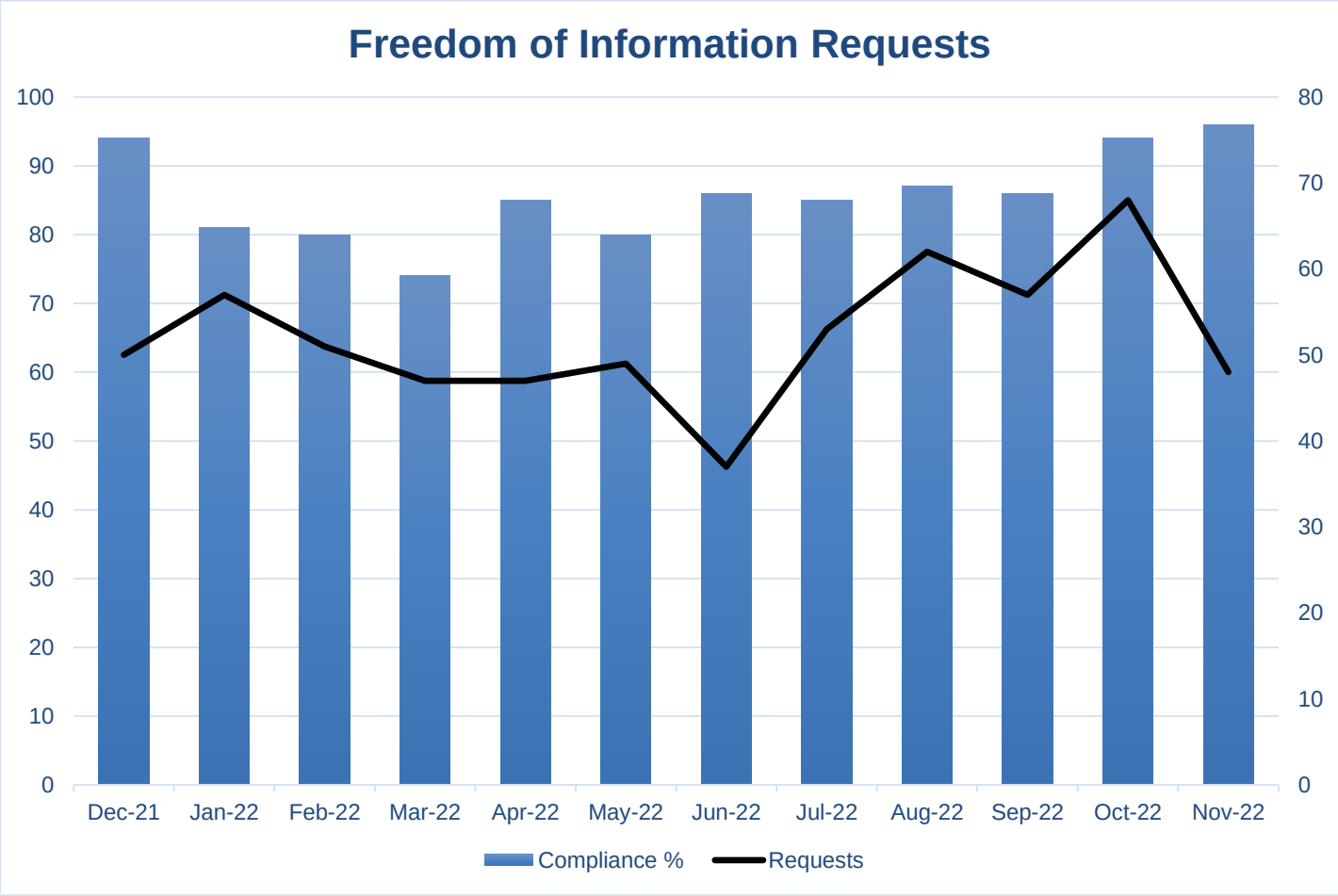
Date reported: September 2022 to December 2022

Between September 2022 and December 2022, the Information Governance Department have reviewed a total of 245 information governance related incidents. This is consistent with the number of incidents reviewed during the last period.

One of these breaches met the threshold to be reported to the Information Commissioner's Office (ICO). The details of this breach are outlined in the private setting of this committee.

3. Freedom of Information Act

FOI compliance percentage for the last rolling 12 months against the 20-working day deadline is demonstrated as follows:



Since March 2022, compliance has steadily increased. Compliance for the last two months are now >90% which is the highest since October 2021. The average number of FOIs received during the last 12 months has increased to 52 requests per month and average compliance remains 86%.

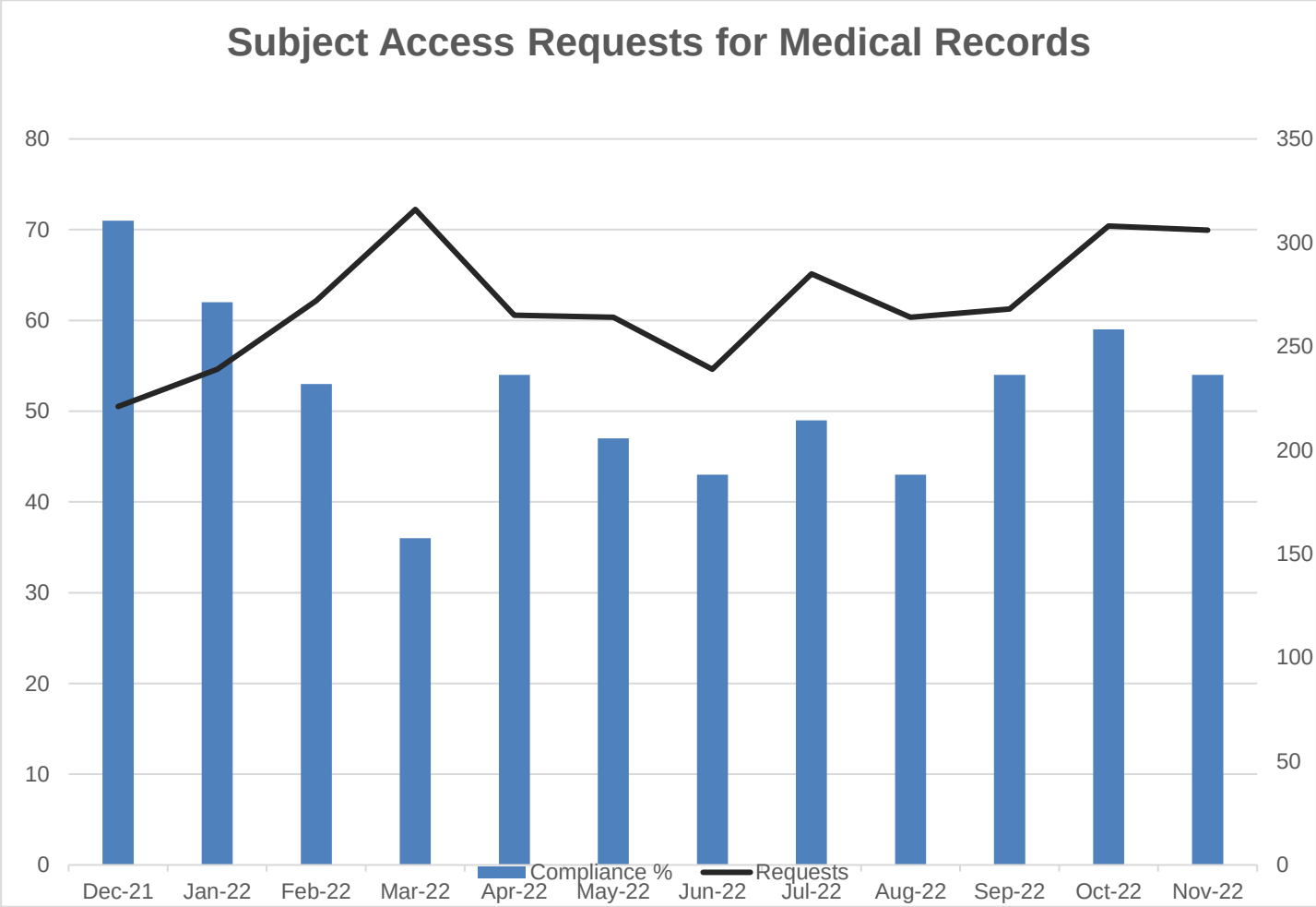
A link to the UHBs FOI disclosure log can be found below. This provides a link to every FOI the UHB publishes online. In the event that requests are made for the same information, the UHB is able to signpost requestors to this log.

https://cavuhb.nhs.wales/about-us/governance-and-assurance/freedom-of-information/disclosure-log/

4. Subject Access Requests Processed

4.1 Health Records requests

Medical Records SAR compliance percentage for the last rolling 12 months against the one-month deadline is demonstrated as follows:



Whilst compliance has risen above the values reported to the last committee, concerns still remain regarding overall compliance, with only just half of requests being responded to within one month.

The total backlog of requests is relatively low, given the volume of requests received. For example, for August 2022, there are only 5 outstanding requests with an average timescale of 44 days for a request to be completed.

The new digital subject access request system, which was discussed at the last committee, has now been built and is the testing phase. We anticipate that this will be available to patients before the end of the financial year. The purpose is to streamline the process and to be able to manage performance and report figures more easily.

4 .2 Non-Health Records

A total of 27 subject access requests submitted for non-health records were received from August 2022 to November 2022. 22 requests (81.5%) were complied with, within the legislated time frame.

5. Compliance Monitoring/NIIAS

During 2022, the UHB sent out a total of 609 letters to staff who have been identified by the UHB's instance of the National Intelligent Integrated Audit Solution (NIIAS), based on a process approved by Management Executive.

These letters form part of an approach which also includes a wide-reaching and targeted comms piece of work. Further detail will be provided in the private committee agenda.

6. Information Governance Mandatory Training

Overall UHB Information Governance training compliance is currently 70% and is broken down by Clinical Boards as follows.

Org L4	Assignment Count	Achieved	Compliance %
001 All Wales Genomics Service	304	262	86%
001 Capital, Estates & Facilities	1347	1025	76%
001 Children & Women Clinical Board	2569	1947	76%
001 Clinical Diagnostics & Therapeutics Clinical Board	2354	1730	73%
001 Corporate Executives	1026	781	76%
001 Medicine Clinical Board	1940	1143	59%
001 Mental Health Clinical Board	1518	1005	66%
001 Primary, Community Intermediate Care Clinical Board	1166	903	77%
001 Specialist Services Clinical Board	2031	1359	67%
001 Surge Hospitals	2	1	50%
001 Surgical Services Clinical Board	2438	1510	62%
uHB	**16695**	**11666**	**70%**

This represents a further 4% increase in overall completeness since figures were last provided to the Committee.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

- Information Governance resource remains unchanged since the last committee meeting.
- 245 information governance related incidents reviewed from September 2022 to December 2022.
- 1 data breach since the last committee has been reported to the Information Commissioner's Office.
- Freedom of Information compliance is again > 90%.
- Requests for access to medical records remains high. Compliance continues to be below an acceptable level.
- The Information Governance Department continues to send letters to staff who breach data access policy.
- Information Governance mandatory training figures remain a cause for concern but have increased by a further 4%.

Recommendation:

The Board / Committee are requested to:

- RECEIVE and NOTE a series of updates relating to significant Information Governance issues

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

1. Reduce health inequalities	X	6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	X	7. Be a great place to work and learn	x
3. All take responsibility for improving our health and wellbeing	X	8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	x
4. Offer services that deliver the population health our citizens are entitled to expect	x	9. Reduce harm, waste and variation sustainably making best use of the resources available to us	x
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered
Please tick as relevant

Prevention	x	Long term		Integration	x	Collaboration	x	Involvement	x

Impact Assessment:
Please state yes or no for each category. If yes please provide further details.

Risk: Yes
Compliance with legal and mandatory requirements
Safety: Yes
Supports patient and staff safety
Financial: Yes
Non-compliance
Workforce: Yes
Applies to entire workforce
Legal: Yes
compliance
Reputational: Yes
Confidence in managing assets/supporting services
Socio Economic: Yes/No
Equality and Health: Yes/No

Decarbonisation: Yes/No	
Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

Report Title:	**Digital Services Key Performance Indicators**			Agenda Item no.	**2.5**
Meeting:	**Digital and Health Intelligence Committee**	Public	X	Meeting Date:	14th February 2023
		Private			
Status *(please tick one only):*	Assurance		Approval		Information X
Lead Executive:	**Director of Digital and Health Intelligence**				
Report Author (Title):	**Service Assessment Analyst/Project Manager**				

Main Report
Background and current situation:

The implementation of the new service desk tool, Ivanti, as reported at the last DHIC meeting has continued to be embedded within the Digital Operations service. The self-service portal was released in Autumn 2022 and is now fully functional for the effective management of the full range of IT service desk functions.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

Investment in the new service desk tool has enabled the service to move towards full ITIL certification and to support the Digital directorate's implementation of the "Digital Front Door" as an easier way for the wider organisation to interact with Digital services.

Examples of static reports which are available from the Ivanti system are shown in the attached Appendix.

A real time demonstration of the Ivanti system's reporting capabilities will take place during the DHIC committee meeting, the aim of which will be to show the range of reporting and performance monitoring that now exists and can be routinely shared within the organisation.

Recommendation:

The Committee is requested to:

NOTE the progress since the last update on the Ivanti service desk tool in relation to KPIs.

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	x
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	x

4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered *Please tick as relevant*									
Prevention		Long term		Integration		Collaboration	x	Involvement	x

Impact Assessment: *Please state yes or no for each category. If yes please provide further details.*
Risk: Yes – service non-availability is reduced through faster logging and response times
Safety: No
Financial: Yes – provides a more effective use of resources
Workforce: No
Legal: No
Reputational: Yes – enables the service to demonstrate performance against targets and to publish performance on a routine basis
Socio Economic: No
Equality and Health: No
Decarbonisation: No

Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

Mohamed,Sarah
08/02/2023 16:36:00

Date by Year

- 2022
- 2023

Date By Month

- March 2022
- April 2022
- May 2022
- June 2022
- July 2022
- August 2022
- September 2022
- October 2022
- November 2022
- December 2022

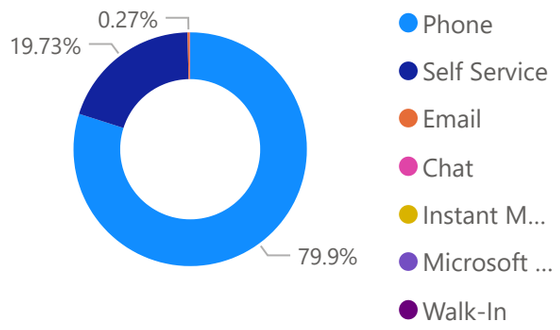
13640
Logged Incidents

11454
Closed Incidents

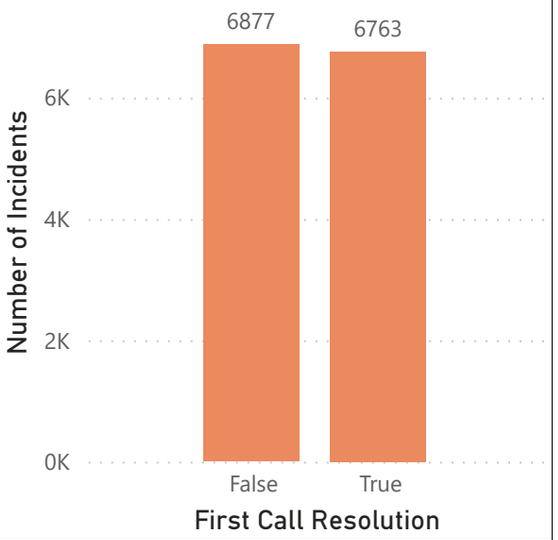
119.50
Average Duration (Hrs)

319
Older then 30 Days

Incidents by Source



First Call Resolution



OwnerTeam

- BI Applications and Warehouse
- Business Intelligence & Informatics
- Change Management
- EUD
- IM&T Security
- ISM Admin
- Maternity
- Network
- O365/Azure
- On-Call
- Paris
- PCIC
- Pharmacy
- PMS Development
- PMS Implementation
- PMS Implementation & Training
- PMS Support

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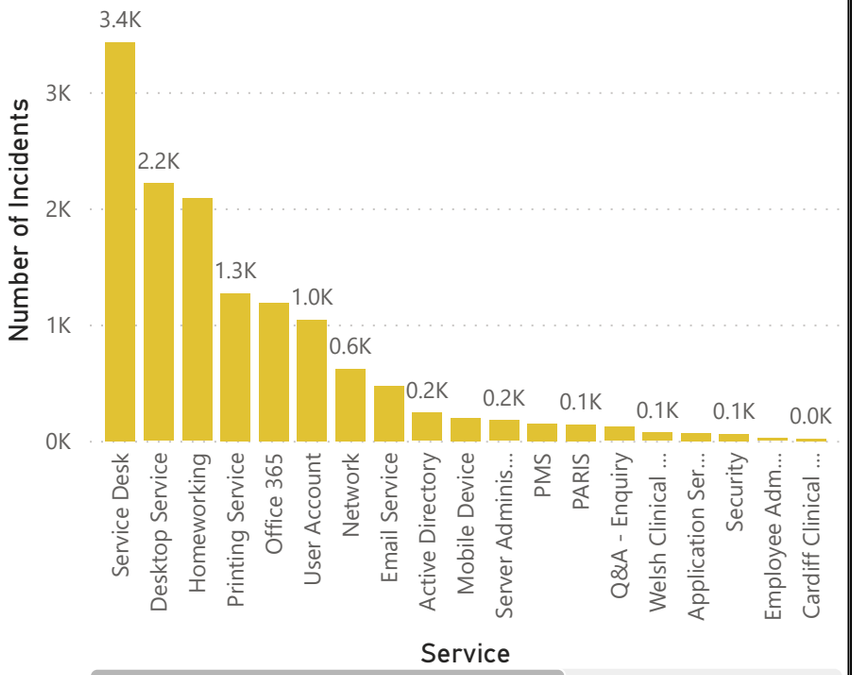
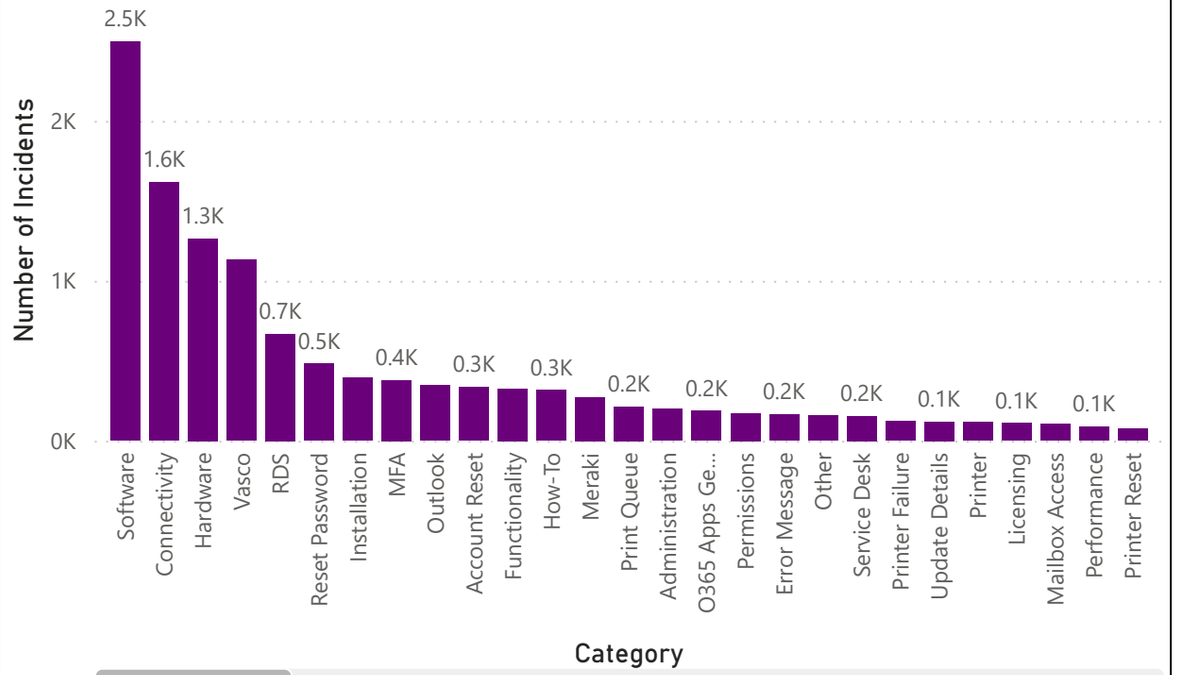
Incidents by Service



Incidents by Category



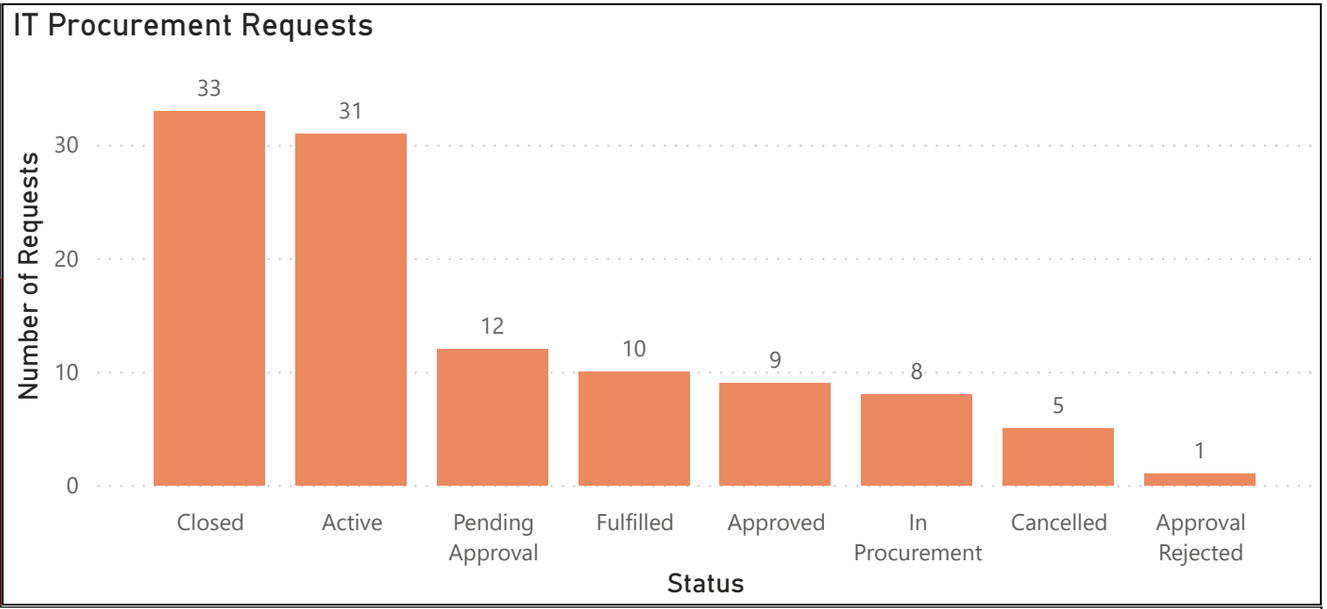
Created by Year

2023

Created by Month

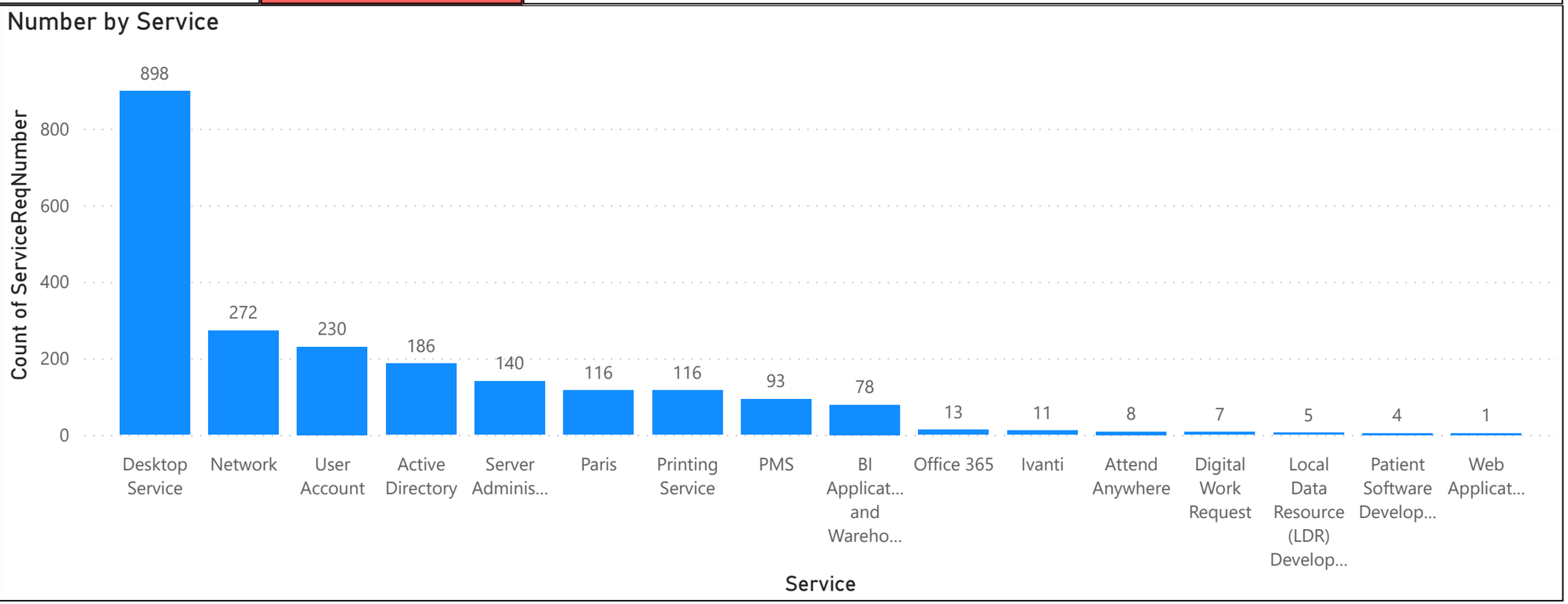
January 2023

2735	1898
Logged Requests	Closed Requests
2735	435
Average Duration (Hrs)	Older than 30 Days



OwnerTeam

- [ ] BI Applications and Warehouse
- [ ] Business Intelligence & Informatics
- [ ] Digital Work Request
- [ ] EUD
- [ ] IM&T Security
- [ ] ISM Admin
- [ ] Ivanti Admin
- [ ] LDR Team
- [ ] Network
- [ ] O365/Azure
- [ ] Paris
- [ ] Paris Training
- [ ] PCIC
- [ ] Pending Approval
- [ ] PMS Development
- [ ] PMS Implementation
- [ ] PMS Support



Date by Year

2023

Date By Month

January 2023

3032

Logged Incidents

2453

Closed Incidents

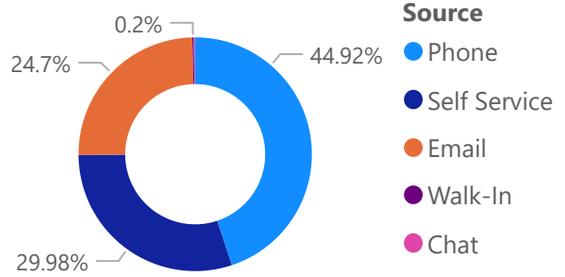
143.03

Average Duration (Hrs)

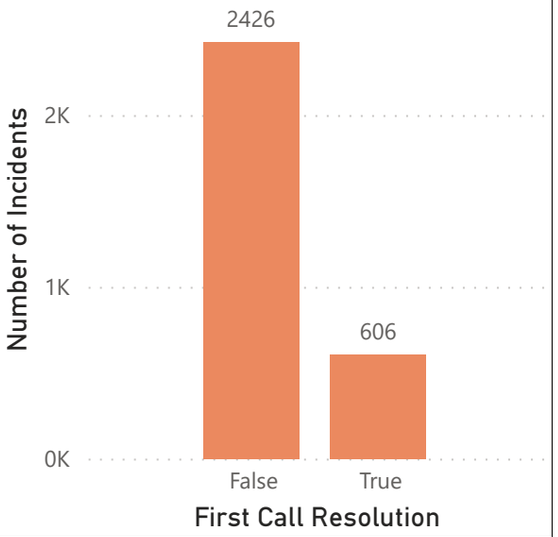
482

Older then 30 Days

Incidents by Source



First Call Resolution



OwnerTeam

- [ ] BI Applications and Warehouse
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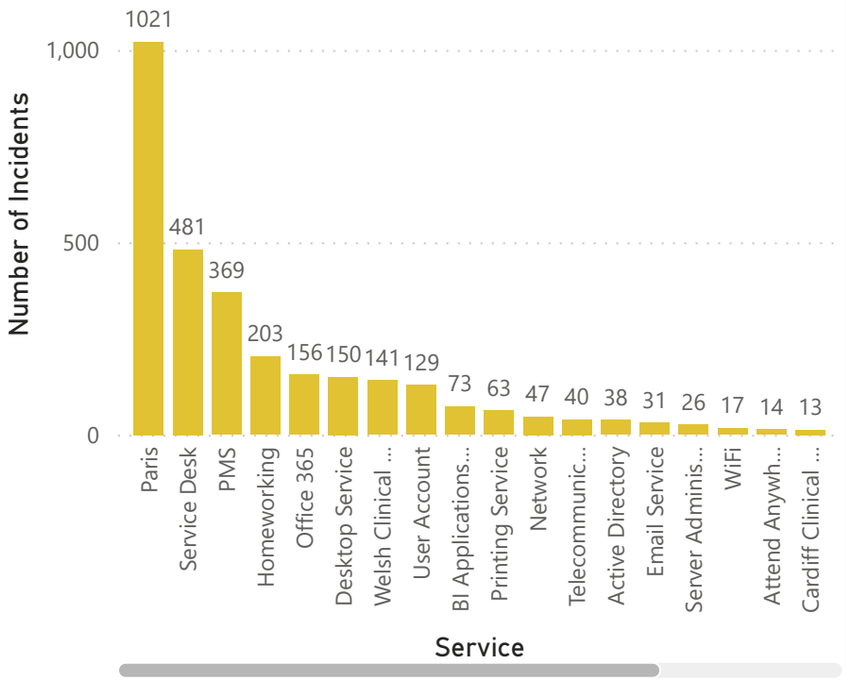
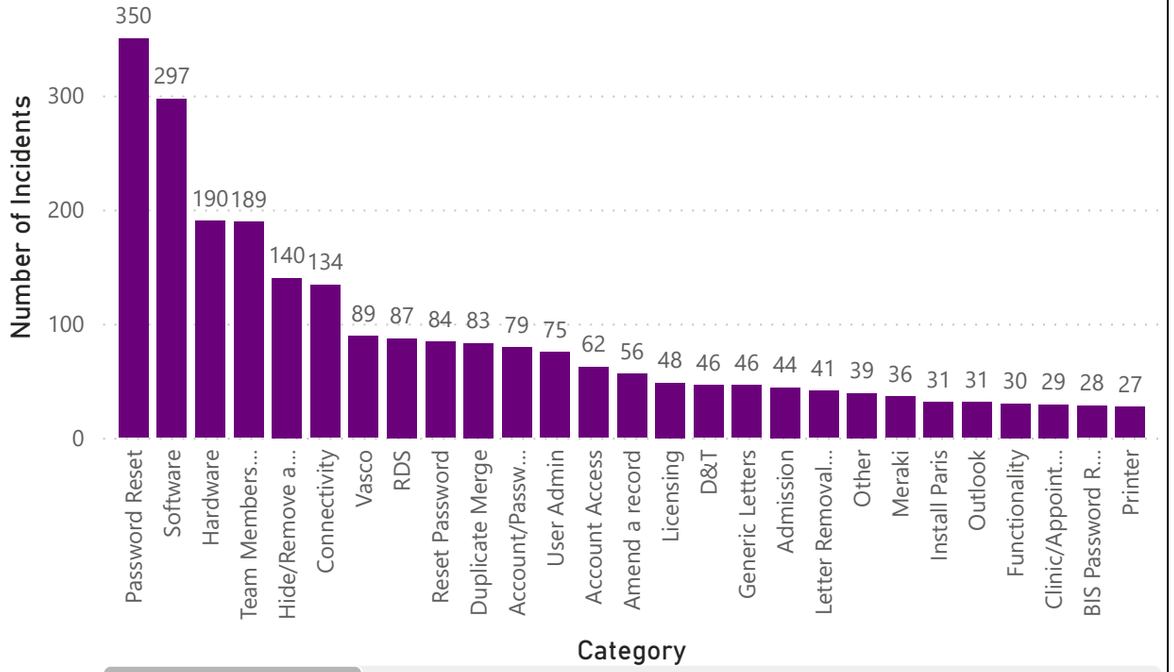
- [ ] EUD
- [ ] IM&T Security
- [ ] Network
- [ ] O365/Azure
- [ ] On-Call
- [ ] Paris
- [ ] Pharmacy
- [ ] PMS Development
- [ ] PMS Implementation
- [ ] PMS Support
- [ ] Server/Infrastructure
- [ ] Service Desk
- [ ] Telecoms
- [ ] Video Consultation
- [ ] WCCG

Incidents by Service



Incidents by Category



Created by Year

2023

Created by Month

January 2023

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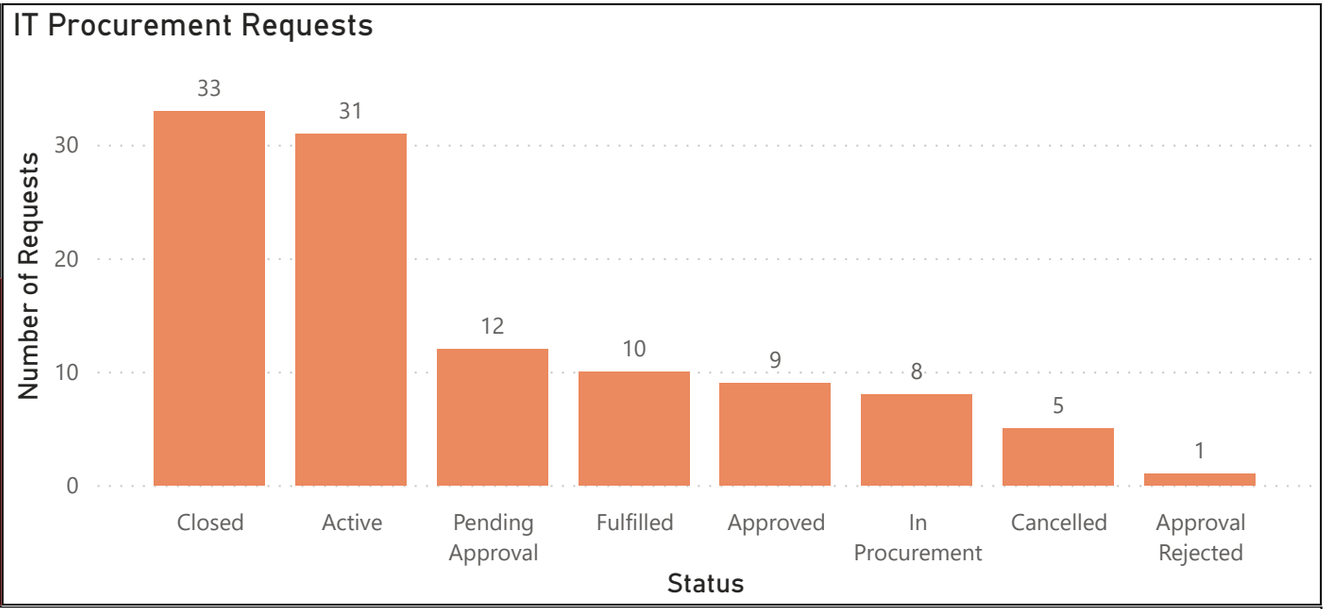

OwnerTeam

- [ ] BI Applications and Warehouse
- [ ] Business Intelligence & Informatics
- [ ] Digital Work Request
- [ ] EUD
- [ ] IM&T Security
- [ ] ISM Admin
- [ ] Ivanti Admin
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- [ ] O365/Azure
- [ ] Paris
- [ ] Paris Training
- [ ] PCIC
- [ ] Pending Approval
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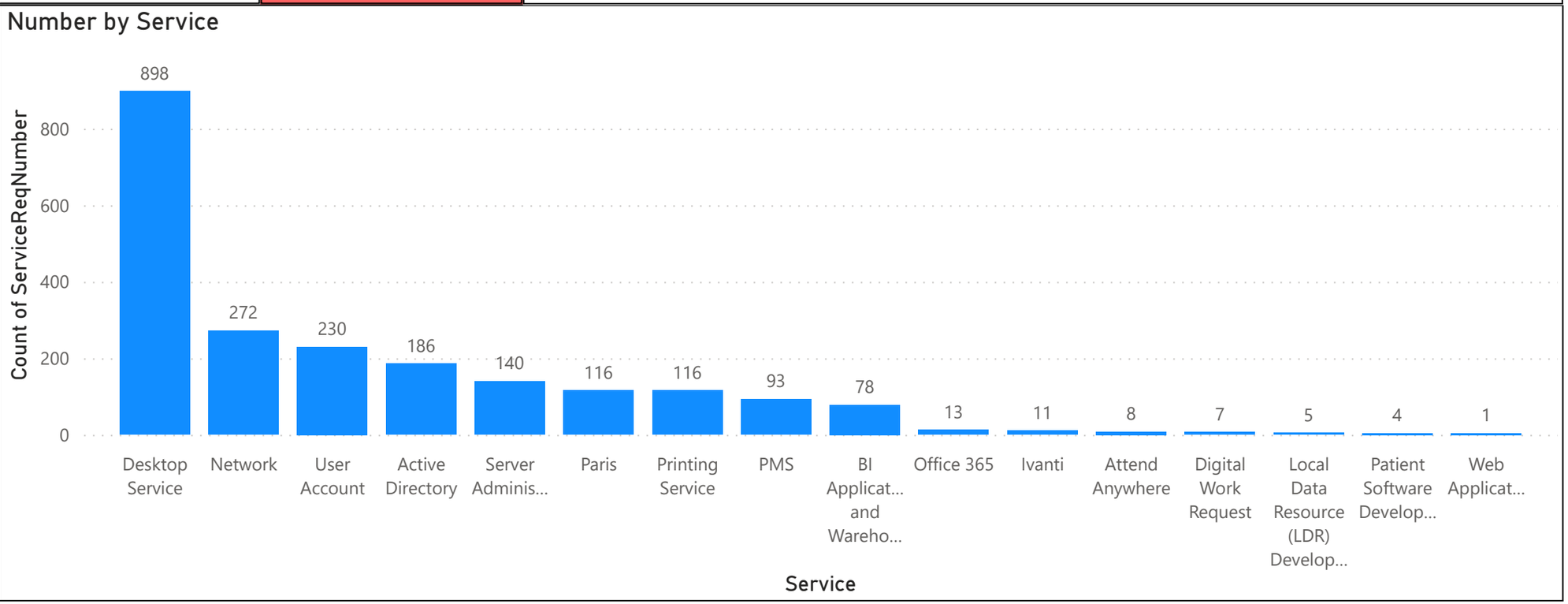
- [ ] PMS Implementation
- [ ] PMS Support



Report Title:	**Framework Policies, Procedures & Controls**				**Agenda Item no.**	**2.6**
Meeting:	**Digital and Health Intelligence Committee**		Public	x	**Meeting Date:**	**14th February 2023**
			Private			
Status *(please tick one only):*	Assurance	x	Approval		**Information**	
Lead Executive:	**Director of Digital and Health Intelligence**					
Report Author (Title):	**Head of Information Governance and Cyber Security Information Governance Manager**					

Main Report
Background and current situation:

There is a backlog of policies and procedures documents that are out-of-date, with a number being high-lighted in various audit reports recommending that they are reviewed and, if necessary, up-dated. In addition to this, there are a number of gaps in our standard operating procedures (SOPs)

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

Earlier this year, due to resource constraints, the UHB commissioned an external review of a wider range of digital policy documents to ensure consistency via standard document structure to include contents, naming structure and function. The aim was to achieve greater consistency of approach to make implementation easier and ensure alignment regarding the aim of these policies, which is to support the business and strategic objectives of the UHB.

The following procedures and guidance have been reviewed and updated:

- **Disposal of IT Equipment Guidance**

This document offers guidance on the security measures requiring consideration when removing data during decommissioning of IT equipment.

- **IM&T Equipment Procurement Guidance**

This guidance document applies to hardware or software procured from external suppliers, and is to ensure that appropriate IM&T hardware and software is purchased to match the needs of the UHB, and that installation is carried out in an efficient and effective manner.

- **IT Security Business Continuity Guidance**

The UHB must ensure the safety and security of all its UHB IT systems, software and, in particular, the network so as to produce a safe and secure environment in line with NHS and statutory policies and procedures. This document provides further information on IT business continuity to support the IT Security Policy and its related control documentation.

- **IT Security Code of Connection Guidance**

This guidance document applies to the baseline controls in place to allow the UHB to connect to an 'unknown' information system.

- **Security of Assets Guidance**

This document provides further information on security of assets to support the IT Security Policy and its related control documentation.

- **Software Licensing Procedure**

This document is required as the UHB needs to ensure it prevents the use of software that is either illegal or unauthorised, which would constitute risk to the UHB. The guidance provides further information as to the detail of the policy and its supporting information.

- **Use Your Own Device Procedure**

The UHB supports the use of personal devices such as smartphones and tablets to enable access to UHB information for work purposes. This procedure documents the requirements for UHB employees to use personal devices to access UHB data, on their own devices.

In addition to these, the following SOPs have been developed:

- **Cyber Incidence Response**

The objectives of the procedure are to: ensure that security incidents are dealt with appropriately and minimise any disruption to the organisation.

- **Patch and Vulnerability Management**

The objectives of the procedure are to ensure a consistent approach to the implementation of patches and dealing with identified vulnerabilities.

Recommendation:

The Board / Committee are requested to:

The Committee are requested to:

- Note progress

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	X	7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	X
4. Offer services that deliver the population health our citizens are entitled to expect	X	9. Reduce harm, waste and variation sustainably making best use of the resources available to us	X
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	X

Five Ways of Working (Sustainable Development Principles) considered
Please tick as relevant

Prevention	x	Long term		Integration		Collaboration	x	Involvement	x

Impact Assessment:
Please state yes or no for each category. If yes please provide further details.

Risk: Yes

Adherence to appropriate policies will further reduce risks

Safety: Yes/No
Financial: Yes/No
Workforce: Yes
Legal: Yes
Policies set out compliance against IT security and information governance requirements
Reputational: Yes
Socio Economic: Yes/No
Equality and Health: Yes/No
Decarbonisation: Yes/No

Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

Report Title:	Clinical Coding Performance Data			Agenda Item no.	2.7
Meeting:	Digital & Health Intelligence Committee	Public	X	Meeting Date:	14th February 2023
		Private			
Status *(please tick one only):*	Assurance		Approval		Information X
Lead Executive:	Director of Digital & Health Intelligence				
Report Author (Title):	Clinical Coding Manager				

Main Report
Background and current situation:

This report considers the performance of the Clinical Coding Department. Clinical Coding performance is measured against Welsh Government targets in terms of its completeness and accuracy.

All secondary care organisations are mandated to translate medical terms used in the inpatient setting that describe a patient's complaint, problem, diagnosis, treatment into a sequence of alphanumerical codes standardised by national guidelines. This permits easy storage, retrieval and analysis of the data for the purpose of, for example, patient-level costing, clinical research and audit, clinical benchmarking, case-mix management and statistics.

All Clinical Coding departments are mandated by Welsh Government to submit a minimum of 95% completeness within 30 days of discharge. Coding departments are audited each year by DHCW and accuracy is based on a requirement for a year-on-year improvement. The UHB is required to code approximately 160,000 finished consultant episodes (FCEs) per annum.

Audit Report

Provisional results of an external audit completed by DHCW in October 2022 are detailed below.

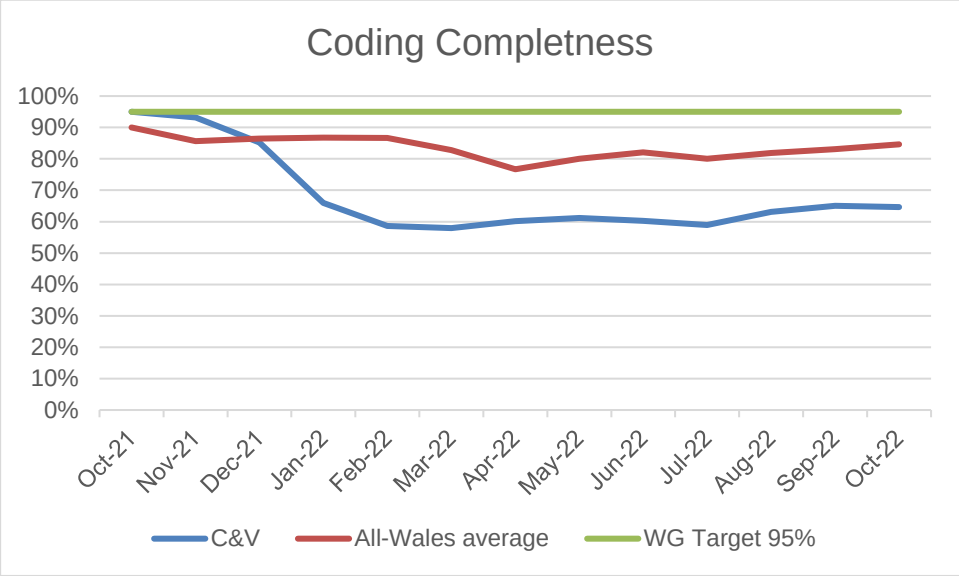
Code Type	Percentage Correct	Recommended Minimum %
Primary Diagnosis	94%	90%
Secondary Diagnosis	89%	80%
Primary Procedure	95%	90%
Secondary Procedure	95%	80%

Results show that in all accuracy measures, the UHB continues to exceed the WG minimum recommended targets. This report provides assurance to the Committee that the quality of coded data remains of a high standard.

The significant recommendations of the report focus on the need to improve the standards of clinical documentation and to ensure that coders have sufficient time to code each episode and update code assignment following the availability of histology results. The department has appropriate procedures in place, that have enabled success over recent years. However, the prolonged reduction in workforce inhibits its ability to enforce these and to achieve its targets.

Coding Completeness

In relation to monthly coding completeness, the following graph displays the UHB's performance against WG targets and the all Wales average.



The reduction in coding completeness is attributed to the continued staff losses (7 trained staff in the last 12 months). The department has recently appointed four trainee clinical coders, but continue to operate at 6.4 WTEs (expected to rise to 7.4) below the permanent establishment. The UHB continues to lose staff to organisations which are supported by electronic source documentation that offers home working. Many of these organisations also offer either a higher banding and/or recruitment and retention bonuses. It is envisaged that this will continue to impact coding completion for as long as the UHB continues to significantly rely on paper source documentation.

The Clinical Coding department has a significant underspend. Finance have advised that the savings from coding this financial year will reach approximately £136k. The department has outlined a recovery plan which has now been approved at an estimated cost of £96,480 (excl. VAT). This will include temporary use of experienced qualified contract coders, a temporary dedicated trainer to support influx of trainees and a UHB funded clinical coding standards course for the new trainees

The Clinical Coding department continues to prioritise the coding of:

- all episodes relating to a positive COVID-19 result (these are required to be coded within one week of discharge by Welsh Health Circular WHC/2022/009, appendix B).
- all episodes for deceased patients (which have an adverse effect on the UHB's RAMI if they remain uncoded).
- all episodes which Finance advise would prevent the UHB being able to recover funds if they remain uncoded (e.g. one small cohort of patients equated to £9k per uncoded episode).

The Clinical Coding department also continues to maintain a service to all clinical areas.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

Coding accuracy continues to exceeded WG targets across both diagnosis and procedure. The draft report is attached as Appendix A.

Due to continued staff shortages and difficulty in recruiting and retaining staff, coding completeness has dropped consistently with the position across Wales. The department has enlisted contract coders to provide support until permanent staff are appointed and fully trained.

A proposed recovery plan has been accepted and is due to begin being implemented this financial year.

Recommendation:

The Board / Committee are requested to:

- Note the performance of the UHB's Clinical Coding Department.

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people		7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered
Please tick as relevant

Prevention		Long term		Integration		Collaboration		Involvement	

Impact Assessment:
Please state yes or no for each category. If yes please provide further details.

Risk: No

Safety: No

Financial: No

Workforce: Yes

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Legal: No

Reputational: No

Socio Economic: No
Equality and Health: No
Decarbonisation: No

Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

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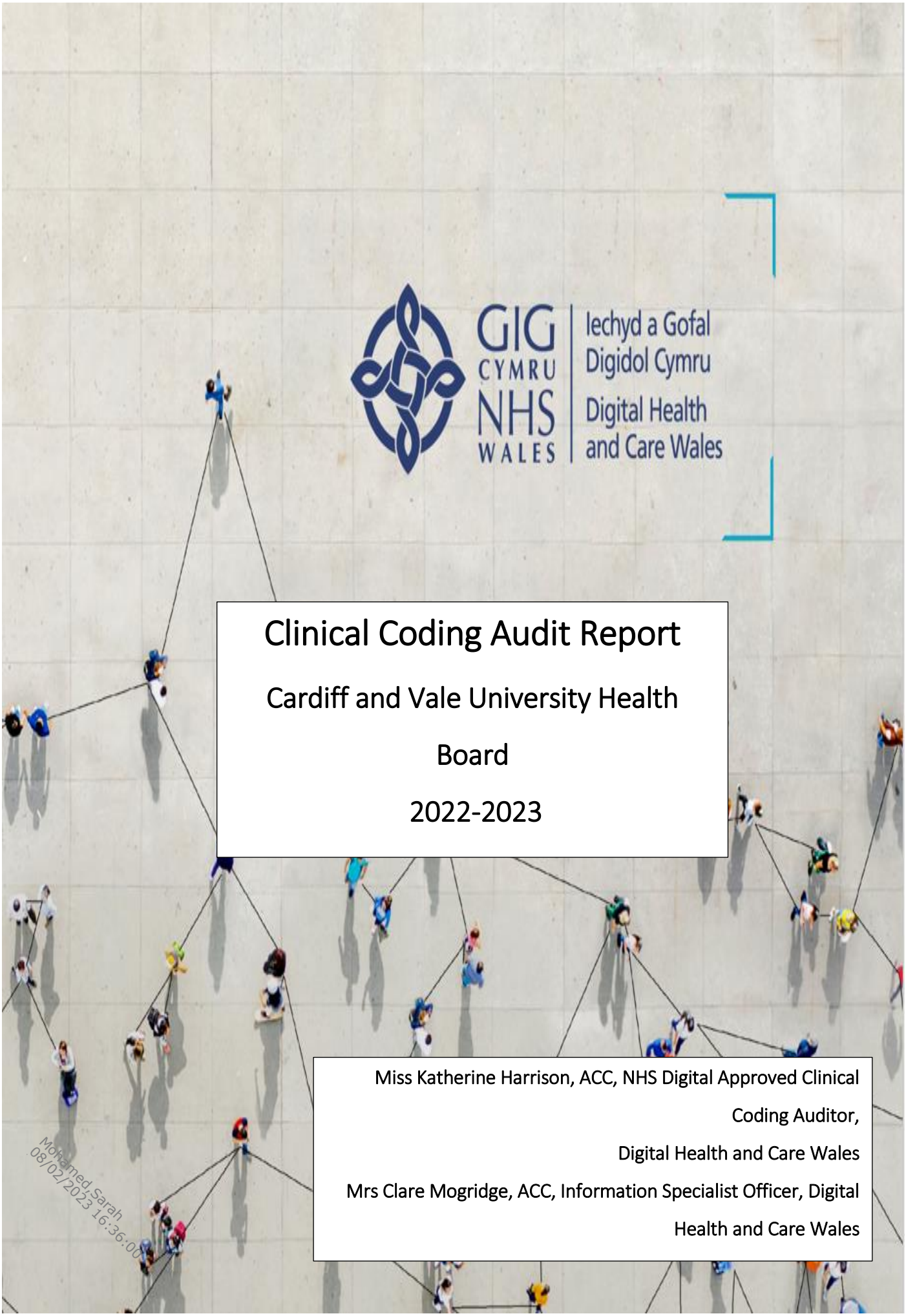


Clinical Coding Audit Report

Cardiff and Vale University Health Board

2022-2023

Miss Katherine Harrison, ACC, NHS Digital Approved Clinical Coding Auditor,
Digital Health and Care Wales
Mrs Clare Mogridge, ACC, Information Specialist Officer, Digital Health and Care Wales

CONTENTS

Introduction

1.1 The Admitted Patient Care data set (APC ds), and the clinically coded data contained within, is arguably the single most important source of management information in use within NHS Wales. The availability of timely, complete, accurately coded APC data are an essential pre-requisite for numerous current and emerging decision support processes.

1.2 Welsh Local Health Boards (LHBs) and Velindre NHS Trust are mandated to clinically code the finished consultant episodes (FCEs) for every patient admitted to a Welsh LHB. Organisations are required to accurately code information relating to all diagnoses and procedures relevant to each individual episode of care experienced by a patient.

1.3 Welsh LHBs and Velindre NHS Trust are currently monitored against a Welsh Government (WG) performance measure for coding completeness. This target is that of 95% of all FCE's are clinically coded within one month of the episode end date.

1.4 Clinical coded data are used for a variety of uses and it impacts on a number of areas including:

- Healthcare planning (including service reconfiguration);
- Performance management (notably the production of Tier 1 and other WG performance indicators and measures);
- Health needs assessment;
- Evaluation of treatment and outcome analysis;
- Benchmarking;
- Chronic disease management (and the linkage of datasets);
- Provision of information for research;
- The production of official statistics and ad-hoc requests – Ministerial, Assembly Questions, Freedom of Information etc.;
- Financial costing and resource utilisation mapping;
- Identification of at risk populations;
- Identification of frequency and occurrence of disease;
- The monitoring of (often high cost) services provided by the Welsh Health Specialised Services Committee (WHSSC);
- Clinical coding data is central to a range of national information initiatives, such as the annual financial costing process and patient-level costing;

1.5 It is current WG policy for healthcare data to be made more readily available to the general public, media etc. under its 'transparency' agenda. Where clinical coding information is being shared, this will further raise the importance of that data being accurate and the need for the Service to be assured that this is the case.

1.6 It is a therefore a requirement that clinical coded data are accurate, consistent, complete and coded in a timely fashion.

1.7 Clinical coding audit is currently the only means by which it is possible to assure the accuracy of the clinical codes assigned when using the full medical record.

1.8 This report outlines the findings and recommendations of Digital Health and Care Wales Clinical Classifications & Terminologies Standards Team's audit of clinical coding accuracy at Cardiff and Vale University Local Health Board. The audit was carried out 10th October 2022 – 21st October 2022 and was undertaken by lead auditor; Miss Katherine Harrison, ACC, National Clinical Coding Audit Programme Lead and second auditor; Mrs Clare Mogridge, ACC, Information Specialist Officer, Digital Health and Care Wales.

2 Background

2.1 Cardiff and Vale UHB have two sites in which coders are based. The Clinical Coding department is based at the University Hospital of Wales and the University Hospital Llandough.

2.2 Clinical Coding staff previously coded according to specialty. However, since the SARS-Cov-2 Pandemic and due to staff shortages, coders code all specialties with the exception of trainee coders.

2.3 The Clinical Coding department site under the Digital and Health intelligence directorate within the Cardiff and Vale UHB.

2.4 Mandatory clinical coding training is provided by the D&A Consultancy, a commercial company who supply clinical coding training courses on behalf of the Clinical Classification Service, Digital Health and Care Wales.

2.5 The clinical coders at Cardiff and Vale make use of the Medicode encoding software when assigning classification codes.

2.6 The recommendations from the previous audit report were:

2.7 The clinical coding staff at Cardiff and Vale University Health Board should be congratulated on the results of this audit, especially considering the difficulties encountered during the last 24 months due to the SARS-CoV-2 pandemic.

2.8 The clinical coding staff at Cardiff and Vale University Health Board are advised that they should continue to attend regular training courses to retain and refresh their skills. The clinical coding managers at Cardiff and Vale University Health Board are advised to continue to support and encourage their clinical coding staff to attain the National Clinical Coding Qualification.

2.9 To further improve the quality of the clinical coding data the clinical coders at Cardiff and Vale UHB are advised to ensure they take enough time to abstract the information required to accurately assign classification codes and ensure they constantly follow the full four step coding process and follow current clinical coding rules and standards.

2.10 The clinical coding staff at Cardiff and Vale UHB must ensure that they check the histology results and when required revise the ICD-10 code previously assigned.

2.11 The clinical coding manager at Cardiff and Vale UHB are advised to investigate the reason behind the staff losses at the clinical coding department at Cardiff and Vale UHB and endeavour to replace the lost staff.

2.12 The clinical coding manager at Cardiff and Vale UHB is advised to revisit the deficiencies in the documentation provided on the procedure sheet for endoscopies, further discussions with clinicians and the persons responsible for the electronic form are advised with the purpose of adding a primary diagnosis field to this form.

3 Aims

3.1 The aim of this audit was to assess the accuracy of the clinically coded data produced by Cardiff and Vale ULHB by comparing the codes assigned by the Clinical Coding Department against national clinical coding standards.

3.2 This report aims to provide a benchmark that can be used by the Clinical Coding Department within Cardiff and Vale ULHB, to identify areas for improvement within the organisation and aid in the identification and planning of future training needs. Conclusions and recommendations based on areas of both good and poor practice found are provided to achieve this.

3.3 It also aims to evaluate the quality of the source documentation used by the coders and the local policies and procedures at Cardiff and Vale ULHB.

4 Objectives

4.1 The objectives for the audit include a range of measures.

4.2 To assess the clinical coding data against national clinical coding standards;

4.3 To identify and report areas of good and bad practice;

4.4 To review and assess the accuracy of the source documentation used for clinical coding;

4.5 To assess the level of clinical involvement with the Clinical Coding Department and to what degree this impacts on the coding process and coding accuracy;

4.6 To make recommendations designed to support future improve in the accuracy of clinically coded data within the UHB;

4.7 To highlight training issues within the department.

4.8 The last external audit was carried out in February -March 2022 by the Digital Health and Care Wales Clinical Classifications & Terminologies Standards Team.

5 Methodology

5.1 The recommended minimum percentage of correct codes are:

- 90% for Primary Diagnosis and Primary Procedure;
- 80% for Secondary Diagnosis and Secondary Procedures.

5.2 The audit was conducted according to the directives in the Welsh Clinical Coding Audit Methodology, and the current NHS Digital Clinical Coding Audit Methodology 2022/2023 V16.0. A brief summary is given below, but the full methodology is available at:

https://nhswales365.sharepoint.com/sites/DHC_CCT/SharedDocuments/Forms/AllItems.aspx?id=%2Fsites%2FDHC_CCT%2FShared Documents%2FClinical Coding Audit Methodology 2022-23%2Epdf&parent=%2Fsites%2FDHC_CCT%2FShared Documents

5.3 The sample audited was 324 Finished Consultant Episodes (FCEs), which were randomly generated from the activity data held within the Patient Episode Database for Wales (PEDW).

5.4 The sample audited was selected from episodes from the month of June 2022, 3 full months previous to the date of the audit, as set out below:

Figure I Period Examined

Site	Period Start	Period End
The UHW Heath Hospital	01/06/2022	30/06/2022
Llandough Hospital	01/06/2022	30/06/2022

5.5 The locally assigned classification codes were audited against national clinical coding standards using the information available in the patients' case notes and relevant electronic systems (e.g. RADIS). Full details on the Clinical Coding National Standards are available at:

Current UK Clinical Coding National Standards (sharepoint.com)

5.6 The auditors then assessed the locally coded data against the National Clinical Coding Standards and the Welsh Clinical Coding Standards using ICD-10 5th Edition and OPCS 4.9 classifications. Codes were audited as one of 4 types:

- Primary Diagnosis codes (i.e. the main condition treated);

- Secondary Diagnosis codes (including External Cause Codes and Morphology Codes);
- Primary Procedure codes;
- Secondary Procedure codes (including Chapter Z site codes).

5.6 A total of 324 episodes were examined.

5.7 A Data Quality audit of the episodes was also undertaken, examining the following data items that are entered onto Welsh Pas (WPAS):

Admission type,

Admission dates,

Episode start and finish dates,

Treatment specialty code,

Treatment specialty description, and

Patient class.

These data items are not entered onto the system by the coders at Cardiff and Vale UHB but were reviewed as part of the Audit Methodology.

Unfortunately, due to access to electronic systems the auditors could not perform the above Data quality checks on all of the episodes audited.

6 Findings

6.7 Total Percentages

6.7.1 The percentages of correctly assigned codes are given below:

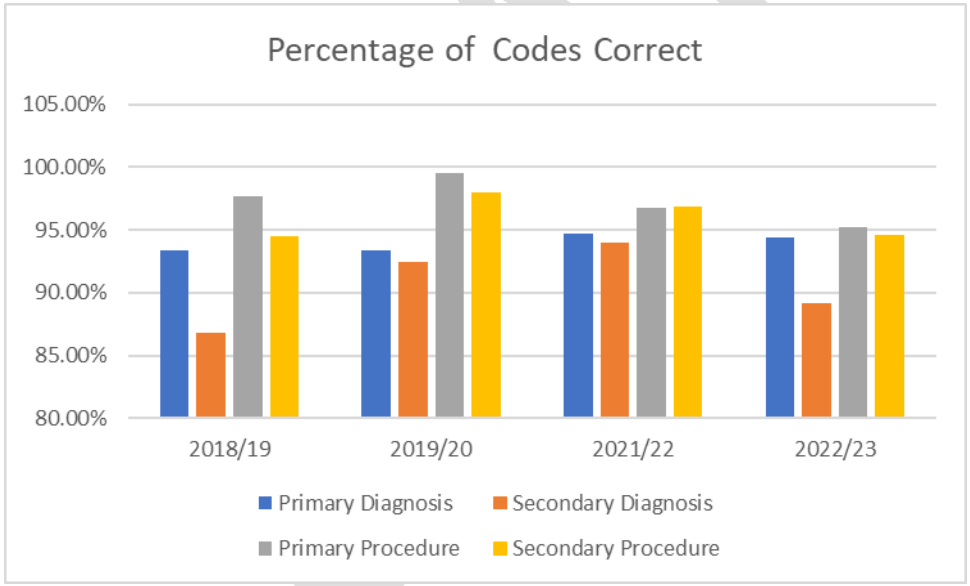
Figure II Percentage of Codes Correctly Assigned

Code Type	Total Number of Codes	Total Number of Correct Codes	Percentage Correct
Primary Diagnosis	324	306	94.44%
Secondary Diagnosis	1529	1363	89.14%
Primary Procedure	230	219	95.22%
Secondary Procedure	803	760	94.65%

6.7.2 The percentage of codes that were correct was above the recommended level in all 4 areas.

6.7.3 It should be noted that of the 324 episodes examined, 196 (60.49%), contained no errors in any position. A breakdown of the error types assigned is given below.

6.7.4 The table below shows these results compared to previous audits:



Please note there are no figures available for financial year 2020-2021. This is due to the cancellation of the Annual National Clinical Coding Audit Programme because of legal restrictions imposed by the Welsh Assembly Government in order to contain the SARS-CoV-2 (COVID 19) pandemic.

6.8 Unsafe to Audit (UTA)

There were 28 episodes which were marked as UTA (7.95% of the total number of sets of case notes looked at). As per the methodology described above, they were removed from the audit and replaced.

6.9 Primary Diagnosis Codes

6.9.1 The primary diagnosis was correct in 94.44% of the episodes audited (306 of the 324 primary diagnoses). A breakdown of the errors in primary diagnoses by their associated error types is given below:

Figure III Primary Diagnosis Errors by Error Type

Error Type	Specific Error Key	Number of Errors	Percentage of FCEs with Error
Coder Error	PD3 PRIMARY DIAGNOSIS INCORRECT AT THREE CHARACTER LEVEL	7	2.16%
	PD4 PRIMARY DIAGNOSIS INCORRECT AT FOUR CHARACTER LEVEL	5	1.54%
	PD5 PRIMARY DIAGNOSIS INCORRECT AT FIVE CHARACTER LEVEL	1	0.31%
	PDO PRIMARY DIAGNOSIS OMITTED	1	0.31%
Non-Coder Error	PDI INFORMATION AVAILABLE AT THE TIME OF AUDIT NOT AVAILABLE AT THE TIME OF CODING	2	0.62%
Documentation Issues	PDD PRIMARY DIAGNOSIS DOCUMENTATION ISSUE	2	0.62%

6.10 Secondary Diagnosis Codes Including External Cause Codes

6.10.1 The secondary diagnoses codes were 89.14% correct (1363 out of the total 1529 secondary diagnoses). A breakdown of the errors by their associated error types is given below:

Figure IV Secondary Diagnosis Errors by Error Key

Error Type	Specific Error Key	Number of Errors	Percentage of FCEs with Error
Coder Error	SD3 SECONDARY DIAGNOSIS INCORRECT AT THREE CHARACTER LEVEL	19	1.24%
	SD4 SECONDARY DIAGNOSIS INCORRECT AT FOUR CHARACTER LEVEL	17	1.11%
	SD5 SECONDARY DIAGNOSIS INCORRECT AT FIVE CHARACTER LEVEL	3	0.20%
	SDISI SECONDARY DIAGNOSIS INCORRECTLY SEQUENCED AND INCORRECT – ANY CHARACTER LEVEL	1	0.07%
	SDNR SECONDARY DIAGNOSIS NOT RELEVANT	64	-
	SDO SECONDARY DIAGNOSIS OMITTED	112	7.33%
	EXCI3 EXTERNAL CAUSE CODE INCORRECT AT	1	0.07%
	EXCO EXTERNAL CAUSE CODE OMITTED	3	0.20%
	EXCNR EXTERNAL CAUSE CODE NOT RELEVANT	2	-
Non-Coder Error	SDI INFORMATION AVAILABLE AT THE TIME OF AUDIT NOT AVAILABLE AT THE TIME OF CODING	8	0.52%
Documentation Issues	SDD SECONDARY DIAGNOSIS DOCUMENTATION ISSUE	2	0.13%

6.11 Primary Procedure Codes

6.11.1 There were 230 primary procedure codes assigned. The primary procedure was correct in 95.22% of the episodes audited (219 of the 230 primary procedures). A breakdown of the errors by their associated error types are shown below:

Figure V Primary Procedure Errors by Error Key

Error Type	Specific Error Key	Number of Errors	Percentage of FCEs with Error
Coder Error	PP3 PRIMARY PROCEDURE INCORRECT AT THREE CHARACTER LEVEL	5	2.17%
	PP4 PRIMARY PROCEDURE INCORRECT AT FOUR CHARACTER LEVEL	1	0.43%
	PPNR PRIMARY PROCEDURE NOT RELEVANT	1	-
	PPO PRIMARY PROCEDURE OMITTED	2	0.87%
Non-Coder Error	PPI INFORMATION AVAILABLE AT THE TIME OF AUDIT NOT AVAILABLE AT THE TIME OF CODING	1	0.43%
Documentation Issues	PPD PRIMARY PROCEDURE DOCUMENTATION ISSUE	2	0.87%

6.12 Secondary Procedure Codes

6.12.1 There were 803 secondary procedures codes assigned. These secondary procedure codes were 94.65% correct (760 out of the 803 secondary procedures). A breakdown of the errors by their associated error types are shown below:

Figure VI Secondary Procedure Errors by Error Key

Error Type	Specific Error Key	Number of Errors	Percentage of FCEs with Error
	SP4 SECONDARY PROCEDURE INCORRECT AT FOUR CHARACTER LEVEL	1	0.12%
	SPIS SECONDARY PROCEDURE INCORRECTLY SEQUENCED	4	0.50%
	SPNR SECONDARY PROCEDURE NOT RELEVANT	2	-
	SPO SECONDARY PROCEDURE OMITTED	31	3.86%
Non-Coder Error	SPI INFORMATION AVAILABLE AT THE TIME OF AUDIT NOT AVAILABLE AT THE TIME OF CODING	4	0.50%
Documentation Issues	SPD SECONDARY PROCEDURE DOCUMENTATION ISSUE	3	0.37%

6.13 Health Record Findings

6.13.1 The auditors made the following observations concerning the source documentation used by the Clinical Coding Department Cardiff and Vale ULHB.

6.13.2 The 'UTA Error' key was assigned 28 times out of the 352 episodes examine were not safe to be audited due to the information relating to the episode of care not being present in the health record. This represents 7.95% of the overall episodes examined. This shows an increase of 5.99% from 6 UTA error keys assigned out of 306 episodes (1.96%) in the previous audit.

6.13.3 Some difficulties with availability of and retrieval of health records for the audit were experienced, especially for the University Hospital Llandough health records. therefore only 148 instead of the 165 planned episodes were audited for the University Hospital of Llandough. To mitigate this, extra day case endoscopy and haematology episodes for the University Hospital of Wales available from electronic only sources were audited from the month of June whish were not on the auditor's pulling list. Nevertheless, unfortunately, it was not possible to reach the 330 episodes planned and 326 episodes were audited.

6.13.4 Obstetric antenatal day case admissions are coded initially from blue forms which contain little clinical information about the patient's main condition treated. Once the baby is delivered these antenatal episodes are then updated by the coding staff when they have access to the patients 'full maternity record.

6.13.5 Haematology Day case episodes are also coded from forms. Coders also use information available from within the Welsh Clinical Portal to code these episodes.

6.13.6 The above issues were represented across the entire sample of case notes examined and appeared to be representative of the general condition of the case notes.

6.14 OTHER ADDITIONAL FINDINGS

6.14.1 Due to difficulties with accessing the electronic systems and Coding episode printouts not showing the specialty on each occasion, it was not possible to perform the planned Data Quality audit for each episode.

6.14.2 However, there was one episode where a potential Data Quality error was found with the Data Quality audit where the specialty was the "Clinical Pharmacology" specialty. The episode details were passed to the Clinical Coding Manager to check/update.

6.14.3 The Clinical Coding Manager informed the auditors that there was an issue with the functionality of the Medicode Management Module that the Clinical Coding Department use which resulted in the Manager being unable to print lists as part of their process of updating incomplete histology episodes. The Clinical Coding Manager had made efforts to arrange for this resolved by contacted the company. Yet, despite this, at the time of the audit the issue had not been resolved.

6.14.4 At the time of the audit, the Clinical Coding Department had 6 vacancies but had recruited two Assistant Coding Managers and two trainee clinical coders since the last audit earlier in February-March 2022.

7 Conclusions

7.1 The overall results of this audit confirm that the clinical coding staff at Cardiff and Vale UHB have achieved above the recommended accuracy for primary diagnosis, secondary diagnosis, primary procedure, and secondary procedure coding.

7.2 Compared to the previous audit results, the number of episodes that were completely correct has decreased by 11.33%. This could be due to coders not abstracting all the relevant information from the source documents.

7.3 There were 112 (67.47%) of the 160 secondary diagnosis errors which were omissions. This is a sign of clinical coders rushing the clinical coding process. The high number of vacancies within the clinical coding department at Cardiff and Vale UHB is likely to have had an impact on this.

7.4 However, since the last audit in February-March 2022, the Clinical Coding Manager has recruited 2 new assistant Managers and 2 new trainee clinical coders which is positive.

7.5 Due to the issues with printing lists of incomplete episodes awaiting histology reports from the encoding software, the audit has shown that this has likely had an impact on the accuracy of these episodes.

7.6 There has been an increase in the number of episodes that are 'UTA' – unsafe to audit compared to the previous audit. This represents a 5.99% rise in the use of the 'UTA' error key from 6 (1.96%) to 28 (7.95%). This could affect the completeness of coding due to the lack of information pertaining to the relevant episodes of care contained in the health records.

8 Recommendations

8.1 The Clinical Coding staff at Cardiff and Vale UHB should be commended for achieving above the recommended accuracy percentages for primary diagnosis, secondary diagnosis, primary procedure, and secondary procedure.

8.2 The Clinical Coding Manager at Cardiff and Vale UHB should implement a robust process to ensure that coders check the histology results and when required revise the ICD-10 code previously assigned.

8.3 It is recommended that Clinical Coding staff take adequate time to code all ICD-10 and OPCS 4.9 codes with reference to Clinical Coding standards, abstracting all clinical information pertinent to the episodes of care at Cardiff and Vale Health Board from both digital and paper health records.

8.4 The auditors advise the clinical coders at Cardiff and Vale UHB to continue to attend and complete regular training and e-learning courses to refresh and retain their coding skills.

8.5 The Clinical Coding Management team are advised to continue to work with the managers of the Medical Records departments to ensure improvement of the standard of documentation with the patient health records.

8.6 The Clinical Coding Managers at Cardiff and Vale UHB are advised to continue to encourage and support their clinical coding staff to attain the National Clinical Coding Qualification (NCCQ).

WHC/2022/009

WELSH HEALTH CIRCULAR

Llywodraeth Cymru
Welsh Government

Issue Date: April 2022

STATUS: COMPLIANCE / ACTION

CATEGORY:
PERFORMANCE / DELIVERY

Title: Prioritisation of COVID-19 patient episodes by NHS Wales Clinical Coding Departments

Date of Expiry / Review: 28/02/2023

For Action by:

Clinical Coding Managers of Local Health Boards and NHS Trusts

Action required by: (insert date)

As soon as possible.

Sender:
Ifan Evans, Director Technology Digital & Transformation

HSSG Welsh Government Contact(s):

Rebecca Hazzard, Digital Policy and Delivery Team, Technology, Digital & Transformation, Health and Social Services Department, rebecca.hazzard@gov.wales , 03000 253250

Lisa Walters, Digital Policy and Delivery Team, Technology, Digital & Transformation, Health and Social Services Department, lisa.walters@gov.wales , 03000 256682

Enclosure(s): None

Clinical Coding of COVID-19 in Admitted Patient Care data set (APC ds) Episodes

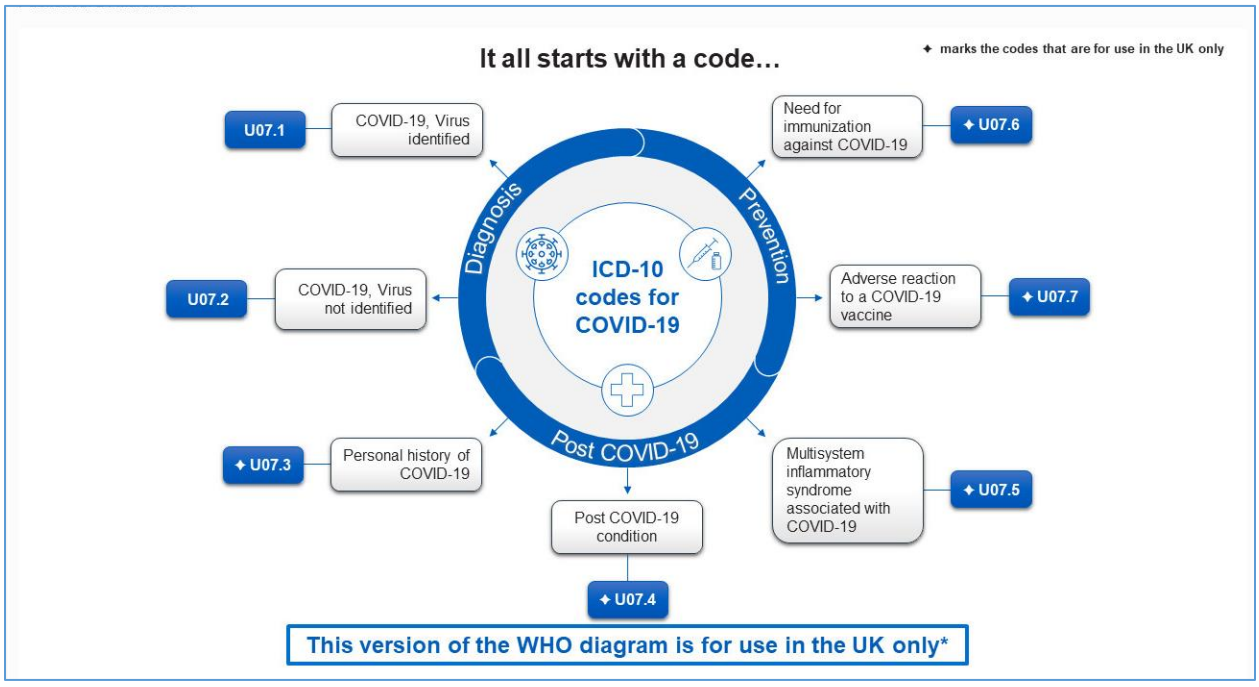
Current Position

The clinical coding service in Wales is mandated to assign classifications codes to all inpatient Finished Consultant Episodes (FCEs). These codes record both clinical conditions affecting the patient and surgical/medical procedures undertaken during the episode.

The classification currently in use within NHS Wales for the recording of patient diagnoses for secondary uses is the 'International Statistical Classification of Diseases and related Health Problems 10th revision, 5th edition (2016)'; commonly referred to as 'ICD-10'.

Clinically coded data is an important source of management information within NHS Wales, and the provision of timely, accurate data supports decision-making processes.

Following the outbreak of the COVID-19 pandemic in early 2020 the WHO released additional specific codes to allow the identification of COVID-19 as a condition in patient records and within data sets using classifications coding:



Additionally, specific information/coding standards were implemented regarding the sequencing of classifications codes recording COVID-19, to show how COVID-19 relates to other conditions. The intention was to be able to identify the following information:

- Where COVID-19 is the main condition treated or investigated during an episode of care
- What symptoms of COVID-19 inpatients are displaying
- Where COVID-19 is the cause of other conditions (such as pneumonia)
- Ongoing conditions related to a previous COVID-19 infection

Given the rapidly changing nature of the situation during the pandemic, all information on COVID-19 cases needs to be recorded as promptly and accurately as possible. To support this, in the 2020/21 financial year the frequency of submission of APC ds Episodes data was increased from monthly to weekly to ensure data relating to inpatients with COVID-19 was available as soon after patient discharge as possible.

Due to the need for COVID-19 information to be as real-time as possible all NHS Wales Clinical Coding departments are asked to ensure that processes are put in place as soon as possible to ensure the following:

- All FCEs for patients with COVID-19 are identified upon discharge and prioritised by the Local Health Board/NHS Trust for the assignment of codes

- Such episodes of care are coded within the first week following discharge to allow for an accurate view of COVID-19 inpatient data on a weekly basis

- Each Local Health Board and NHS Trust to report their current numbers and percentages of uncoded COVID-19 and non COVID-19 episodes to Welsh Government (HSS.Performance@gov.wales) on the last day of each month.

Report Title:	**Board Assurance Framework** – Digital and Health Intelligence			Agenda Item no.	2.8
Meeting:	Digital and Health Intelligence Committee	Public	x	Meeting Date:	14th February 2023
		Private			
Status *(please tick one only):*	Assurance	x	Approval	Information	
Lead Executive:	Interim Director of Corporate Governance				
Report Author (Title):	Director of Corporate Governance				

Main Report
Background and current situation:

The Board Assurance Framework (BAF) contains one risk 15. Digital Strategy and Road Map which falls within the remit of the Digital and Health Intelligence Committee.

This risk within the full BAF was last reported to the Board at the end of January 2023 and confirmed to be the risks to our Strategic Objectives.

The purpose of discussion at the Digital and Health Intelligence Committee is to provide further assurance to the Board that this risk is being appropriately managed or mitigated, that controls where identified are working and that there are appropriate assurances on the controls. Where there are gaps in either controls or assurances there should be actions in place.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

The Board Assurance Framework is presented to each meeting of the Board after discussion with the relevant Executive Director. It provides the Board with information on the key risks impacting upon the delivery of the Strategic Objectives of Cardiff and Vale University Health Board.

The attached Digital Strategy and Road Map risk is a key risk to the achievement of the organisation's Strategic Objectives and was added to the BAF at the Board Meeting in November 2022.

Recommendation:

The Digital and Health Intelligence Committee is asked to:

(a) Review the attached risks in relation to the Digital Strategy and Road Map
(b) Provide assurance to the Board on 30th March 2023 on the management /mitigation of these risks.

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

1. Reduce health inequalities	x	6. Have a planned care system where demand and capacity are in balance	x
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	

4.	Offer services that deliver the population health our citizens are entitled to expect	x	9.	Reduce harm, waste and variation sustainably making best use of the resources available to us	x
5.	Have an unplanned (emergency) care system that provides the right care, in the right place, first time	x	10.	Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered
Please tick as relevant

Prevention	x	Long term		Integration		Collaboration		Involvement	

Impact Assessment:
Please state yes or no for each category. If yes please provide further details.

Risk: Yes/~~No~~

At the Board Meeting held on 26th May 2022 the following nine risks were approved for inclusion on the BAF as the key risks to the Health Board delivering its Strategic Objectives:

1. Workforce
2. Patient Safety
3. Leading Sustainable Culture Change
4. Capital Assets
5. Risk of Delivery of IMTP 2022-2025
6. Staff Wellbeing
7. Exacerbation of Health Inequalities
8. Financial Sustainability
9. Urgent and Emergency Care

Further risks were added to the BAF at the Board Meeting held at the end of November 2022. These are:

10. Cancer
11. Critical Care
12. Digital
13. Maternity
14. Stroke
15. Digital Strategy and Road Map

Risk 15. Digital Strategy and Road Map is allocated to the Digital and Health Committee for oversight. It should be noted that digital infrastructure risk has was added to the Capital Assets risk and this is currently monitored by the Strategy and Delivery Committee.

Safety: ~~Yes~~/No

Financial: ~~Yes~~/No

Workforce: ~~Yes~~/No

Legal: ~~Yes~~/No

Reputational: ~~Yes~~/No

Socio Economic: ~~Yes~~/No
Equality and Health: ~~Yes~~/No
Decarbonisation: ~~Yes~~/No

Approval/Scrutiny Route:	
Committee/Group/Exec	Date:
Board	26 January 2023

15. Digital Strategy and Roadmap – Director of Digital & Health Intelligence (David Thomas)

CAV UHB board approved a five-year Digital Strategy in 2020 which set out the vision for supporting the organisation, from a digital and data perspective, for the period 2020-2025. Development of the strategy was clinically led and was designed to support the UHB's Shaping our Futures' strategic programmes. To realise the benefits contained with the accompanying roadmap, which sets out what we will do and when, requires significant additional investment to bring the organisation up to a level of digital maturity that can support our agreed strategic objectives.

Risk	There is a risk that the Digital Strategy and Roadmap will not be implemented, due to lack of resources, resulting in a deficit in infrastructure, applications and informatics capability.
Date added:	04.10.22 (updated 06.01.23)
Cause	CAVUHB IT and digital services are known to have been historically underfunded resulting in a significant legacy deficit in infrastructure, applications and informatics capability that has built up over at least a decade (our PMS and the core module that sit on top for UEC, inpatients and outpatients were built c20 years ago). Colleagues need mobile, scalable, agile solutions which are unachievable whilst we are locked into legacy. There are some programmes and plans identified to rectify these issues however they are unachievable with the current resource allocation.
Impact	We have capability in human resources but lack capacity for planning, management and execution of the activities needed to deliver the digital strategy and roadmap. Just to produce the case(s) for change requires capacity we do not have in the current circumstance ○ Delivery on digital maturity would give capability to colleagues that will reduce inefficiency, release clinical time to care, improve safe practice, allow near real time data to be available to support clinical decision making at the point of care by moving from paper and analogue means of capturing and recording information to digital means where data flows seamlessly between settings Recruitment remains a challenge requiring the use of interim agency support in key areas. Existing resources are consumed with tactical short-term fixes given the legacy so we are unable to prioritise those activities that take us forward – we don't have enough people and we don't have enough money to make the changes we want and need to see. There is a risk that the financial savings and improved staff and patient experience expected from the Digital Roadmap plans will not be fully realised, due to the lack of resources, resulting in a deficit in IT infrastructure, applications and informatics capability and consequential adverse impacts.

Impact Score: 5	**Likelihood Score: 5**	**Gross Risk Score:**	**25 (Extreme)**
Current Controls	• Digital strategy approved by Board in20/21 with roadmap for 21/22/23 • Digital components described in IMTP • Some additional funding secured via the Business Case Advisory Group • IT infrastructure priorities developed and set out for 2022-2025 • Internal audit report highlights the risk in delivering digital strategy citing the investment challenges that will prevent full implementation.		
Current Assurances	• D & HI have a number of business cases in development which require revenue investment (1) • Risk register articulates the risks of not being able to deliver digital solutions to support delivery of healthcare (1)		
Impact Score: 5	**Likelihood Score: 4**	**Net Risk Score:**	**20 (Extreme)**
Gap in Controls	• Current annual discretionary funding is insufficient to cover the maintenance upkeep of the core infrastructure.		
Gap in Assurances	• Unable to currently provide assurance that the finance will be provided		

Actions	Lead	By when	Update since November 22
1. Discussions with DoF to feed into Digital Financial Plan	DT	31.03.23	Complete – see action no.4 and 5
2. HIMSS assessment of our Digital maturity to be carried out in Qtr 4	DT	31.03.23	The assessment will be undertaken in Q4
3. A ten-year investment request developed and submitted to WG outlining capital and revenue requirements.	DT	31.03.23	See action 4 and 5 this is partially completed with the full 10 year investment request been undertaken by financial year end.
4. Additional investment request submitted to WG for Digital SOC development resources	DT	31.03.23	**New action**
5. Detailed case for investment to be presented at private meeting of DHIC committee (Feb 22)	DT	14.02.23	**New action**

Impact Score: 5	**Likelihood Score: 3**	**Target Risk Score:**	**15 (Extreme)**

Key:

1 - 3	**Low Risk**
4-6	**Moderate Risk**
8-12	**High Risk**
15 – 25	**Extreme Risk**

Report Title:	**Digital and Health Intelligence Committee – Terms of Reference and Workplan**			Agenda Item no.	3.1
Meeting:	**Digital and Health Intelligence Committee**	Public	x	Meeting Date:	14th February 2023
		Private			
Status *(please tick one only)*:	Assurance		Approval x	Information	
Lead Executive:	**Interim Director of Corporate Governance**				
Report Author (Title):	**Director of Corporate Governance**				

Main Report

Background and current situation:

In line with the UHB's Standing Orders, Terms of Reference and Work Plans for Committees of the Board, should be reviewed on an annual basis to ensure they are up to date and comply with any new requirements either statutory or from Welsh Government.

This report provides Members of the Digital and Health Intelligence Committee (DHIC) with the opportunity to review the Terms of Reference and Work Plan prior to submission to the Board for approval.

The work plan for the DHIC has been developed based upon the requirements set out in its Terms of Reference to ensure the Committee achieves what is set out in the Terms of Reference.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

The Terms of Reference and Work Plan for the DHIC were last reviewed in February 2022. Prior to that a thorough review of the Committee and its purpose was undertaken alongside training for Committee Members hence there are only minor changes to the Terms of Reference presented in respect of updates to job titles. They have also been reviewed by the Director of Corporate Governance. Changes are highlighted in red text.

One further change is proposed. It is proposed, based on previous discussions, that clinical coding performance is reported to the Quality, Safety and Experience Committee from 2023/24. The highlighted change to remove clinical coding from the DHIC Terms of Reference is therefore subject to the inclusion of the same in the Quality, Safety and Experience Committee Terms of Reference.

Recommendation:

The Committee are requested to:

(a) **Review** the Terms of Reference and work plan 2023/24 for the DHIC;
(b) **Ratify** the Terms of Reference and work plan 2023/24 for the DHIC; and
(c) **Recommend** the changes to the Board for approval on 30th March 2023.

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

1. Reduce health inequalities	x	6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	

3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered *Please tick as relevant*									
Prevention	x	Long term		Integration		Collaboration		Involvement	

Impact Assessment:
Please state yes or no for each category. If yes please provide further details.

Risk: ~~Yes~~/No

Please include the detail of any Risk Assessments undertaken when preparing and considering the content of this report and, where appropriate, the nature of any risks identified. (If this has been addressed in the main body of the report, please confirm)

Safety: ~~Yes~~/No

Are there any Staff or Patient safety implications associated with the content and proposals contained within this report? If so, have these been fully considered and have plans been put in place to mitigate these? (If this has been addressed in the main body of the report, please confirm)

Financial: ~~Yes~~/No

Are there any Financial implications associated with the content and proposals contained within this report? If so, have these been fully considered and have plans been put in place to mitigate these? (If this has been addressed in the main body of the report, please confirm)

Workforce: ~~Yes~~/No

Are there any Workforce implications associated with the content and proposals contained within this report? If so, have these been fully considered and have plans been put in place to mitigate these? (If this has been addressed in the main body of the report, please confirm)

Legal: ~~Yes~~/No

Are there any legal implications that arise from the content and proposals contained within this report? If so, has advice been sought and what was the outcome? (If this has been addressed in the main body of the report, please confirm)

Reputational: ~~Yes~~/No

Are there any reputational risks associated with the content and proposals contained within this report? If so, have these been fully considered and have plans been put in place to mitigate these? (If this has been addressed in the main body of the report, please confirm)

Socio Economic: ~~Yes~~/No

The Socio-Economic Duty is to designed to encourage better decision making, ensuring more equal outcomes. Do the proposals within this report contain strategic decisions, such as setting objectives and the development of services. If so has consideration been given to how the proposals can improve inequality of outcome for people who suffer socio-economic disadvantage? Please include detail.

Useful Guidance on the application of the Socio-Economic Duty can be found at the following link: The Socio-economic Duty: guidance | GOV.WALES
(If this has been addressed in the main body of the report, please confirm)

Equality and Health: ~~Yes~~/No

Equality Health Impact Assessments (EHIA) are typically undertaking when developing or reviewing Health Board strategies, policies, plans, procedures or services. Do the proposals contained within the report necessitate the requirement for an EHIA to be undertaken? If so, please include the detail of any EHIA undertaken or the plans are in place to do so.

Useful guidance on the completion of an EHIA can be found at the following link: EHIA toolkit - Cardiff and Vale University Health Board (NHS. Wales) *(If this has been addressed in the main body of the report, please confirm)*
Decarbonisation: ~~Yes~~/No
If appropriate, has consideration been given to the delivery of proposals in accordance with NHS Wales Decarbonisation Plans. If so, please confirm the detail of issues considered and plans made. *(If this has been addressed in the main body of the report, please confirm)*

Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

Digital and Health Intelligence Committee (DHIC)

Terms of Reference

Reviewed by Committee: 14th February 2023

Approved by the Board:

DIGITAL AND HEALTH INTELLIGENCE COMMITTEE

TERMS OF REFERENCE AND OPERATING ARRANGEMENTS

1. INTRODUCTION

1.1 The UHB Standing Orders provide that "*The Board may and, where directed by the Welsh Government must, appoint Committees of the LHB Board either to undertake specific functions on the Board's behalf or to provide advice and assurance to the Board in the exercise of its functions. The Board's commitment to openness and transparency in the conduct of all its business extends equally to the work carried out on its behalf by committees*".

1.2 In line with Standing Orders (3.4.1) and the UHB Scheme of Delegation, the Board shall nominate annually a committee to be known as the **Digital and Health Intelligence Committee**. The detailed terms of reference and operating arrangements set by the Board in respect of this committee are set out below.

1.3 Digital & Health Intelligence Committee comprises Information Technology, Business Intelligence/Analytics, Information Management and Information Governance ~~and Clinical Coding.~~ It includes some specific IT project teams including those managing the PARIS system, use for mental health/Community services and local management of the Welsh Clinical Portal. Its function is to provide enabling services across the UHB to support the effective use of technology and the use of data/intelligence in the delivery of services.

2. PURPOSE

The purpose of the DHIC is to:

2.1 Provide **assurance** to the Board that;

- Appropriate processes and systems are in place for data, information management and governance to allow the UHB to meet its stated objectives, legislative responsibilities and any relevant requirements and standards determined for the NHS in Wales.
- There is continuous improvement in relation to information governance within the UHB and that risks arising from this are being managed appropriately.
- Effective communication, engagement and training is in place across the UHB for Information Governance

2.2 Seek assurance on the development and delivery of a Digital Strategy (which encompasses the areas detailed in paragraph 1.3 above) for the UHB ensuring that:

- It supports Shaping our Future Wellbeing and detail articulated within the IMTP
- Good partnership working is in place
- Attention is paid to the articulation of benefits and an implementation programme of delivery

- Benefits are derived from the Digital Strategy

3. DELEGATED POWERS AND AUTHORITY

To achieve its purpose, the DHIC must receive assurance that:

- The UHB has an appropriate framework of policies, procedures and controls in place to support consistent standards-based processing of data and information to meet legislative responsibilities.
- Accepted recommendations made by internal and external reviewers are considered and acted upon on a timely basis.
- A risk register is in place and that risks are being appropriately identified, assessed and mitigated at all levels in relation to information governance, management and technology.
- Statutory and mandatory requirements are being met such as Caldicott Guardian, FOI, GDPR etc.

To do this the Committee will take the following actions:

3.1 Approve policies and procedures in relation to the Strategy.

3.2 Receive assurance that all statutory and mandatory requirements are being met such as Caldicott Guardian, FOI, GDPR etc.

3.3 Receive assurance on the delivery and implementation of the strategy and associated work plan.

3.4 Receive assurance on clinical and staff engagement of the digital agenda.

3.5 Receive, by exception, data breach reports on the following areas:

- Serious reportable data breaches to the Information Commissioner (ICO) and the Welsh Government and any near misses that may be informative for the Committee.
- Sensitive information (break glass system)
- E-mail
- National and local auditing such as NIIAS
    - freedom of information,
    - subject access requests
    - Data Quality
    - IG risk assessments
- Incidents – lessons learned from all recorded / reported incidents.

3.6 Receive periodic reports on development, procurement and implementation of national and local IM&T systems.

3.7 Review risks:

- Periodically consider risks escalated to the Committee from Clinical Boards / Corporate Departments in relation to:
    - Information Governance
    - Information Management

- Information Technology
- Review risks escalated to the Committee that have a risk rating of 12 and above.

4. AUTHORITY

4.1 The Committee is authorised by the Board to investigate or have investigated any activity within its terms of reference. In doing so, the Committee shall have the right to inspect any books, records or documents of the UHB relevant to the Committee's remit, and ensuring patient/client and staff confidentiality, as appropriate. It may seek relevant information from any:

- employee (and all employees are directed to cooperate with any reasonable request made by the Committee); and
- any other committee, sub-committee or group set up by the Board to assist it in the delivery of its functions.

4.2 The Committee is authorised by the Board to obtain outside legal or other independent professional advice and to secure the attendance of outsiders with relevant experience and expertise if it considers it necessary, in accordance with the Board's procurement, budgetary and other requirements.

5.0 ACCESS

5.1 The Chair of the Digital & Health Intelligence Committee shall have reasonable access to Executive Directors and other relevant senior staff.

6.0 SUB COMMITTEES

6.1 The Committee may, subject to the approval of the UHB Board, establish sub committees or task and finish groups to carry out on its behalf specific aspects of Committee business.

7. MEMBERSHIP

Members

7.1 A minimum of four (4) members, comprising:

Chair	Independent member of the Board
Vice Chair	Chosen from amongst the Independent members on the Committee
Members	At least two other independent members of the Board

The Committee may also co-opt additional independent 'external' members from outside the organisation to provide specialist skills, knowledge and expertise.

Attendees

7.2 In attendance:

Director of Digital and Health Intelligence

Director of Digital Transformation

Chief Clinical Information Officer ~~Assistant Medical Director IT~~

Director of Corporate Governance

Head of Information Governance/Cyber Security ~~Manager~~

Workforce Representative

Other Executive Directors will attend as required by the Committee Chair

7.3 By invitation — The Committee Chair may invite:

- any other UHB officials; and/or
- any others from within or outside the organisation
- to attend all or part of a meeting to assist it with its discussions on any particular matter.

Secretariat

7.4 Secretary — As determined by the Director of Corporate Governance

Member Appointments

7.5 The membership of the Committee shall be determined by the Board, based on the recommendation of the UHB Chair - taking account of the balance of skills and expertise necessary to deliver the committee's remit and subject to any specific requirements or directions made by the Welsh Government.

7.6 Committee members' terms and conditions of appointment, (including any remuneration and reimbursement) are determined by the Board, based upon the recommendation of the UHB Chair {and on the basis of advice from the UHB's Remuneration and Terms of Service Committee}.

Support to Committee Members

7.7 The Director of Corporate Governance, on behalf of the Committee Chair, shall:

- arrange the provision of advice and support to committee members on any aspect related to the conduct of their role; and
- ensure the provision of a programme of organisational development for committee members as part of the UHB's overall OD programme developed by the Director of Workforce and Organisational Development.

8. COMMITTEE MEETINGS

Quorum

8.1 At least two members of the Committee must be present in addition to the Director of Digital and Health Intelligence to ensure the quorum of the Committee, one of whom should be the Committee Chair or Vice Chair.

Frequency of Meetings

8.2 Meetings shall be held no less than three time per year, and otherwise as the Chair of the Committee deems necessary – consistent with the UHB annual plan of Board Business.

Withdrawal of Individuals in Attendance

8.3 The Committee may ask any or all of those who normally attend but who are not members to withdraw to facilitate open and frank discussion of particular matters.

9. RELATIONSHIP AND ACCOUNTABILITIES WITH THE BOARD AND ITS COMMITTEES/GROUPS

9.1 Although the Board has delegated authority to the Committee for the exercise of certain functions as set out within these terms of reference, it retains overall responsibility and accountability for ensuring the quality and safety of healthcare for its citizens through the effective governance of the organisation.

9.2 The Committee is directly accountable to the Board for its performance in exercising the functions set out in these terms of reference.

9.3 The Committee, through its Chair and members, shall work closely with the Board's other committees, including joint (sub) committees and groups to provide advice and assurance to the Board through the:

- joint planning and co-ordination of Board and Committee business; and
- sharing of information

in doing so, contributing to the integration of good governance across the organisation, ensuring that all sources of assurance are incorporated into the Board's overall risk and assurance framework.

9.4 The Committee will consider the assurance provided through the work of the Board's other committees and sub groups to meet its responsibilities for advising the Board on the adequacy of the UHB overall framework of assurance.

9.5 The Committee shall embed the UHB's corporate standards, priorities and requirements, e.g., equality and human rights through the conduct of its business.

10. REPORTING AND ASSURANCE ARRANGEMENTS

10.1 The Committee Chair shall:

- report formally, regularly and on a timely basis to the Board and the Accountable Officer on the Committee's activities. This includes verbal updates on activity and the submission of committee minutes and written reports throughout the year;
- bring to the Board and the Accountable Officer's specific attention any significant matters under consideration by the Committee;
- ensure appropriate escalation arrangements are in place to alert the UHB Chair, Chief Executive (and Accountable Officer) or Chairs of other relevant committees of any urgent/critical matters that may affect the operation and/or reputation of the UHB.

10.2 The Committee shall provide a written, annual report to the board and the Accountable Officer on its work in support of the Annual Governance Statement.

10.3 The Board may also require the Committee Chair to report upon the committee's activities at public meetings or to community partners and other stakeholders, where this is considered appropriate, e.g., where the committee's assurance role relates to a joint or shared responsibility.

10.4 The Director of Corporate Governance, on behalf of the Board, shall oversee a process of regular and rigorous self-assessment and evaluation of the Committee's performance and operation including that of any sub committees established. In doing so, account will be taken of the requirements set out in the NHS Wales Audit Committee Handbook.

11. APPLICABILITY OF STANDING ORDERS TO COMMITTEE BUSINESS

11.1 The requirements for the conduct of business as set out in the UHB Standing Orders are equally applicable to the operation of the Committee, except in the following areas:

- quorum (set within individual Terms of Reference)
- Notifying and equipping Committee members – Committee members shall be sent an Agenda and a complete set of supporting papers at least seven (7) clear days before a formal Committee meeting (unless specified otherwise in law).
- Notifying the public and others – at least seven (7) clear days before each Committee meeting a public notice of the time and place of the meeting, and the public part of the agenda, shall be displayed on the Health Board's website together with the papers supporting the public part of the agenda (unless specified otherwise in law).

12. REVIEW

12.1 These terms of reference and operating arrangements shall be reviewed annually by the Committee with reference to the Board.

Digital and Health Intelligence Committee Work Plan 2023-24				
App. - Approval Ass.- Assurance Inf. Information and noting	**Exec Lead**	**30-May**	**03-Oct**	**13-Feb**
Agenda Item				
Assurance				
Review and delivery of Digital Strategy	DT	Ass.	Ass.	Ass.
Assurance Review on processes and sysems for Data, Information management	DT		Ass.	
Assurance on Information Governance Training, Communications and Engagement Plans	DT		Ass.	
Review of the framework of policies , procedures and controls	DT	Ass.	Ass.	Ass.
Internal Audit Reviews	DT/JQ	Ass.	Ass.	Ass.
WAO Reviews	DT/JQ	Ass.	Ass.	Ass.
Other external reviews	DT	Ass.	Ass.	Ass.
Risk Register	DT/JQ	Ass.	Ass.	Ass.
Development, procurement and implementation of national and Local IMT systems (as and when required)	DT			Ass.
Statutory and Mandatory Requirements				
Assurance that Caldicott Guardian requirements are met	MJ	Ass.	Ass.	Ass.
Assurance that Freedom of Information requirements are met	DT	Ass.	Ass.	Ass.
Assurance that GDPR Compliance is met	DT	Ass.	Ass.	Ass.
Data Breach Reports: Serious Reportable Data Breaches to the ICO Sensitive Information FOI Subject Access Requests Data Quality Incidents	DT	Ass.	Ass.	Ass.
Digital and Health Intelligence Committee Governance				
Annual Work Plan	JQ			App.
Self assessment of effectiveness	JQ	Ass.		
Induction Support for Committee Members	JQ			
Review Terms of Reference	JQ			App.
Produce Digital and Health Intelligence Committee Annual Report	JQ			App.
Minutes of Digital and Health Intelligence Committee Meeting	JQ	App.	App.	App.
Action log of Digital and Health Intelligence Committee Meeting	JQ	Ass.	Ass.	Ass.

Report Title:	Draft Digital and Health Intelligence Committee Annual Report 2022/23			Agenda Item no.	3.2
Meeting:	Digital and Health Intelligence Committee	Public	X	Meeting Date:	14.02.2023
		Private			
Status *(please tick one only):*	Assurance		Approval	X	Information
Lead Executive:	Director of Corporate Governance				
Report Author (Title):	Corporate Governance Officer				

Main Report
Background and current situation:

An Annual Report from the Committee is produced to demonstrate that it has undertaken the duties set out in its Terms of Reference and to provide assurance to the Board that this is the case.

The purpose of the Annual Report is to provide Members of the Digital and Health Intelligence Committee with the opportunity to discuss the attached draft annual report before being submitted to the Board for approval by the end of March 2023.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

At the time of writing this covering report, the Committee has achieved an overall attendance rate of 100% from the period 1 April 2022 to date and has met on two occasions (not including this meeting) during the year. Subject to the Committee approving the recommendations set out below, the Annual Report will be updated to reflect the business discussed at the meeting today together with the attendance rate and forwarded to the Committee Chair for approval.

The attached Annual Report 2022/23 of the Digital and Health Intelligence Committee demonstrates that the Committee has undertaken the duties as set out in its Terms of Reference.

Recommendation:

The Committee is requested to:

a) **REVIEW** the draft Annual Report 2022/23 of the Digital and Health Intelligence Committee; and

b) **RECOMMEND** the Annual Report to the Board for approval.

Link to Strategic Objectives of Shaping our Future Wellbeing:
Please tick as relevant

1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people	x	7. Be a great place to work and learn	x
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	x
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	

5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	x

Five Ways of Working (Sustainable Development Principles) considered *Please tick as relevant*									
Prevention	x	Long term		Integration		Collaboration		Involvement	

Impact Assessment: *Please state yes or no for each category. If yes please provide further details.*
Risk: No
Safety: No
Financial: No
Workforce: No
Legal: No
Reputational: No
Socio Economic: No
Equality and Health: No
Decarbonisation: No

Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

Mohamed,Sarah
08/02/2023 16:36:00

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

Annual Report of Digital Health & Intelligence Committee 2022/2023

1.0 Introduction

In accordance with best practice and good governance, the Digital & Health Intelligence Committee produces an Annual Report to the Board setting out how the Committee has met its Terms of Reference during the financial year.

2.0 Membership

The Committee membership is a minimum of four Independent Members. In addition to the Membership, the meetings are also attended by the Director of Digital and Health Intelligence, the Director of Digital Transformation, the Assistant Medical Director IT, the Director of Corporate Governance, the Information Governance Manager, and a Workforce Representative. Other Executive Directors attend as required by the Committee Chair. The Chair of the Board is not a Member of the Committee but attends at least once annually after agreement with the Committee Chair.

3.0 Meetings & Attendance

The Committee met three times during the period 1 April 2022 to 31 March 2023. This is in line with its Terms of Reference.

At least two members of the Committee must be present in addition to the Director of Digital and Health Intelligence to ensure the quorum of the Committee, one of whom should be the Committee Chair or Vice Chair.

The Digital & Health Intelligence Committee achieved an attendance rate of X% during the period 1 April 2022 to 31 March 2023 as set out below:

Commented [SM(aVU-CG1]: To be completed following February meeting

	07/06/2022	04/10/2022	14/02/2023	Attendance
David Edwards (Chair)	✓	✓		
Michael Imperato (Vice Chair)	✓	✓		
Sara Moseley	✓	✓		
Prof Gary Baxter (Committee member until 31st December 2022)	✓	✓		
Total	**100%**	**100%**		

Commented [SM(aVU-CG2]: To be completed following February meeting

4.0 Terms of Reference

The Terms of Reference *were reviewed and recommended for Board approval by the Committee on 14 February 2023*. The Terms of Reference are due to be formally approved by the Board on 30 March 2023.

Commented [SM(aVU-CG3]: To confirm after February meeting

5.0 Work Undertaken

As set out in the Committee Terms of Reference the purpose of the Committee is to:

Provide **assurance** to the Board that;

- Appropriate processes and systems are in place for data, information management and governance to allow the Health Board ("the UHB") to meet its stated objectives, legislative responsibilities and any relevant requirements and standards determined for the NHS in Wales.
- There is continuous improvement in relation to information governance within the UHB and that risks arising from this are being managed appropriately.
- Effective communication, engagement and training is in place across the UHB for Information Governance;
- To seek assurance on the development and delivery of a Digital Strategy for the UHB ensuring that:
    - It supports Shaping our Future Wellbeing and detail articulated within the IMTP
    - Good partnership working is in place
    - Attention is paid to the articulation of benefits and an implementation programme of delivery
    - Benefits are derived from the Strategy

During the financial year 2022/23, the Digital Health & Intelligence Committee reviewed the following key items at its meetings:

Private Digital Health & Intelligence Committee

June, October 2022 & February 2023

Papers presented to the private session of the Digital Health & Intelligence Committee were as follows:

- Cyber Security Update and Learning from Cyber attacks
- Digital Budget and Investment
- Caldicott Guardian Requirements

PUBLIC DIGITAL HEALTH & INTELLIGENCE COMMITTEE – SET AGENDA ITEMS

7th June 2022, 4th October 2022, and 14th February 2023

Digital Transformation Progress Report (Digital Dashboard)

Commented [SM(aVU-CG4]: Discussion from February meeting to be added

At the Committee meeting in June, the Director of Digital Transformation advised the Committee that the Digital Strategy was due a refresh. It was noted that work had progressed with defining the Digital Roadmap and associated business cases to support the Digital Transformation Programme. The Roadmap included year end funded initiatives. All of the activities were either completed or mobilised, which showed good progress.

A high-level plan which was submitted to Welsh Government was also shared with Board Members. The plan contained an estimate of a 10-year forecast which set out what was needed for Digital, which included capital and revenue. The total cost was £275 million and it was noted that was a slight under estimation.

At the meeting in October, the Director of Digital Transformation provided a list of projects that were reported against in the IMTP. It was noted that there was good progress with PROMS. However, a number of the projects were off track due to the lack of appropriate resources. The Committee noted that whilst good progress was being made in some projects, Committee Members were concerned to learn that other projects (eg Power BI) were "off track" due to a lack of resources. That lack of resourcing had included some unfunded business cases and longstanding issues around investment. The Committee's concerns and resource issues were brought to the attention of the Board in November 2022 by way of the Committee Chair's Report.

Digital Strategy Refresh including Investment Requirements

At the meeting in June, the Committee was advised that the Digital team was constantly evolving the 3 year strategic outline plan for Digital services. A key issue had been the continued focus and efforts to support the Health Board during the on-going Covid19 pandemic response, including the Recovery and Response programmes, as well as addressing the more strategic issues associated with the Health Board's ambitions for digital maturity. The Committee was informed that the most important strategic work to undertake this year included the implementation of (i) an enterprise architecture and (ii) electronic patient records.

In the October meeting, it was noted that Digital Directors (all Wales) had made a commitment that all Health Boards would undertake a HIMMS EMRAM assessment on digital maturity in the next few months

IG Data & Compliance (SIs, Data Protection, GDPR, FOI, SARs, Staffing & Mandatory Training)

Commented [SM(aVU-CG5]: Discussion from February meeting to be added

Information Governance and Compliance was discussed at each of the Committee meetings.

At the meeting in June, it was noted that the overall number of serious incident reports had dropped. This was partly due to a change from the local e-Datix system to the new system. However, the number of information governance related incidents

had increased during Quarter 4. The Committee was advised that this was due to a natural fluctuation and did not reflect anything significant.

Committee Members were also informed that the overall compliance of Freedom of Information (FOI) requests had also increased across the Health Board during Quarter 4 of 2022. There had also been a drop-in compliance in Quarter 4 regarding health record requests. The Medical Records team were taking measures to address that with the Information Governance team's support.

In October, the Committee was advised that there had been a total of 257 information governance related incidents. Four data breaches had met the threshold to be reported to the Information Commissioner's Office (ICO). Details of those breaches were outlined in the Private section of the Committee meeting.

It was also noted that compliance for requests made for medical records had dropped beneath the 50% mark during the last three months. That was being addressed urgently by the digital front door.

The Committee was advised that, as with other Health Board wide training, it was a challenge to increase the compliance levels for Information Governance staff training. The Committee noted the importance of the same, in particular noting that it was likely that the ICO would query the compliance rate when it was dealing with reportable data breaches. The Committee was advised that the Digital and Health Intelligence Directorate would consider other ways in which the Information Governance training could be delivered and would also work with the Communications Department to target the low training levels.

Clinical Coding Performance Data

Commented [SM(aVU-CG6]: Discussion from February meeting to be added

Clinical Coding Performance Data was presented at each of the Committee meetings.

At the meeting in June, the Committee was advised that the Health Board was losing clinical coders to other companies because of the ability to work at home. The possibility of establishing a Clincal Coding academy on an all Wales basis was discussed.

In the October meeting, it was noted that the clinical coding performance levels were above Welsh Government requirements, but had remained low.

It was noted that a discussion was required as to whether it would be more appropriate for the Quality, Safety and Experience Committee to receive the Clinical Coding Performance Data, rather than this Committee, and that the Director of Digital Health and Intelligence would pick that up. .

Joint IMT & IG Corporate Risk Register

At the October meeting, the Committee was informed that there was one risk at "red" which related to Cyber Security. Further discussions relating to Cyber Security were held in the private session of the Committee.

It was noted that two risks that were had a “yellow” status had been reduced to zero due to the mitigations that had been put in place.

Framework Policies, Procedures & Controls

Commented [SM(aVU-CG7]: Discussion from February meeting to be added

At the June meeting, the Director of Digital and Health Intelligence advised the Committee that he had been notified of 28 policies that were out of date. The Digital team was working through those and further reports would be brought back to the Committee, as and when required.

Board Assurance Framework – Digital Risk

Commented [SM(aVU-CG8]: Discussion from February meeting to be added

Minutes: Digital Directors Peer Group

At each meeting, for information the Committee received the Minutes of the Digital Directors Peer respective meetings.

6.0 Reporting Responsibilities

The Committee has reported to the Board after each of the Digital Health & Intelligence Committee meetings by presenting a summary report of the key discussion items at the Digital Health & Intelligence Committee. The report is presented by the Chair of the Digital Health & Intelligence Committee.

7.0 Opinion

The Committee is of the opinion that the draft Digital Health & Intelligence Committee Report 2022/23 is consistent with its role as set out within the Terms of Reference and that there are no matters that the Committee is aware of at this time that have not been disclosed appropriately.

David Edwards

Committee Chair

Report Title:	**Digital Directors' Peer Group**			Agenda Item no.	4.1
Meeting:	Digital & Health Intelligence Committee	Public	X	Meeting Date:	14th February 2023
		Private			
Status *(please tick one only):*	Assurance		Approval		Information x
Lead Executive:	Director of Digital & Health Intelligence				
Report Author (Title):	Director of Digital & Health Intelligence				

Main Report
Background and current situation:

The creation of the Digital Directors peer group in 2021 replaced the previous Digital Delivery Leadership Group meeting which came into existence in 2020 following the dissolution of the National Information Management Board which had been focused on providing an overview of information and IM&T issues nationally.

The establishment of the peer group brings Digital in line with other professions in the NHS in Wales (eg Directors of Finance peer group, Directors of Planning peer group) and is a welcome development.

Assurance is provided by the discussion and exchange of views and updates on a wide range of digital related issues via the regular monthly meetings compromising board-level leads for digital from across all NHS Wales organisations, including Welsh Government and DHCW.

Executive Director Opinion and Key Issues to bring to the attention of the Board/Committee:

The attached minutes of the last three meetings held in November 2022, December 2022 and January 2023 provide an update on the scope and range of discussions on digital matters impacting on all NHS Wales organisations.

CAV UHB is represented by the Director of Digital and Health Intelligence (the Director of Digital Transformation acts as deputy when necessary).

Recommendation:

The Committee are requested to NOTE the minutes of the last meetings as follows:

- Minutes of Meeting – 8th November 2022
- Minutes of Meeting – 6th December 2022
- Minutes of Meeting – 10th January 2023

Link to Strategic Objectives of Shaping our Future Wellbeing: *Please tick as relevant*			
1. Reduce health inequalities		6. Have a planned care system where demand and capacity are in balance	
2. Deliver outcomes that matter to people		7. Be a great place to work and learn	x
3. All take responsibility for improving our health and wellbeing		8. Work better together with partners to deliver care and support across care sectors, making best use of our people and technology	x
4. Offer services that deliver the population health our citizens are entitled to expect		9. Reduce harm, waste and variation sustainably making best use of the resources available to us	
5. Have an unplanned (emergency) care system that provides the right care, in the right place, first time		10. Excel at teaching, research, innovation and improvement and provide an environment where innovation thrives	

Five Ways of Working (Sustainable Development Principles) considered *Please tick as relevant*									
Prevention		Long term	x	Integration	x	Collaboration	x	Involvement	x

Impact Assessment: *Please state yes or no for each category. If yes please provide further details.*
Risk: No
Safety: No
Financial: No
Workforce: No
Legal: No
Reputational: No
Socio Economic: No
Equality and Health: No
Decarbonisation: No

Approval/Scrutiny Route:	
Committee/Group/Exec	Date:

Mohamed,Sarah
08/02/2023 16:36:00

Directors of Digital Peer Group Meeting
Draft Notes

Date of Meeting	Tuesday 8 November 2022
Time of Meeting	2pm – 5.00pm
Meeting Venue	MS Teams
Chair	Stuart Morris

PRESENT:	**APOLOGIES:**	**GUESTS:**
John Frankish ABUHB	Mike Ogonovsky ABUHB	Allan Wardhaugh WG
Sion Jones BCUHB	Claire Osmundsen-Little DHCW	Rob Bleasdale CTMUHB
Stuart Morris CTMUHB	Ifan Evans DHCW	Karen Winder CTMUHB
David Thomas CVUHB	Dylan Roberts BCUHB	Stephen Morris SBUHB
Carwyn Lloyd-Jones DHCW	Alison Ramsey NWSSP	James Stevens ABUHB
Helen Thomas DHCW	Pete Hopgood PTHB	Andrew Ward NWSSP
Anthony Tracey HDUHB	Carl Taylor VNHST	Fiona Jenkins CVUHB
Sian Richards HEIW		Alka Ahuja TEC Cymru
Neil Jenkins NWSSP		Michelle Cook TEC Cymru
Iain Bell PHW		
Vicki Cooper PTHB		
Matt John SBUHB		
Leanne Smith WAST		
Philip Bowen WG		
Ryan Perry WG		
Amir Ramzan WG		
Larissa Brock WNHSC		

ITEM	DISCUSSION	ACTION
1. Welcome & Apologies, Meeting Notes and Matters Arising (Chair)	Stuart Morris chaired the meeting and apologies were noted as above. Notes of the previous meeting were approved and the action log was updated. <u>Matters arising</u> National Digital Strategy for Wales – development is underway involving stakeholders and digital leads. The Health Minister has discussed with Mike Emery (new CDO for Health & Social Care) and a paper will be shared this week for wider approval. Final version of strategy is due to be launched in February 2023. IMTP Planning Framework - WG are intending to issue this mid-November following discussions with the Minister and senior officials. Joint DoFs/DoDs Meeting – Scheduled for this Friday 11 November.	
2. Terms of Reference Update (Chair)	SM advised that the ToR need updating regarding membership and remit of the group now it is well established. **ACTION All to review ToR prior to discussion at December meeting.**	01 - All

3. National Clinical Framework (Allan Wardhaugh)	Presentation shared: link to the slides accessible via non-NHS accounts AW requested reassurance around having user-centred design, with both LINC and RISP to be run from DHCW in future which may have an impact. SM responded that keeping the service need as a focus is critical and has already discussed with HT the importance of ensuring clinicians are involved in the process. Group comments: -Electronic Patient Care Record strategy is under review. DHCW has plans to recruit extra senior capability to ensure this is driven forward. -It needs to be easy for staff to use; both patient and clinician input is needed along the way. -We need to assist DHCW in finding a model that best fits across Wales, with transparency from them on how it is being managed. -WAST are aiming to instil a more product-based approach across the organisation. -PHW are looking to roll out a single disease register and have done some discovery phase research and are interested in joining up the conversations. AW added that some NHS colleagues are feeling disengaged and requested that this issue be addressed so they feel more involved in the process. SM agreed and confirmed he spoke to Sian Phillips yesterday regarding this specific issue. PB offered to attend the next NCF board meeting to discuss the National Digital Strategy for Wales and how the ePCR strategy fits within this. PB said he would ensure a member of Allan's team would be invited to join the National Digital Strategy Implementation Steering Group. **ACTION PB.**	02 - PB
4. All Wales Infrastructure Programme (AWIP) (David Thomas)	DT explained that the aims of the programme are strategic, looking at principles and standards rather than tactical solutions. A list of work packages has been decided on for this year in order that we don't try and focus on doing too much with insufficient resource. DT agreed to email the group details of the Channel 3 work on discovery and closure which will be submitted to the AWIP Programme Board this Thursday. All were invited to attend the meeting if available. **ACTION DT to circulate relevant information.** PB added that he is due to discuss the funding letter with the Health Minister this week. There was discussion around the need for more workshops with the Wide Area Network provider. DT commented that it was necessary to ensure those that attend the Programme Board meetings have a clear understanding of what is expected by way of delivery and roles/responsibilities to avoid a mismatch of expectations. The group agreed that Digital Directors need to be kept informed and suggested that a review of the use of consultants and	03 - DT

	benefits/outputs would be helpful. DT agreed to keep the group updated. **ACTION LB to add AWIP to forward planner.**	04 - LB
5. DPIF Update • FY22/23 expenditure • Proposed FY23/24 budgets • DPIF Future – review (Philip Bowen) • Secondment/Development Opportunities in WG (Ryan Perry)	Presentation shared by PB. All were encouraged to share the paper with relevant colleagues and send in feedback to PB/RP as soon as possible. Survey and data gathering will be taking place to review the future DPIF with analysis taking place in December. The Health Minister plans to make a statement in early 2023 to re-emphasise the importance of digital developments in the health service. Brief group discussion around funding limitations and the need to target investment as efficiently as possible in future. RP highlighted the secondment/development opportunities currently available in Welsh Government.	
6. Transforming the Cardiac Information System for Wales (Rob Bleasdale & Colleagues)	RB gave a presentation on behalf of the Welsh Cardiac Network for John Godward who was unable to attend. Stephen Morris, James Stevens, Adam Ward and Karen Winder attended as part of the working group set up to review the project. RB shared an overview of the deliverable aims to replace/renew the current PACS system and the specific matters that need consideration (ie storage, hardware, architecture etc). There was discussion around capital vs revenue funding (capital historically). John Godward has received consensus from teams on an All-Wales solution but Digital Directors wanted to confirm this with colleagues, adding that the financial element of the business case is key as well as dependencies with other imaging programmes. Andrew Ward advised that the ideal solution would involve Cloud storage and there was discussion around a phased approach. It was agreed that the slides be shared with the group and for all to contact SM with any concerns by the end of the week. **ACTION ALL.**	05 - All
7. Eye Care Programme (Fiona Jenkins)	FJ explained the limited resources available for this national project and asked for guidance from the group. Clinicians are frustrated by the current paper-based systems and keen for the programme to be rolled out. The Digital Directors were asked to: 1. Check that comms with project teams are working effectively. 2. Ensure UAT testing is taking place. 3. Help with DPIA sign off. The go-live aim is for OpenEyes to be rolled out in one pathway/one clinic initially to enable digital and clinical teams to become familiar.	

	SM stated that the group recognised the opportunity to put the programme on a more secure footing. HT added that we need to set up a critical path around the service management model, UATs and DPIAs to ensure the go-live date can be met. Group agreement that this should be included on the agenda each month. **ACTION LB.**	06 - LB
8. TEC Cymru Telehealth Programme – Virtual Wards (Michelle Cook, Alka Ahuja)	HT introduced the item. MC shared a presentation on the market analysis done so far on virtual ward suppliers elsewhere in the UK, their effectiveness in reducing patient service use via remote monitoring and the possible improvements to services in Wales. There was discussion around the importance of gaining cohesion and working with social care, interaction with DSPP (NHS Wales app), having an inclusive design and considering patient outcomes/ PROMs in the process. AA advised that they have linked in with the National Clinical Framework and will be meeting with Health Technology Wales shortly. They have been awarded funding by The Health Foundation for remote monitoring in schools and are keen to build up further engagements across other areas and organisations. Group comments made: -SR was keen to discuss the impact on workforce and cross reference this into the HEIW national plans. -Primary Care staff need to be involved and 2-way workflow needs to be considered. -Workforce staffing models and upskilling is important (England currently considering). -Linking into Public Health would also be beneficial. -Need to be aware of the capacity challenge for staff working on virtual wards that are also working on physical wards. -HDUHB have already gone out to tender with Delta Wellbeing. -How do we move this forward quickly and what areas are best to start with? MC advised that they will be discussing with Chief Executives on 22 November and the Health Minister in early December. Suggestion to add this item to January agenda. **ACTION LB**	07 – LB
9. AOB	SM reminded the group of other proposed agenda items for December: o IMTP updates from all organisations o Scan4Safety update o Workforce discussion (the group were asked to send in relevant questions to LB)	
	End of meeting.	
Next Meeting: Tuesday 6 December 2pm		

Directors of Digital Peer Group Meeting
Draft Notes V1.1

Date of Meeting	Tuesday 6 December 2022
Time of Meeting	2.00pm – 5.00pm
Meeting Venue	MS Teams
Chair	Iain Bell

PRESENT:	**APOLOGIES:**	**GUESTS:**
John Frankish ABUHB	Stuart Morris CTMUHB	Sarah-Jane Taylor DHCW
Mike Ogonovsky ABUHB	Sian Richards HEIW	Shikala Mansfield DHCW
Dylan Roberts BCUHB	Pete Hopgood PTHB	Andy Smallwood NWSSP
Sion Jones BCUHB	Neil Jenkins NWSSP	Fiona Jenkins CVUHB
David Thomas CVUHB	Larissa Brock WNHSC	
Carwyn Lloyd-Jones DHCW		
Claire Osmundsen-Little DHCW		
Ifan Evans DHCW		
Helen Thomas DHCW		
Anthony Tracey HDUHB		
Alison Ramsey NWSSP		
Iain Bell PHW		
Vicki Cooper PTHB		
Matt John SBUHB		
Carl Taylor VNHST		
Leanne Smith WAST		
Philip Bowen WG (part)		
Ryan Perry WG		
Amir Ramzan WG		
Jane Green WNHSC		

	DISCUSSION	ACTION
1. Welcome & Apologies, Meeting Notes and Matters Arising (Chair)	Amends made to notes and approved. Matters arising: IB is attending NCF steering group next week and will invite Allan Wardhaugh to National Digital Strategy Steering Group. There was discussion on the planning framework which did not mention Digital specifically. A collective approach to describing Digital in IMTPs was agreed. IE and IB to manage the approach. **ACTION HT to brief CEMT on Digital/planning.** IE proposed meeting with DoPs regarding the understanding of Digital in the planning framework.	**1 - HT**
2. Workforce (Sarah-Jane Taylor, Shikala Mansfield DHCW)	Digital Workforce Profession Review next steps, recommendations and considerations were presented and Directors agreed the approach. MO asked about engaging with Agenda for Change to match criteria for digital professional groups. Views on standardisation of job descriptions or more individualisation was discussed. Pay banding and reward will not be per job as it has to be part of a Digital	

	Workforce Strategy. HT agreed the architecture was to work as a collective but it was not about standardising existing roles. AT advised the variation in pay bands requires impact assessment on an organisation's budget. CO-L suggested a common language/narrative in IMTPs about the skills gap as having to top up workforce with agency staff. VC commented on making JDs include transferable skills in order to retain staff. There was overall support for a national approach but there may be challenges in implementation. A desire for talent management and career progression was expressed. Recommendation 1 is to set up an All Wales Digital Professions Group (DPG) to support Digital Directors to take forward key themes from the Workforce Review and analysis. HT said the Group would need the right people who are across the whole directorate and aware of the challenges. IB suggested the Group has coverage across the six job families. DR commented on being clear about the approach to establish the professional group. **ACTION DR, IE and S-JT to write a proposal for the Directors of Digital to consider.**	**2 - DR**
3. Finance Update (Claire Osmundsen-Little)	CO-L outlined the fact that balancing the position is challenging. Microsoft VAT recovery which has not yet been confirmed has been built into most HB positions and we are looking at SLAs and programmes in detail. Nursing Care Record and WEDs still to be finalised. Moving more to Cloud and this will have an impact on budgets. DHCW cyber security plan will have charging mechanisms. The Digital Spend survey is to take place in January which will assist in providing an accurate picture across Wales. She questioned if decarbonisation would be a key opportunity. Addressing common issues collectively along with benefits realisation is the way forward. MO said it would be useful to validate what is 'digital' as there is no consistency across organisations. A joint session of DoDs/DoPs in February was suggested. **ACTION Carwyn Lloyd-Jones.**	**3 - CLJ**
4. Scan 4 Safety (Andy Smallwood NWSSP)	AS gave a presentation updating on Scan 4 Safety. The use of patient identifiers and sharing of data was discussed in some detail as the programme will use the CRN number (not NHS number) as a patient identifier. AS advised that the system was flexible around this as the scanner can read any form of barcode. HT said a national standard exists, so the issue is more about practice. DHCW, NDR and NWSSP will discuss further the use of identifiers. AS asked Digital Directors to provide NWSSP with a digital point of contact in each organisation. **ACTION ALL.**	**4 - ALL**
5. Terms of Reference Review	Item not discussed. Add to January agenda. **ACTION LB.**	**5- LB**

6. Conversation with Carwyn Lloyd Jones • Active Directory Vulnerability Assessment • Multi-Factor Authentication (MFA) for Admin Control • Expanding Scope of Welsh Informatics Assurance Group (WIAG)	A presentation was provided by CL-J. The assessment has identified weaknesses and misconfigurations within **Active Directory**, which provided a number of exploitation paths and capabilities that a threat actor could use. Remedial actions were outlined. There was a discussion on enabling **MFA for AdminControl**. This will be happening for DHCW which will then impact others. There is a need to encourage users to have multi-factor authentication. To address the adoption of MFA for Admin Control across NHS Wales, Chris Darling DHCW Board Secretary, will discuss at the Board Secretaries group. **WIAG** – All Digital Directors were asked to consider in principle whether they would find it helpful to use the DHCW new service assurance process (WIAG) for major initiatives within their own organisations, and in principle their willingness to contribute to the modest additional costs of doing so, or suggestions about how to resource appropriately. CL-J asked if all organisations would share their stats for **Cyber training** and IG training. VC said it would be better to mandate cyber training on ESR and then measure. HT advised cyber training is part of the Chairs' objectives and suggested working with cyber leads to develop template for numbers and narrative to be used to help uptake. IB suggested linking AdminControl and cyber training which would be more impactful. **ACTION CLJ to provide a list of the stats to Digital Directors, in confidence.**	**6 - CLJ**
7. HIMSS Update & KLAS Proposal (Dylan Roberts)	DR provided an update on HIMSS. HIMSS - ABUHB directorate were demotivated by the 'scoring zero' headline result and more thought is needed around the messaging and support for staff who are impacted. HT said a score of zero at the headline level was expected in this is first pass, but there should be more detail on the gaps at each level, which would inform priorities in different organisations and it was important to get the narrative right. **ACTION DR and DHCW to work together on a comms plan with common messages and FAQs.** MO commented that strategically the report needs to land correctly with DoFs and others. KLAS – **ACTION DR to provide a short video to get agreement from DDs to proceed.** **ACTION DR, IE and Ruth Chapman to write KLAS plan to present at January meeting.**	**7 - DR** **8 - DR** **9 - DR**
8. Eye care programme update (Fiona Jenkins, CVUHB)	Fiona Jenkins provided an update on the programme which covered: staffing; UAT testing; new ways of working manual; and DPIAs. Discussed roles and recruitment required now and for the proposed transfer to DHCW. There will be a gateway review undertaken by Welsh Government which needs to be completed before any transfer of the programme. More resilience in Q4 is required before handing over to DHCW and to help HBs go live. RP suggests focus on three	

	or four short term needs and then build a team to take it forward. **ACTION FJ to arrange a meeting within the week to identify requirements and process.** The new ways of working service management document requires sign off. The final version is on Teams channel awaiting comments from HDd and CTM which are required by midday Friday 9 December. HB reps to sign off at Programme Board meeting on Wednesday 14 December. **ACTION AT, SM to review and provide feedback to FJ.** DPIAs/JCA also require urgent sign-off as no HB has sharing agreement in place. Documents have been updated and need to be signed and returned prior to the Programme Board on Wednesday 14 December. **ACTION FJ agreed to provide a written update in January** (due to annual leave) and will then attend a future meeting to report on progress.	**10 - FJ** **11 - AT, SM** **12 - FJ**
9. Welsh Government (Philip Bowen, Ryan Perry)	RP briefly commented on the WG presentation. It was agreed that DPIF be added to the January meeting agenda. **ACTION LB.**	**13 - LB**
	End of meeting.	
Next Meeting: Tuesday 10 January 2pm		

Directors of Digital Peer Group Meeting
Draft Notes

Date of Meeting	Tuesday 10 January 2023
Time of Meeting	2.00pm – 5.00pm
Meeting Venue	MS Teams
Chair	Iain Bell

PRESENT:	**APOLOGIES:**	**GUESTS:**
Mike Ogonovsky ABUHB	Helen Thomas DHCW	Jamie Graham DHCW
Dylan Roberts BCUHB (part)	Alison Ramsey NWSSP	Leon Hitchings CVUHB
Stuart Morris CTMUHB	Pete Hopgood PTHB	
David Thomas CVUHB	Leanne Smith WAST	
Carwyn Lloyd-Jones DHCW		
Claire Osmundsen-Little DHCW		
Ifan Evans DHCW		
Anthony Tracey HDUHB		
Sian Richards HEIW		
Neil Jenkins NWSSP		
Iain Bell PHW		
Vicki Cooper PTHB		
Matt John SBUHB		
Carl Taylor VNHST		
Aled Williams WAST		
Mike Emery WG		
Philip Bowen WG		
Larissa Brock WNHSC		

	DISCUSSION	ACTION
1. Welcome & Apologies, Meeting Notes and Matters Arising (Chair)	Amends made to previous notes (inc removal of John Frankish ABUHB) and approved. Apologies noted as above. Matters arising: Action log updates will be handled outside of the meeting.	
2. Conversation with WG (Mike Emery, Philip Bowen)	**Mike Emery (Chief Digital Officer, WG)** ME introduced himself to the group, expressing enthusiasm for a clear framework to enable all to deliver what is needed whilst being aware of the financial constraints. **Philip Bowen (Deputy Director Digital Policy and Delivery, WG)** Presentation shared. Additional points to note: -The revised final version of the digital strategy is due to be presented to the Health Minister shortly who is keen for a February launch. The working group will then be re-established for implementation. The peer group requested further information as soon as possible. -Clarity was requested over whether the strategy would incorporate AI. PB responded that it would be referenced as a priority but DPIF funding has not focused on this. The University of Wales Trinity St David has written a proposal, with input from Louisa Nolan (PHW), and more discovery work is needed on what is taking place within the NHS in Wales. It will warrant a separate piece of work/policy in future	

	but there are no restrictions on organisations using their own core funding for AI solutions. -NHS organisations may be asked to provide more information where necessary for the Infected Blood Inquiry. -Volunteers will be requested to contribute in more depth to the WG DPIF review as from next week and a 45-minute agenda slot was requested for the next meeting for the WG update. **ACTION IB, LB to schedule.** ME added that being new in post he is keen to know the immediate challenges facing the group and how to best work together. IB responded that all are keen for more formal, simplified governance to be set up at national level. IE is now attending Directors of Planning (DoPs) meetings on a regular basis and suggested a future joint session for DoDs, DoPs and other executives (eg All Wales Medical Directors). He also stressed the importance of highlighting the digital agenda at CMO level. PB confirmed that ME would be the WG representative for this peer group from now on, with PB deputising when needed. Thanks were expressed by DoDs for PB's contribution to date.	**01 – IB, LB**
3. Integrated Medium Term Plan (IMTP) - Digital Priorities	Each organisation in NHS Wales highlighted their main planning priorities with some directors circulating slides to include further detail: **ABUHB – Mike Ogonovsky** Hospital flow management; Robotic Process Automation; aligning quality systems for standards across Wales on which to progress; APIs; data standards; information; architecture; clinical safety standards and alignment of national processes. **BCUHB – Dylan Roberts** Transformation of informatics function into digital, data and technology function to align with good practice (eg architecture, PMO etc); essential services programme (to tackle significant technical debt re some systems no longer supported); other smaller projects. NB resource constraints due to budget deficit. **CTMUHB – Stuart Morris** Health Board alignment; regional working; data driven service development; digital & data capabilities; patient-centred contact; enabling digital ways of working; cyber; automation where possible. NB significant digital debt. Capital/revenue allocations are insufficient and there is lack of budget for what should be core areas of spending. Lack of long-term sustainable funding a significant issue. **CVUHB – David Thomas** Digital outline case for Smartline care system, aspiration for a new hospital; major infrastructure prospects (suffering from past legacy); national critical care system, scan 4 safety, e-prescribing; Welsh Nursing Care Record; data sharing/strategy; interoperability/open APIs; cyber; other smaller projects (but lack of funding). NB digital is seen as high risk due to lack of funding and this is regularly highlighted to the Board.	

	HDUHB – Anthony Tracey Previously HD have never submitted 3-year plan to WG. This year AT has presented digital transformation to the Board with a list of potential returns on investment and highlighted the financial impact on lack of waste of time/resources etc. The peer group welcomed this planning approach and discussed the importance of working closely with their Directors of Finance for support. **PTHB – Vicki Cooper** Role based IT; automation; information; connectivity (fast, safe, secure); delivering patient-centric solutions; utilising business intelligence (AI, virtual clinics, telehealth etc); infrastructure for modern ways of working (Cloud). **SBUHB – Matt John** Continue with e-prescribing; review the LHB 5-year strategy (HIMSS work very timely); support national priorities and then local priorities (similar to others listed above). Currently writing a digital strategic plan with assistance from local Finance Team to achieve sign-off. **HEIW – Sian Richards** Implement and evaluate learning management system for NHS workforce; continue with digital capabilities work; intelligence and data capacity (predictive analytics); move to single platform for under/postgraduate students and trainees (Cloud); digital transformation (relating to workforce plans); cyber and Information Governance. **NWSSP – Neil Jenkins** Digital strategy has been launched. Aiming to expand work with partner organisations to deliver large digital projects where we don't have the capacity; ESR transformation programme; scan 4 safety; Oracle Cloud financial management system. NB concern around risks (cyber, technical debt). **PHW – Iain Bell** Currently undertaking discovery work on screening services and their locations. Investigating Tarion/contact tracing systems; more holistic approach to diseases and risk factors; maximisation agenda (data science and predictive analytics); investment in core missing skills and outsourcing where needed; automation of processes; how to make the most of existing digital investment. NB significant dependencies with DHCW (NDR & GP data). **VNHST – Carl Taylor** Focus on essential services; digital service design; digital skills within the organisation; community digital platforms/apps; infrastructure for NDR; cyber security; telephony system; radiotherapy and radiology solutions; AttendAnywhere; OPD transformation; e-referrals; new cancer centre digital requirements. Welsh Blood service - IT procurement and system implementation; collection teams' connectivity; appointments system.	

	WAST – Aled Williams Digital strategy was written 2 years ago. 111 service (website, telehealth, video consultations); internal system moves (Cloud), e-PCR system, data sharing with WCRS, WCP etc; AI; increasing digital literacy across the organisation. Intelligence through data (NDR, dynamic dashboard, predictive analytics); data foundations; virtual working and mobility (Office 365); telephony and data solutions collaborating across the UK; cyber. NB major risks are lack of finance, workforce vacancies (including within IT) and reliance on third parties. Attempting to emphasise future benefits of digital investment at Board level. **DHCW – Ifan Evans** Aiming for IMTP framework to align with the Minister's 6 main themes. Strategic change for DHCW with patient services/engagement (DSPP). Increasing investment in primary community and mental health to focus outside of hospital environment. Foundational platforms; data (eg NDR); open architecture and interoperability; data centre move; cyber; digital applications (digital medicines in PC and SC); diagnostics (LINC and RISP); WEDS and WIS. IB summarised the commonalities listed by each organisation, especially limited financial resources, technical debt, skillset needs and common challenges around cyber, infrastructure and investment facing the NHS in Wales. There was group discussion around providing IMTP input to Directors of Finance and Directors of Planning over the next few weeks, increasing continuity across plans and keeping the Minister's 6 priority areas in focus. **ACTION COL and AT to write a paper on the digital benefits and challenges facing all.** **ACTION LB to add joint DoDs/DoPs agenda discussion to February meeting schedule, in preparation for the joint meeting in March.** IE added that some staff may be leaving due to inefficiencies and frustrations with the lack of modern technology/inefficient hardware and perhaps there is opportunity to promote this agenda in relation to funding. ME offered to assist in highlighting to colleagues the solutions that digital can bring to help alleviate current system pressures and workforce retention issues.	**02 – COL, AT** **03 - LB**
4. Cyber Resilience (Carwyn Lloyd-Jones, Jamie Graham DHCW)	**The Ireland Health Service Attack (Carwyn Lloyd-Jones)** Presentation shared on the methods used for the cyber attack in Ireland and the time taken to recover services due to back up systems and work mobile phones also being targeted. **Cyber Plan for Wales (Jamie Graham)** JG shared details of the DHCW 3 year cyber plan. There was group discussion around the plan and a request for DHCW input to assist Digital Directors in highlighting to their Boards the work needed. Collaboration of resource and finance was emphasised with	

	combined procurement where possible. CLJ has scheduled a meeting with NWSSP to discuss procurement later this week. COL added that DHCW are submitting a request for funding directly to WG in the first instance and will report back to the group once a response is received.	
5. AOB	**WRAPPER Report (Anthony Tracey)** Document shared via email for information. **Eye Care Programme Update (David Thomas, Leon Hitchings)** Document shared via email for information. **KLAS Useability Surveys (Dylan Roberts)** Work is underway to design a questionnaire to establish levels of system useability within organisations and where improvements are needed. We are linking in with relevant networks. Louise Gregory and Ruth Chapman are the main contacts at DHCW.	
	End of meeting.	
Next Meeting: Tuesday 7 February 2pm		