Digital & Data Committee

Mon 19 December 2022, 14:00 - 16:00

Virtual Via Teams

Agenda

14:00 - 14:00
0 min

1. PRELIMINARY MATTERS

1.1. Welcome and Introductions

Ian Wells, Chair

1.2. Apologies for Absence

Ian Wells, Chair

For Noting

1.3. Declarations of Interest

Ian Wells, Chair

For Noting

14:00 - 14:00
0 min

2. CONSENT AGENDA

2.1. Items for Approval

2.1.1. Unconfirmed Minutes of the Meeting Held on 28 September 2022

Ian Wells, Chair

For Approval

2.1.1 DDC20221219 - Unconfirmed Minutes 28.9.22.pdf (11 pages)

2.1.2. Unconfirmed Minutes of the In Committee Meeting Held on 28 September 2022

Ian Wells, Chair

For Approval

2.1.2 DDC 20221219 - Unconfirmed In Committee Minutes 28.9.22.pdf (3 pages)

2.1.3. Committee Self Effectiveness Survey Outcome

Cally Hamblyn, Assistant Director of Governance and risk

For Approval

2.1.3 DDC 20221219 - Outcome of Committee Self Effectiveness Survey.pdf (4 pages)

2.2. Items for Noting

2.2.1. All Wales Independent Member Digital Network Highlight Report

Cally Hamblyn, Assistant Director of Governance and Risk

For Noting

2.2.1a DDC 20221219 - All Wales IM digital Network Highlight Report - Cover Paper.pdf (2 pages)
2.2.1b DDC 20221219 - All Wales IM Digital Network Highlight Report.pdf (5 pages)

2.2.2. Action Log

Ian Wells, Chair

For Noting

2.2.2 DDC 20220928 - Action Log.pdf (6 pages)

14:00 - 14:00
0 min

3. MAIN AGENDA

3.1. Matters Arising Not Otherwise Contained Within the Action Log

Ian Wells, Chair

3.2. Grant Thornton - Clinical Information Review - Presentation

Director of Digital

3.2a DDC 20221219 - Grant Thornton - Clinical Information Review Cover Paper.pdf (2 pages)
3.2b DDC 20221219 - Grant Thornton - Clinical Information Review - Report.pdf (23 pages)

14:00 - 14:00
0 min

4. INTEGRATED GOVERNANCE

4.1. Organisational Risk Register - Organisational & Strategic Digital Assigned Risks - to follow

Cally Hamblyn, Assistant Director of Governance & Risk

For Discussion/Noting

4.1a DDC20221219 - Organisational Risk Register Cover Report.pdf (4 pages)
4.1b DDC20221219 - Appendix 1 - Master Org RR - November 22 - Digital & Data Risks Only -Redactedv2.pdf (2 pages)

4.2. Digital Risk Register

Andrew Nelson, Chief Information Officer

For Discussion/Noting

4.2.a DDC 20221219 - Digital Risk Register.pdf (3 pages)
4.2b DDC 20221219 - Digital Risk Register.pdf (1 pages)

4.3. Committee Referral from Audit & Risk Committee - Internal Audit Reports - Digital Operating Model and Medical Records Management

Stuart Morris, Director of Digital

For Discussion/Review

4.3b DDC 20221219 - IA CTM 2223 01 Digital Operating Model Referral from ARC.pdf (21 pages)
4.3c DDC 20221219 IA Medical Records Management Referral from ARC.pdf (21 pages)

4.4. Medical Records Assurance Report

Stuart Morris, Director of Digital

For Discussion/Noting

4.4 DDC 20221219 - Medical Records Assurance Report.pdf (3 pages)

4.5. Data Protection Improvement Plan Update

Andrew Nelson, Chief Information Officer

For Discussion/Noting

4.5a DDC 20221219 - Data Protection Improvement Plan Update.pdf (3 pages)

14:00 - 14:00
0 min

5. IMPROVING CARE

5.1. Digital Programme Assurance Report

Andrew Nelson, Chief Information Officer

For Discussion/Noting

5.1 DDC 20221219 - Digital Programme Assurance Report.pdf (5 pages)

14:00 - 14:00
0 min

6. SUSTAINING OUR FUTURE

6.1. Patient Centred Contact Highlight Report

Stuart Morris, Director of Digital

For Discussion/Noting

6.1 DDC 20221219 - Patient Centred Contact.pdf (4 pages)

14:00 - 14:00
0 min

7. OTHER MATTERS

7.1. Committee Forward Work Plan 2022-23

Ian Wells, Chair

7.1 DDC 20221219 - Forward Work Plan.pdf (1 pages)

7.2. Committee Highlight Report to Board

Ian Wells, Chair

7.3. Any Other Urgent Business

Ian Wells, Chair

7.4. How Did We Do Today?

Ian Wells, Chair

14:00 - 14:00
0 min

8. DATE AND TIME OF NEXT MEETING

Ian Wells, Chair

13 March 2023 at 2:00 pm

CWM TAF MORGANNWG UNIVERSITY HEALTH BOARD

UNCONFIRMED MINUTES OF THE MEETING OF THE DIGITAL & DATA COMMITTEE HELD ON 28 SEPTEMBER 2022 VIRTUALLY VIA TEAMS

PRESENT:

Ian Wells	Independent Member (Committee Chair)
Jayne Sadgrove	Vice Chair/Independent Member
Dilys Jouvenat	Independent Member

IN ATTENDANCE:

Emrys Elias	Health Board Chair/Independent Member (in part)
Kelechi Nnoaham	Executive Director of Public Health (Caldicott Guardian)
Stuart Morris	Director of Digital/Senior Information Risk Owner (SIRO)
Andrew Nelson	Chief Information Officer/Data Protection Officer
Cally Hamblyn	Assistant Director of Corporate Governance & Risk
Karen Winder	Assistant Director of ICT
Robert Bleasdale	Chief Clinical Information Officer
Paul Chilcott	Head of Cyber
Christian Smith	Specialist
Chris Ball	Head of IT Infrastructure
Lisa Cartwright	Clinical Coding Manager (in part)
Keiron O'Shea	Advanced Systems Analyst Information Systems (in part)
Kathrine Davies	Corporate Governance Manager (Secretariat)

09/22/01 1.1 WELCOME & INTRODUCTIONS

Ian Wells welcomed everyone to the meeting including Emrys Elias, Health Board Chair who was observing the Committee on this occasion and Lisa Cartwright and Keiron O'Shea, from the Clinical Coding Team for agenda item 5.3.

09/22/02 1.2 APOLOGIES FOR ABSENCE

Apologies were **RECEIVED** from Lynda Thomas, Independent Member.

09/22/03 1.3 DECLARATIONS OF INTERESTS

No declarations of interest were received.

09/22/04 **2.0 CONSENT AGENDA**

No questions were received prior to the meeting in relation to the consent agenda.

09/22/05 **2.1 ITEMS FOR APPROVAL**

09/22/06 **2.1.1 Minutes of the meeting held on 22 June 2022**

The above minutes were **CONFIRMED** as an accurate record.

09/22/07 **2.1.2 Minutes of the In-Committee meeting held on 22 June 2022**

The above minutes were **CONFIRMED** as an accurate record.

09/22/08 **2.1.3 Committee Annual Report 2021-22**

The Annual Report 2021-22 was **APPROVED**.

09/22/09 **2.1.4 Amendment to the Standing Orders – Revised Terms of Reference**

The Terms of Reference were **APPROVED.**

09/22/10 **2.1.5 Freedom of Information Policy**

The Policy was **APPROVED.**

09/22/11 **2.1.6 Live Streaming and Recording Policy**

The Policy was **APPROVED.**

2.2 ITEMS FOR NOTING

09/22/12 **2.2.1 Action Log**

The Action Log was **NOTED.**

09/22/13 **3. MAIN AGENDA**

09/22/14 **3.1 Matters Arising Otherwise Not Contained within the Action Log**

No further matters were identified.

3.2 GOVERNANCE

09/22/15 **3.2.1 Organisational Risk Register**

C. Hamblyn presented the Organisational Risk Register that provided the Committee with the risks escalated to the register which are assigned to the Committee.

C Hamblyn drew attention to the potential impact to the Organisational Risk Register in the transition period to the New Care Group Model. She noted that "Guiding Principles: Quality

Governance & Accountability during the Operating Model Transition" were agreed at the Executive Leadership Group on the 12th September 2022 where in terms of the Organisational Risk Register a Workshop approach to realign risks led by Nurse Directors was agreed.

For reference and assurance the digital risk from the Board Assurance Framework was shared with the Committee.

I Wells referred to the risks which were due to be updated by the 30th September 2022, and queried whether there was a further update available. C. Hamblyn advised that the report was produced at the end of August/early September to align with the pathway to approval via the Executive Leadership Group, hence some of the deadlines were now in need of review. Assurance was provided that every effort was still being made to ensure risk owners were aware of the need for timely review and to set appropriate and realistic review dates.

S. Morris provided further assurance by sharing the robust approach within the Digital & Data function in terms of the management and review of risks. It was noted that risks are reviewed and updated on a fortnightly basis.

I Wells referred to the Prince Charles Hospital Data Centre and queried if this was now operational, adding that the confirmation of funding from Welsh Government for the PAS system was welcome news. S. Morris advised that work continued and the system was not yet fully operational, however, it was anticipated that it would be within the next few weeks. With regard to the Wales Patient Administration System (WPAS) funding, S. Morris was pleased to advise that the Health Board had secured the full funding that had been requested and would now be going out for recruitment.

J. Sadgrove referred to risk 4699, 'Failure to deliver a robust and sustainable Information Governance function', which had been reviewed in the period with the risk score decreasing from a 20 to a 15. J Sadgrove expressed concerns on the sustainability of realigning Clinical Coding staff as a rationale for reducing the score, if the Health Board still needed to recruit suitably qualified Information Governance professionals. In response, A. Nelson advised that the Health Board had been out to advert for the Head of Information Governance position, however, that had been unsuccessful and the use of agency support was now being explored in terms of seeking a short term solution. A Nelson assured the Committee that the realignment of the Clinical Coding staff were in line with the skills that they could bring to support the Information Governance function.

S. Morris provided further assurance to the Committee in terms of the discipline followed by the function to ensure that existing processes and systems were maintained to continue to deliver a safe and effective Information Governance service. He also reiterated that all short and long term opportunities were being explored in terms of future sustainability and capacity.

Resolution: The Committee **NOTED** the report.

09/22/16 3.3 Digital Risks

A Nelson presented the report that outlined the Digital Risks and the actions taken to mitigate them.

I Wells drew attention to the statement that 50% of medical records were being misfiled and expressed concern on the resulting impact this has on staff capacity and the transition to a digitised record. He also queried how lessons learned are being shared and any training available to staff. In response, S. Morris, recognised the delays around the preparation of the paper record and the quality that it was returned to the Medical Records Team. Assurance was provided that there was improvement activity underway to address the areas of concern and the need to recognise digital competency as a requirement for roles going forward.

R. Bleasdale commented that following a decision by the Health Board to reduce the number of administrative staff on wards, this in his view has led to the increase of misfiling, as clinical staff are now required to undertake their own filing whilst in busy clinical environments. He expressed concerns that these incidents of misfiling could translate directly to digital meta-tagging and filing if mitigation was not implemented. R Bleasdale concluded that this risk was recognised and mitigating actions were being considered.

S. Morris reflected that further work to support and strengthen the design of new and existing National systems was also needed to ensure that they are more user friendly.

Resolution: The Committee **NOTED** the report.

09/22/17 3.4 Information Commissioner's Office (ICO) Audit Feedback and Information Governance Improvement Plan

S. Morris presented the report updating the Committee on the work carried out by the Health Board on improving the controls in place to mitigate any risk of non-compliance with information standards and the progress to date in taking forward the

recommendations the ICO made to the Health Board in January 2022.

The Committee noted that there would be a further informal follow up meeting with the ICO at the end of December 2022 with a view to sign off completed recommendations by the end of March 2023. S Morris reflected that the recent engagement with the ICO had been supportive and thanked the Information Governance team for their support in compiling the evidence submission whilst recognising the challenges in terms of existing capacity.

Resolution: The Committee **NOTED** the progress made in delivering the Information Governance Improvement Plan and the outcomes of the ICO's recent follow up meeting.

09/22/18 3.5 Update on progress made in taking forward recommendations made by NHS Wales Internal Audit and Audit Wales

A Nelson presented the report that provided the Committee with an update on the progress being made against outstanding recommendations from previous Internal and External Audit reviews. A Nelson expressed concerns that some of the original recommendations might no longer be applicable or align with the Digital Strategy resulting in recommendations remaining open for a significant period of time.

In response, C Hamblyn provided assurance that there was a workshop session scheduled for October 2022, with Internal and External Audit Colleagues and Executive Leads, to work through all remaining recommendations to ensure that they remain fit for purpose. This session would provide S Morris with the opportunity to suggest realignment and closure of any recommendations where appropriate in collaboration with Audit colleagues.

I Wells referred to the update in relation to the Data Quality recommendation referenced as 0.1 in the report, and queried the statement that the Health Board were unable to undertake any further work until the Jayex (patient self check in) system was procured. In response, K. Winder advised that the Health Board were exploring the installation of a new system as the support for Jayex system would expire (Summer 2023). It was further noted that the Jayex system currently takes off the two separate WPAS systems at the moment and they would be looking to consolidate the new system.

Resolution: The Committee **NOTED** the present status of the reccomendations and **APPROVED** the proposed course of action whereby the management team would seek to review the objectives and underlying rationale for the recommendations from a more tactical perspective and consider how digital processes can achieve similar outcomes to those advised and the opportunities that would arise from the joint workshop with the Executive Team and Audit colleagues.

09/22/19 3.6 Information Governance Highlight Report

C Hamblyn presented the report that provided detail on the key issues considered by the Information Governance Group at the meeting held in July 2022.

C. Hamblyn informed the Committee that the Information Governance function had now moved into the portfolio of the Director of Digital who would present this report as the new Chair of the group moving forward.

Resolution: The Committee **NOTED** the report.

4. IMPROVING CARE

09/22/20 4.1 Digital Assurance Report

K Winder presented the report which provided the Committee with an update on the progress of the prioritised digital deliverables within the corporate Integrated Medium Term Plan (IMTP) across the eight strategic solutions and the challenges faced in the last quarter.

Members **NOTED** the following key highlights:

- ICT IMTP 39 programmes agreed and taken forward this year
- Welsh Nursing Care Record - Now live in Prince Charles Hospital, Royal Glamorgan Hospital, Ysbyty Cwm Rhondda and Ysbyty Cwm Cynon planning Princess of Wales Hospital in Quarter 4
- E Whiteboards – Scope expanded to include 6 goals programme requirements
- Welsh Emergency Department System (WEDS) and Welsh Community Care Information System (WCCIS) – on pause
- Hardware – Capital budget 20% of required amount impacting kit purchase
- Alternity – Monitoring software live to help ICT proactively improve user experience
- Information team – Working with Health Board on waiting list validation and planning, improving Qliksense to provide real time dashboards
- Microsoft Enterprise Agreement (MSEA) – CTM reduced the cost by circa 1 million due to actively reviewing users and devices

J. Sadgrove commented that she welcomed the establishment of the e-whiteboards as she had learned first hand from her visits to the acute sites what an immediate positive impact they make in being able to manage the ward.

J. Sadgrove queried the process with regard to Ophthalmology and the Open Eyes project. In response, K. Winder advised that the Health Board was going live with Glaucoma, however with other parts of the project National direction and funding arrangements are not yet confirmed.

J. Sadgrove referred to the WCCIS Implementation and in particular the implementation for Community Mental Health Services in light of the relation to Regulation 28 from the Coroner. J Sadgrove queryed whether there was any progress and decisions on the way forward for the future. K. Winder, in response, advised that there were 300 plus staff working within the Health Board on WCCIS since they had gone live and would be working with mental health on how they would be taking WCCIS forward. She also noted that Aneurin Bevan University Health Board had also now gone live and the Health Board would be monitoring their progress.

In response, S Morris recognised that this was a risk which had been escalated for some time, however, from a Health Board perspective they needed to be aligned with the Local Authority and this was the current position. He added that a meeting was planned for October 2022 to work with each local authority to see how this could manifest. In the meantime the Health Board was exploring what could be maximised within some of the other systems such as the Welsh Clinical Portal in order to bridge the gap.

J. Sadgrove stressed the need for an agreed timeframe to be reached so that this could move to a transition stage and a longer term plan with the Local Authority. S. Morris advised that the Assistant Director ICT would be working with mental health colleagues over the coming months in terms of planning. S Morris agreed to provide a detailed paper on WCCIS to the next meeting.

S. Morris took the opportunity to extend his thanks and acknowledge the huge amount of work that had been undertaken by the team across the Health Board to deliver against the digital programme, in what continues to be challenging circumstances in light of capacity and resource constraints.

Resolution: The Committee **NOTED** the report and the progress made and recognised the challenges in delivering the digital programme.

Actions: To bring an Assurance Report on WCCIS back to the next meeting.

09/22/21 4.2 Medical Records Assurance Report

S. Morris presented the report which outlined the current progress and issues regarding the Digitisation of Patient Notes Project and the current challenges faced by the Medical Records Department, including but not limited to record storage, management, and digitisation.

I Wells referred to the cost saving not being realised in the short term or even after the project had ended and queried whether the eventual outcome would result in savings. S. Morris advised that in terms of the timescale which was three years, it was originally anticipated that these would not be realised. Staff had been re-allocated and their roles had changed since that time. Longer term S Morris advised that success was dependent on how the Health Board was able to develop its digital solutions.

R. Bleasdale provided the Committee with the background to the procurement process and chosen provider and Mr Morris advised that the Programme Board had now been re-established and would be looking at this work, not only for remedial actions but, for the longer term benefit and reward.

R. Bleasdale added that it was the failure to deliver the open architecture which was presenting challenges and there was a real need to drive on the delivery of the architecture market nationally.

Resolution: The Committee **NOTED** the report.

09/22/22 4.3 Digital Communication

S. Morris presented the report which provided an update on the digital engagement across the Health Board.

S. Morris outlined the key points as follows:

- During this period the team supported the Induction of the Health Board's International Medical Graduates.
- A cyber awareness session for all staff planned for Friday 14 October 2022.
- The Strategic Digital Leadership team would design a new governance structure to complement the new CTMUHB Transformation Portfolio.
- During the autumn of 2022, a proposal would be submitted to increase the Strategic Digital Leadership team to support both the Transformation and day to day delivery activities across the Health Board.

Resolution: The Committee **NOTED** the report.

5. **SUSTAINING OUR FUTURE**

09/22/23 **5.1 ICT Major Schemes Update**

K. Winder presented the report which updated the Committee on the progress of the approved ICT capital projects.

Following the presentation S Morris advised that due to the financial constraints there were significant challenges in terms of prioritisation of schemes with difficult decisions being made. S Morris also noted that this report was being received at the Executive Leadership Group on the 4th October 2022 to ensure visibility on the challenges that were being faced.

C Ball noted that the financial position in terms of allocation was challenging for the ICT Function with a number of concerns being received as service requests were not being met due to having to prioritise allocation.

I Wells queried if the leasing of software had been considered. In response A Nelson advised that this had been explored, however, it was not considered a viable option due to the revenue challenges it would present.

In concluding the item the Committee recognised the significant growth in the Digital Estate over the past couple of years and how the funding position impacted on the delivery of the digital programme if there was an inability to provide the most efficient and effective kit to meet service requirements.

Resolution: The Committee **AGREED** the adjustments described in section 4.
NOTED the progress, status and continued work of each of the key Informatics Projects.
NOTED The issues being identified at Princess of Wales Hospital (POW).

NOTED The request against the funding available for strategic schemes, including POW.

09/22/24 **5.2 Developing the Digital Plan for Disaggregation of ICT Services from Swansea Bay UHB**

K. Winder presented the report that outlined the approach and provided an update on the progression of the disaggregation of Digital Services within the Bridgend Integrated Locality Group (ILG) from Swansea Bay University Health Board, and repatriating those services to Cwm Taf Morgannwg University Health Board.

In concluding the item, the Committee commended the ICT Team on the scale of preparatory work it had undertaken in light of the funding constraints.

Resolution: The Committee **NOTED** the report and the progress made to date with the disaggregation and the recent confirmation received from Welsh Government of funding for c.£2m over the next 3 years, and **SUPPORTED** the continuation of disaggregation

09/22/25 **5.3 Clinical Coding Strategy and Auto Coder Demonstration**

L. Cartwright and K. O'Shea provided the Committee with an innovative demonstration on advanced clinical coding.

Following the presentation I Wells queried what the role of the Clinical Coder would be if activity currently within the role was mainstreamed. In response, R Bleasdale advised that the Clinical Coder would change to that of a curator and educator to provide an enhanced level of support to clinicians in relation to best practice in terms of data entry.

The Committee welcomed the presentation and the impressive progress being made and requested a further update in future to learn more on its implementation.

A Nelson expressed thanks to L Cartwright noting that she has been instrumental in creating and enabling an environment to implement the Auto Coder and for the Health Board to be in a position to use the system to submit year end data going forward.

Resolution: The Committee **NOTED** the presentation and demonstration.

6. OTHER MATTERS

09/22/26 **6.1 Committee Highlight Report to Board**

I Wells suggested that this be completed by Corporate Governance Function outside of this meeting and shared with the Executive Leads and himself for agreement prior to its presentation at the next Health Board meeting.

09/22/27 **6.2 Forward Work Plan**

The Chair invited members to relay any suggested future topics to himself or to Kathrine Davies, Committee Secretariat.

09/22/28 **6.3 ANY OTHER BUSINESS**

No further areas of business were identified.

09/22/29 **6.4 HOW DID WE DO TODAY?**

I Wells asked Committee Members and Attendees to provide feedback on the evaluation of the meeting to the Corporate Governance Team or directly to him as Chair of the Committee.

09/22/29 **DATE AND TIME OF NEXT MEETING**

The next meeting is scheduled for the 19th December 2022 at 2:00 pm.

CWM TAF MORGANNWG UNIVERSITY HEALTH BOARD

UNCONFIRMED MINUTES OF THE "IN COMMITTEE" MEETING OF THE DIGITAL & DATA COMMITTEE HELD ON 28 SEPTEMBER 2022 VIRTUALLY VIA TEAMS

PRESENT:

Ian Wells	Independent Member (Committee Chair)
Jayne Sadgrove	Vice Chair/Independent Member
Dilys Jouvenat	Independent Member

IN ATTENDANCE:

Stuart Morris	Director of Digital
Andrew Nelson	Chief Information Officer / Senior Information Risk Owner
Cally Hamblyn	Assistant Director of Corporate Governance & Risk
Paul Chilcott	Head of Cyber
Robert Bleasdale	Chief Clinical Information Officer
Karen Winder	Assistant Director of ICT
Chris Ball	Head of IT Infrastructure
Christian Smith	Lead Informatics Nursing Specialist

09/22/01 1.1 WELCOME & INTRODUCTIONS

Ian Wells welcomed everyone to the meeting.

09/22/02 1.2 APOLOGIES FOR ABSENCE

Apologies were **RECEIVED** from Lynda Thomas, Independent Member.

09/22/03 1.3 DECLARATIONS OF INTERESTS

No declarations of interest were received.

09/22/04 2.0 MAIN AGENDA

09/22/05 2.1 Cyber Improvement Programme

P Chilcott presented an update on the following areas of the Cyber Improvement Programme:

- The Health Board's delivery of the tactical Cyber Improvement Plan which draws together the recommendations of the NCSC, CRU and Cyber Essentials. The Committee were assured that the focus remained on critical systems and the tactical plan was prioritised and illustrated in key phases as outlined in the report.
- How the detailed Cyber Improvement Programme was being taken forward within the Health Board.

I Wells recognised the significant work undertaken and commended the Team for their significant efforts in driving forward improvement in this area.

Resolution: The Committee **NOTED** the report.

Action: No actions were identified.

09/22/06 **2.2 Early reflection on lessons learnt from the Adastra Incident**

A Nelson presented the report which provided the background to the recent ransomware attack on the Adastra System on the 4th August 2022, and reflected upon the early lessons learned as a result of the impact the event had on service delivery within the Health Board.

The Committee were assured that no Welsh data was lost as a result of the attack and that risk mitigation arrangements were being implemented in terms of reducing the impact of any possible future ransomware attacks being realised. It was also noted that the NIST framework approach had been used in terms of managing this event and helped to recognise any improvements needed to the Health Boards architecture.

J Sadgrove queried whether the Health Board learnt from other attacks such as the ransonware incident in Ireland. In response, it was confirmed that the Team ensure that they remained informed and aware of other ransonware attacks to identify how the Health Board can learn and evaluate its businesss continuity arrangements and ensure it has identified and managed any potential weaknesses.

Resolution: The Committee **NOTED** the report and the incidents that had occurred during this period.

Action: No actions were identified.

09/22/07 **3.3 Digital Critical Incidents**

P Chilcott presented the report that provided the Committee with the detail on 18 major incidents that had occured during the period 1st June 2022 to the 15th September 2022.

The Committees attention was focussed upon the four critical incidents during the period and assurance was received that root cause investigations were undertaken so that learning could be recognised.

It was noted that all members of the digital team had observed marked improvements in service management and processes in terms of the recording and evaluation of Digital Incidents.

Resolution: The Committee **NOTED** the report and the incidents that had occurred during this period.

Action: No actions were identified.

09/22/08 **3.4 Infrastructure Review**

A Nelson presented the report that provided the Committee with an update on the commissioning of 4Cs Consulting who provided independent advice on the Health Board's present and future digital infrastructure and its relative priorities.

In response to the update the Committee requested that they receive a copy of the management response as soon as it is available.

S Morris commented that the review was welcomed as it underpinned the strategic direction of the Digital and Data function. He also advised that the Executive Team would be fully engaged with the drafting of the management response and this would be shared with the Committee in due course.

Resolution: The Committee **NOTED** the report.

Action Management Response to the Infrastructure Review to be shared with the Committee.

09/22/09 **6.3 ANY OTHER BUSINESS**
No further business was identified.

09/22/10 **DATE AND TIME OF NEXT MEETING**
The next meeting is scheduled for the 19TH December at 2:00 pm.

AGENDA ITEM
2.1.3

DIGITAL & DATA COMMITTEE

OUTCOME REPORT: DIGITAL & DATA COMMITTEE EFFECTIVENESS SURVEY

DATE OF MEETING	19th December 2022
PUBLIC OR PRIVATE REPORT	**PUBLIC**
IF PRIVATE PLEASE INDICATE REASON	Not Applicable - Public Report
PREPARED BY	Kathrine Davies, Corporate Governance Manager
PRESENTED BY	Cally Hamblyn, Assistant Director of Governance & Risk
EXECUTIVE SPONSOR APPROVED	Assistant Director Governance & Risk
REPORT PURPOSE	**FOR NOTING**

ACRONYMS	
Nil	

1. PURPOSE

1.1 The Chair of the Digital and Committee is required to present an annual report to the Board outlining the Committee's business through the financial year to provide an assurance. As part of this process, the Committee are required to undertake an annual self-assessment questionnaire.

1.2 Members of the Committee are asked to discuss and review the feedback set out in this report which relating to its activities and performance during 2021/22.

1.3 Members should note that five responses were received.

2. SUMMARY REPORT

Positive Assurance	**1. Committee Effectiveness:** There was a clear consensus that Members/Attendees were aware that: • There were approved Terms of Reference in place defining the role of the Committee and were reviewed annually. • In the main the Committee were aware that an Annual Report was produced and reported to the Board to provide assurance that the Committee considers activity consistent with its remit. • A Committee Annual Cycle of Business had been established to be dealt with across the year. **2. Committee Business** • Members of the Committee felt that they met with sufficient frequency to deal with planned matters in an effective manner. • The Committee was felt to be adequately supported by the meeting secretariat. • The Committee felt that the meetings were effectively Chaired with clarity of purpose and outcome. • It was felt that where meetings of the Committee were held in private that these had been used appropriately for items that should not be discussed in the public domain. Feedback reflected that these meetings were held at every meeting due to the commercially sensitive item of cyber security and critical incidents. • The Committee were of the opinion that each agenda item was 'closed off' appropriately so it was clear what the conclusion was. • Members felt that the boundaries between this Committee and other Committees were clearly defined with adequate cross-referral if required. **3. Behaviour, Culture and Values** • The meeting behaviours of Members/Attendees were considered to be courteous and professional. • It was felt that the atmosphere at the meetings were conductive to open and productive debate.

	4. Welsh Language • Meetings through the medium of Welsh was supported if it was the preferred language of any of the Members/Attendees. Appropriate arrangements for translation would be necessary in such circumstances.
Areas of Note	**1. Committee Effectiveness** • The Terms of Reference were reviewed and approved at its September 2022 meeting as part of the annual review basis prior to subsequent approval by the Health Board in November 2022. • The Committee **received** and approved its Annual Report for 2021-22 at its September 2022 meeting and was submitted to the Board in November 2022. • The Committee Cycle of Business has been implemented to further complement the Forward Work Programme and was approved by the Committee at their March 2022 meeting. **2. Committee Business** • The Digital & Data Committee utilises a Consent Agenda system for routine business consideration. Members are aware that should they consider that any item on consent requires further assurance and scrutiny then it will be moved to the main agenda for discussion. • As with all Board Committees, the Committee, where sufficiently urgent can consider any item 'Out of Committee' via 'Chairs Urgent Action'. • Highlight reports are produced following each meeting so that the Board is kept informed of the nature of the issues considered and any decisions reached. These reports are available as part of the 'public' Board papers to demonstrate the Health Board's commitment to openness and transparency. Feedback reflected that the Highlight reports were succinct and to the point.
Areas Requiring Further Consideration	**Committee Effectiveness - Areas for action/improvement** were identified as follows: • Whilst virtual meetings have been a positive experience **overall** and that it had been convenient in that they had enabled scrutiny to continue, feedback reflected that it more convenient and enabled better use of time. However, it was felt that it did reduce networking opportunities.

Action Plan	In response to the areas of improvement identified the following actions are proposed: • The Committee could consider the possibility of holding a face to face meeting during the year to allow for networking and relationship building which is sometimes lost when meetings were held virtually.
Appendices	Nil

3. Recommendation

3.1 The Committee is asked to **NOTE** the report.

AGENDA ITEM
2.2.1a

DIGITAL & DATA COMMITTEE

All Wales IM Digital Network Highlight Report

Date of meeting	19 December 2022
FOI Status	Open/Public
If closed please indicate reason	Not Applicable - Public Report
Prepared by	Stuart Morris, Director of Digital
Presented by	Cally Hamblyn, Assistant Director of Governance & Risk
Approving Executive Sponsor	Cally Hamblyn, Assistant Director of Governance & Risk
Report purpose	FOR NOTING

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

Committee/Group/Individuals	Date	Outcome
N/A		

ACRONYMS
UHB – University Health Board

1. SITUATION/BACKGROUND

1.1 The purpose of this report is to update the Committee on the latest meeting of the All Wales Independent Member Digital Network.

2. SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

2.1 The full report is appended to this report

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

3.1 Nothing to be escalated from this report

4. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	There are no specific quality and safety implications related to the activity outined in this report.
Related Health and Care standard(s)	Governance, Leadership and Accountability
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below)
	Equality Impact Assessment to be completed as part of each project
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	Yes (Include further detail below)
	Resources to deliver
Link to Strategic Goals	Improving Care

5. RECOMMENDATION

5.1 The Committee is asked to **NOTE** the report

DIGITAL HEALTH AND CARE WALES
ALL WALES INDEPENDENT MEMBER DIGITAL NETWORK HIGHLIGHT REPORT

Agenda Item	

Name of Meeting	All Wales Independent Member Digital Network Highlight Report
Date of Meeting	19 October 2022

Public or Private	Private
IF PRIVATE: please indicate reason	The IM Digital Network is a Private meeting

Executive Sponsor	Chris Darling, Board Secretary
Prepared By	Chris Darling, Board Secretary
Presented By	David Selway, Independent Member, DHCW

Purpose of the Report	For Noting
Recommendation	
The Board is being asked to: NOTE the content of the report.	

1 IMPACT ASSESSMENT

STRATEGIC OBJECTIVE	All Objectives apply

CORPORATE RISK (ref if appropriate)	

WELL-BEING OF FUTURE GENERATIONS ACT	A Healthier Wales
If more than one standard applies, please list below:	

DHCW QUALITY STANDARDS	N/A
If more than one standard applies, please list below:	

HEALTH CARE STANDARD	Governance, leadership and acccountability
If more than one standard applies, please list below:	

EQUALITY IMPACT ASSESSMENT STATEMENT	Date of submission: N/A
Choose an item.	Outcome:
Statement:	

Workforce EQIA page

IMPACT ASSESSMENT	
QUALITY AND SAFETY IMPLICATIONS/IMPACT	No, there are no specific quality and safety implications related to the activity outlined in this report.
LEGAL IMPLICATIONS/IMPACT	No, there are no specific legal implications related to the activity outlined in this report.
FINANCIAL IMPLICATION/IMPACT	No, there are no specific financial implication related to the activity outlined in this report
WORKFORCE IMPLICATION/IMPACT	No, there is no direct impact on resources as a result of the activity outlined in this report.
SOCIO ECONOMIC IMPLICATION/IMPACT	No. there are no specific socio-economic implications related to the activity outlined in this report

RESEARCH AND INNOVATION IMPLICATION/IMPACT	No, there is no specific research and innovation implications relating to the activity outlined within this report

Acronyms			
DHCW	Digital Health and Care Wales	IM	Independent Member
SHA	Special Health Authority	RAG	Red, Amber, Green
CDPS	Centre for Digital Public Services	ICT	Information Communication Technology
SRO	Senior Responsible Officer	DMP	Digital Medicine Portfolio
DSPP	Digital Services for Patients and the Public	HEIW	Health Education and Improvement Wales

2 SITUATION/BACKGROUND

2.1 The Independent Member Digital Network was created to strengthen links with Independent Members from all Health Boards, Special Health Authorities and Trusts across NHS Wales to enhance the Digital agenda and improve services for patients and service users across the system. John Gammon has joined the network as the new Independent Member for HEIW.

2.2 The inaugural meeting took place on the 26 January 2022 and this report provides a highlight from the fourth meeting which took place on 19 October 2022.

2.3 The expectation will be that all members of the network contribute agenda items and that the forward plan will take a system wide approach in terms of subjects for discussion.

3 SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

Digital Services for Patients and the Public (DSPP – SRO)

3.1 The Network received an informative presentation from two DHCW Program Directors of the Digital Services for Patients and the Public (DSPP) program. The presentation outlined the purpose of DSPP and how the program would be delivered. The Network was informed of the NHS app and how it would link to primary care in Wales. The app was in the process of being

trialled across 10 GP practices in Wales with just over 1000 patients. The Network discussed possible issues with the NHS app if GPs restrict some of the services available to their patients.

Cyber Resilience Unit

3.2 The Network were joined by Michael Prasad, Cyber Resilience Lead who gave a presentation on the Cyber Resilience Unit and the work being undertaken across the whole of NHS Wales. The Network were informed of the purposes of the Cyber Resilience Unit and the work completed to date which included the creation of the Cyber Assessment Framework (CAF) for NHS Wales.

Welsh Value in Health Care

3.3 The Network welcomed Sally Lewis, Director of Welsh Value in Health Care who provided a presentation on the Welsh Value in Health Care. The presentation included an overview of the aim of the Value-Based healthcare to be the equitable, sustainable and transparent use of the available resources to achieve better outcomes and experiences for every person. The Network discussed ways in which they could support the initiative.

Update on DHCW Research and Information Strategy / Function

3.4 Rachael Powell, Associate Director of Information, Intelligence and Research (DHCW) joined the meeting to provide an overview of the recently approved Research and Information Strategy. The presentation outlined the vision for research and innovation with four strategic aims:-

- Deliver the assets and resource to facilitate the Research and Innovation environment across Wales
- Focus on quality and the impact of our research and innovation
- Identify, develop and nurture effective partnerships
- Develop a culture of innovation that promotes creativity, learning, encouragement and support.

4 KEY RISKS/MATTERS FOR ESCALATION TO BOARD/COMMITTEE

4.1 Not all NHS Wales Bodies have an Independent Member with a lead for Digital, however, any nominated Independent Member can attend the IM Digital Network to ensure each body is represented.

4.2 The Network discussed the need for topics such as Cyber Security to be highlighted and raised on Board agendas.

5 RECOMMENDATION

5.1 The Board is being asked to NOTE the content of the report.

6 APPROVAL / SCRUTINY ROUTE

Person / Committee / Group who have received or considered this paper prior to this meeting		
PERSON, COMMITTEE OR GROUP	DATE	OUTCOME
David Selway		Approved

ACTION LOG – DIGITAL & DATA COMMITTEE					
Minute Reference	**Date of Meeting Action Originated**	**Issue**	**Lead Officer**	**Timescale for Action to be completed**	**Status of Action** (as at 9.12.22)
28.9.22	September 2022	**Digital Assurance Report** To bring an Assurance Report on WCCIS back to the next meeting	Andrew Nelson	December 2022	**Completed** Options discussed by Executive Board and a verbal update to be provided as part of the Digital Programme Assurance Report item at December 2022 meeting.
06.22.18	June 2022	**Digital Assurance Report** S Morris and the Digital Team to consider the following actions: • Opthalmology (Open Eyes) – was there any planned care funding which could be used to support this programme as it aligns to the Audit Wales Report on Planned Care where Opthalmology was recognised as a signficant area of concern. • Community Services (WCCIS) – in considering the assessment for prioritisation, the regulation 28 from the coroner in relation to prevent further loss of life should be a signifant consideration factor. • Explore the use of laptop leasing schemes.	Stuart Morris/Digital Team	September 2022 Propose to close	**Ongoing** Progress Update 12.12.22: - Areas of risk remain prior to implementation. Project Coordination, Service Readiness and Service Management Support need to be address prior to Go-Live - In November 2022, Executive Team have approved to implement WCCIS in a phased manner for Mental Health Services, Community Services and District Nursing

					- Unable to proceed with leasing scheme at this time

COMPLETED ACTIONS					
03.22.22	March 2022	**Critical Incidents Report** To query the specification of the LINC system with the Assistant Director for ICT.	Paul Chilcott/Stuart Morris	June 2022	**Completed** The LINC programme is on the risk register.
03.22.22	March 2022	**Critical Incidents Report** To review the wording in Section 2.1.1 on storage area networking	Paul Chilcott	June 2022	**Completed** This can be read as – "in the event of a failure". The SAN is likely to have multiple resilient components to ensure that failures are tolerated, and then supported by a Service Level Agreement with the manufacturer for rapid replacement. This will be taken to the LINC service Management Board for further assurance.
06.22.22	June 2022	**Digital Communication** S Morris / All – in terms of accessibility avoid the use of red and yellow text.	Stuart Morris/All	June 2022	**Completed** The team have noted the requirement to avoid red and yellow text in reports.

					Mentimeter tool does allow for a level of configuration although the use of colour brings Word Clouds etc… to life … need to consider the audience when presenting feedback. No further action at this time.
06.22.20	June 2022	**Infrastucture Programme** Provide a future report on the Infrastructure Plan.	Andrew Nelson	September 2022	**Completed** On Agenda September 2022 Meeting
06.22.14	June 2022	**Organisational Risk Register** Update Digital Risks to ensure they represent the current position and review dates are up to date.	Andrew Nelson	September 2022	**Completed** Risk assessments updated on the Datix Risk Module and are reflected in the Organisational Risk Register.
07.21.19	July 2021	**All Wales Information Governance Toolkit Update** To provide a further update to the next meeting on the actions to mitigate the gaps identified by the Information Governance Toolkit Self-Assessment	Director of Corporate Governance	October 2021	**COMPLETED** Report received by the Committee at the October 2021 meeting.
07.21.21	July 2021	**Digital Programme Assurance Report** Agreed that A. Nelson would arrange for the Target Operating Model review to be made available to members.	Chief Information Officer / Senior Information Risk Owner	October 2021	**COMPLETED** Circulated to Members October 2021

10.21.15	October 2021	**Organisational Risk Register** Risks 4337, 4282 and 4693 would be reviewed outside of the meeting and reported back.	Director of Corporate Governance	March 2022	**COMPLETED** The Actions have been reviewed and are reflected in the Organisational Risk Register being presented to the 23 March meeting.
10.21.15	October 2021	**Organisational Risk Register** Narrative on Risk 4963 to be amended to reflect the explanation from K. Winder on uploading the data	Director of Corporate Governance	March 2022	**COMPLETED** Risk has been updated and is now proposed to be closed. The update will come forward in the Org RR update to D&D Committee for the March 2022 meeting.
10.21.21	October 2021	**Disaggregation of ICT Support Services from Swansea Bay UHB** The Committee agreed to escalate their concerns to the Board on the lack of funding for the disaggregation of ICT support services	Director of Corporate Governance	November 2021	**COMPLETED** Escalated to Board in the Committee Highlight Report and received at the November 2021 Board Meeting.
10.21.15	October 2021	**Organisational Risk Register** Internal Audit report on Bridgend Disaggregation would be shared with Members of the Committee once received	Chief Information Officer/Senior Information Risk Owner	March 2022	**COMPLETED** On Agenda for March 2022 meeting.
10.21.25	October 2021	**Forward Work Plan** Welsh Nursing Care Record be added to the Forward Work Programme for a further update to a future meeting of the Committee.	Director of Corporate Governance	January 2022	**COMPLETED** Added for Forward Work Plan for June 2022 Meeting.

7.21.10	July 2021	**All Wales Information Governance Toolkit Outcome** To provide a further update to the Committee on the actions to mitigate the gaps identified by the Information Governance Toolkit Self-Assessment	Director of Corporate Governance	October 2021	**COMPLETE** Report received at October 2021 Meeting.
7.21.19	July 2021	**Digital Programme Assurance** Circulate the review of the Target Operating Model to Members	Chief Information Officer / Senior Information Risk Owner	October 2021	**COMPLETE** Circulated to Committee Members 7.10.21
03.21.19	March 2021	**Internal Audit Report – IT Assessment** Interim Director of Planning & Performance to review management response and discuss with Committee Chair in order that an updated management response is received at the next meeting.	Chief Information Officer / Senior Information Risk Owner	July 2021	**COMPLETE** Report received by Committee at July 2021 meeting.
03.21.19	March 2021	**Internal Audit Report – IT Service Management** Verbal update to be provided at next meeting.	Chief Information Officer / Senior Information Risk Owner	July 2021	**COMPLETE** Report received by Committee at July 2021 meeting.
03.21.22	March 2021	**Clinical Coding Plan** Report to be received at next meeting.	Chief Information Officer / Senior Information Risk Owner	July 2021	**COMPLETE** Report received by Committee at July 2021 meeting.
03.21.22	March 2021	**Committee Forward Work Plan**	Head of Corporate	March 2021	**COMPLETE** Actioned on 11th March 2021

		Cancellation of two meetings of the Committee necessitated Executive Lead reflecting on work programme to prioritise topics for future meetings – this to be noted on work plan.	Governance & Board Business		
IC 03.21.15	March 2021	**Cyber Resilience** Report to be received "In Committee" at next meeting.	Chief Information Officer / Senior Information Risk Owner	July 2021	**COMPLETE** Report received by Committee at July 2021 meeting.

AGENDA ITEM
3.2a

DIGITAL & DATA COMMITTEE

GRANT THORNTON – CLINICAL INFORMATION REVIEW

Date of meeting	19 December 2022
FOI Status	Open/Public
If closed please indicate reason	Not Applicable - Public Report
Prepared by	Stuart Morris, Director of Digital
Presented by	Stuart Morris, Director of Digital
Approving Executive Sponsor	Stuart Morris, Director of Digital
Report purpose	FOR NOTING

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

Committee/Group/Individuals	Date	Outcome
N/A		

ACRONYMS
UHB – University Health Board

1. SITUATION/BACKGROUND

1.1 The purpose of this report is to update the Committee on Clinical Information Review undertaken by Grant Thornton.

2. SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

2.1 The full report is appended to this report

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

3.1 A number of risks are highlighted within this report in terms of resourcing, data quality and data literacy.

4. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	There are no specific quality and safety implications related to the activity outined in this report.
Related Health and Care standard(s)	Governance, Leadership and Accountability
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below)
	Equality Impact Assessment to be completed as part of each project
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	Yes (Include further detail below)
	Resources to deliver
Link to Strategic Goals	Improving Care

5. RECOMMENDATION

5.1 The Committee is asked to **NOTE** the report

Information Improvement Roadmap

Cwm Taf Morgannwg University Health Board

November 2022

Executive summary

Good-quality data is fundamental to providing the right care

Better clinical data delivers better patient outcomes – enabling improvements in the efficiency and effectiveness of care, improving future clinical decisions and ultimately improving patient outcomes.

Grant Thornton have been supporting Cwm Taf Morgannwg University Health Board to review their elective capacity and identify areas for potential improvement. Throughout the work we encountered fundamental issues with clinical data which made it difficult to draw consistent, meaningful conclusions. These issues result in a lack of confidence, ownership and understanding of data by clinical and operational teams.

Based on our experience of working with NHS organisations we have outlined the expectations for clinical leadership to the production and use of information, and the benefits this will provide to the organisation. As our previous work demonstrated, the use of clinical data by services identifies issues and leads to improved ownership of the data produced and reported.

We have developed a high-level road map designed to move the organisation to a point where clinical teams are routinely and frequently producing and using clinical data that they have faith in. This is outlined at a high-level below and described in more detail within this document.

The health board has a detailed digital strategy that includes a focus on increased analytics to support clinical decision making. However, there are a number of constraints that are impacting on progress in this area, particularly related to the resources and infrastructure available to support improvement, and the limitations of national systems and historic national policy.

Clinical and corporate staff working together to complete the practical tasks outlined in the roadmap will ultimately lead to the behaviours exhibited by high-performing organisations when using data to improve the quality of services.

Short term
0-6 months

- Focus on the three pathways covered by our previous work
- Build on the engagement with clinical and operational staff already established
- Work collaboratively to address data quality issues identified through our previous work

Medium term
6-18 months

- Use the learning form the short-term activities to scale- up activities to divisional level
- Ensure improvement activities are clinically-led and align to clinical delivery across divisions and sites
- Provide support and training to improve use of information by service and operational staff

Long term
18-36 months

- Build on the foundations from the first two phases to establish the board as an intelligence-led organisation
- Develop a single version of the truth reporting suite for use by clinical teams - linking performance, activity, outcome, finance and workforce data.
- Integrate the use of good quality information into an organisation wide approach to quality improvement
- Use advanced analytics to improve patient care, reduce clinical variation and address health inequalities
- Establish a clinically-led assurance framework for all clinical data across the health board

Introduction

Background

Our work completed to-date and purpose of this document

Background to the work

Grant Thornton have been supporting Cwm Taf Morgannwg University Health Board to review their elective capacity and identify areas for potential improvement. This support has comprised:

- A review of demand and capacity was undertaken within Orthopedics, ENT, Gynecology, General surgery and Urology.
- This was followed by a review of day case opportunity was undertaken focused on:
  - Urology – cystoscopy
  - General surgery – cholecystectomy
  - Gynaecology – hysterectomy

As part of the work we set up a clinical working group with individuals and teams who already had ideas for change and who will help gain momentum locally. We used a series of task and finish groups to gather a shared understanding of the problems to be solved which is essential at the beginning of any change initiative.

We identified short term changes that could be simply implemented by the teams on the ground as quality improvement initiatives and have identified larger scale Health Board programmes of change to improve the delivery of daycase activity. This included identifying areas where services could review and improve their data.

Appendix A outlines the approach taken to pathway analysis and some of the issues encountered.

Purpose of this document

This document is designed to provide a roadmap to **establishing clinical leadership to the production and use of accurate information**.

Throughout the work we encountered fundamental issues with clinical data which made it difficult to draw consistent, meaningful conclusions and to undertake the activities agreed as originally requested.

As part of our support, we agreed to develop recommendations for improvement to support the health board to improve its clinical information. To do this we have:

- Made specific recommendations to address the issues identified through our day case pathway reviews, in conjunction with clinical and operational staff – these are included in appendix 2
- Used our experience of working with NHS organisations to outline expectations for clinical ownership and use of information, and the support required to facilitate this
- Developed a high-level roadmap for improvement in data quality and the use of data by services, with clear deliverables over short, medium and long-term. The short term aspects will focus on the three pathways, the medium term focuses on scaling learning across other services, and the long-term will look at the strategic implications for the organisation as a whole.

We will present the Roadmap to key executive and clinical stakeholders, and use feedback from these session to provide recommendations to support the Board on its on aspiration to become a data-driven organisation.

Current position

Information challenges encountered during our work

We encountered multiple data challenges when aligning demand and capacity data and when seeking to link and analyse data across pathways.

These challenges make it very difficult to establish an accurate view on pathway effectiveness and will impact on operational decision making.

If these issues of data consistency, completeness and accuracy persist across all services they will **impact on the Health Board's ability** to:

- Establish a reliable and consistent view of pathway delivery and clinical variation across the organisation
- Develop robust plans to standardise care delivery and clinical pathways across the organisation
- Identify potential improvement opportunities of productivity, quality and costs
- Understand patient need, risk and complexity and plan services to meet these
- Undertake the day-to-day management of services in an efficient and consistent manner

Additionally, these issues result in a **lack of confidence, ownership and understanding of data** by clinical and operational teams. This lack of transparency will lead to a disconnect between operational teams and the health board's senior management team

Issues with data included:

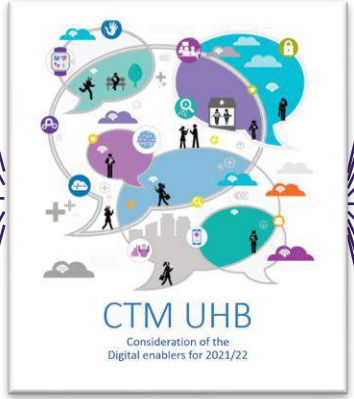
- **Incomplete activity and waiting list coding** – significant numbers of records with diagnosis or procedure coding were incomplete or uncoded
- **Daycase recording** – some patients who go home on the same day are not being recorded as daycase, either because they were not planned as such or because data recording is incorrect
- **Recording of outpatient procedures** – outpatient procedures are identified within activity data, but not included in capacity templates
- **Allocation of outpatient capacity to new and follow up** – new to follow up ratios in the capacity data for some specialties do not reflect the activity actually delivered
- **Inconsistent approach to capacity data reporting across ILGs** – the data is captured and reported in different formats in different localities
- **Issues with naming conventions** – specialty categorisations varied across the activity and waiting list datasets received, and recording of consultant and site sometimes use free text fields
- **Availability of risk and complexity data** – ASA scores and other risk and complexity measures are not readily available from central, even if they are recorded in clinical systems

The Board's strategy for data and digital

Using digital enablers to build healthy communities together

Objectives in the digital strategy

- Supporting our population to increasingly manage their health and wellbeing, maintaining their access to care services, support networks, to clinicians and other care teams wherever they are & whatever their circumstance
- Supporting carers and clinicians to be able to continue to provide care effectively and safely, in a joined up way, where they have access to the clinical records and notes they need, and they can rely on the hardware (such as PCs), broadband connectivity and the systems wherever they are and whenever they need them
- To work with all users to provide them with digital tools, knowledge and training for the environments we are operating in, whilst taking the opportunity to address some of the health inequalities prevalent in our community and embed digital as a way of working – done in a way that we learn, and continually improve the productivity and satisfaction of working in a digital way and in a covid environment
- Support quick proactive and effective decision making – providing patients and protection teams with rapid access to triage and information
- Supporting users – patients, clinicians, members of the protection and surveillance community and those redesigning systems in being proactive or at least quick to react to the changing situation and environment, empowering and providing with the intelligence to make better decisions in respect of achieving these strategic objectives and enact them



Information improvement solutions in the strategy

- Maximise the opportunity to digitise data by reducing unstructured manual data entry
- Provide real-time access to intelligent clinical information to service users, operational and clinical professionals via accessible digital tools
- Making best use of clinical systems by optimising their configuration to make data entry easy and standardised by reducing variation
- Provide the local digital tools and data required to support effective care
- A standards based single view of information across services and sites with high availability
- Empowering staff and clinicians to integrate the use of data into their practice through protected time, targeted support and training
- Increase the digital literacy and data awareness of the workforce through the provision of training and supporting the best use of data
- Exploiting technology and innovation to create information efficiencies and improve user experience alongside improvements in data quality
- Services are supported by using analytical data and insight collaboratively for decision making in transformation and clinical delivery

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Constraints

Issues that will affect the Board's ability to implement the road map

National

- National approaches and policies have historically not been aligned with the objectives of the organisation's digital strategy, and has limited its scope
- National systems are 'locked down' and in places limit access to data which limits the ability to deliver this roadmap – an open architecture is required to balance local and national priorities
- The revised National Clinical Framework and new National Data Resource strategy outline updated national aspirations for data, but current national arrangements does not yet support these aspirations

Infrastructure

- To meet national requirements the health board needs more resilient information management services and fit-for-purpose data visualisation platforms.
- To deliver a responsive service the Health Board requires a resilient infrastructure and data architecture, using consistent technical data standards
- Without the above, there is limited opportunity to exploit complementary technologies such as AI and automation

Wider challenges that will impact on information improvement

Resource

- Challenges in clinical engagement are compounded by increasing activity and system pressures, and the time data entry currently takes via eForms
- Training to support digital and analytical skills is resource intensive exacerbated by geography and multiple care settings
- There is limited analytical and training resources available, with difficulties in attracting analytical and digital talent
- Competing pressures for resource and prioritisation of information improvement

Organisational

- Lack of clinical ownership of information hampers discussions around transformation and organisational performance
- Organisational restructure into divisions will result in changes to governance structures, which will further impact ownership of reporting outputs by service leads
- Different hospitals are using differing systems and practices
- A move to consistent pathways across sites will result in further changes to clinical practice and data capture

Using data for improvement

The importance of clinical information

Good quality information to enable evidence-based decisions

Good-quality data is fundamental to providing the right care to the right patient in the right place. Patient-level information is integral to the decisions that need to be made across multiple services, pathways and organisations in order to manage current services, reducing in unwarranted variation, and determining the future models of care

The Welsh health service is structured to function with a **collaborative, integrated approach** to designing, planning and delivering health services across local areas. Increased collaboration between sectors and settings will create more joined up patient pathways, supported by digital technology.

Information needs to describe the whole patient pathway which means the data and methodologies for capturing, managing and reporting information must be **consistent and comparable** across the settings and services. The reliability of data in non-inpatient settings such as community services is just as important as inpatient data.

To manage and improve the quality of care**,** clinical and operational staff need access to high-quality data that describes the needs of the patients and the treatments received. **Better clinical information enables more effective and efficient care**, improving the quality-of-care plans and streamlining care through a clearer understanding of the patients treated.

Accurate information will ensure that **decisions made at a senior level** within hospitals, and across the health board, can be **made with confidence** in the assumptions being drawn from the board's clinical information.

Better clinical data delivers better patient outcomes – enabling improvements in the efficiency and effectiveness of care, improving future clinical decisions and ultimately improving patient outcomes.

From our experience of supporting the improvement of clinical data across the NHS, processes need to function effectively across all areas of the data pathway to produce good quality information that can be used by service to improve care.

- **Inputs** – the way data is entered into systems by clinical, operational and administrative staff
- **Systems** – how clinical systems are configured to support data capture and output
- **Data management** – the way data is extracted, stored and manipulated within the organisation
- **Reporting** – the rules defining how information is reported locally and nationally
- **Service engagement** – service-level understanding, ownership and use of clinical information
- **Governance** – the organisational controls and policies in place to ensure its information accurately reflects the care delivered

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Establishing a data driven culture

Learning from our work with other organisations

The importance of a data-driven culture in healthcare is becoming paramount as organisations face unprecedented challenges in delivering complex care to an ageing population in an economically challenged environment.

Decisions relating to care delivery, planning and investment are all underpinned by quality data. Likewise operational and clinical performance can only be improved by utilising good data to highlight opportunities and areas of need.

All organisations will have limited potential if they aren't supported by a culture of data and analytics. To instil a culture ownership it is important to support clinicians and managers to be good consumers of data-driven insights. Collaboration between the analytical information could also be improved to ensure data-driven innovation and ownership of performance data address data needs of end users – whether they be clinicians, senior managers.

- **focus on quality improvement rather than simply delivering productivity performance target**
- understanding of the data its accuracy and deficiencies
- **continual engagement with clinical and operational teams**, engage individually alongside team engagement
- proactive in the use of data to support clinical and operational transformation
- Create an iterative and **proactive feedback loop** for clinicians and operational mangers

The National Clinical Framework outlines clear aspirations to establish local and national learning health systems that will drive development of NHS clinical services. **The activities outlined in this roadmap will enable the health board to meet the goals of the framework**.

Clinical and operational ownership of data

Supporting clinical and operational staff to make better use of data

	Behaviours	Impact
Leadership	When boards and clinical leaders understand the importance of data quality and their role in data governance, the management information in an organisation improves.	This leads to improved decision-making, delivering increased value and benefit for the patients served.
Data Accessibility	Enabling data to be contemporaneous and accessible improves the organisational appetite for engaging in performance information, and its use in underpinning change and improvement.	The value of data and its outputs improves as it becomes readily available, creating greater investment and appetite for information. This leads to evidence based decisions and improved structured approaches to quality and performance.
Data Literacy	Improving organisational data literacy by facilitating a digital and data culture delivering the required skills allows for the best utilisation of data.	Ensures staff are equipped with the ability to make decisions based upon data insights, whilst improving the reporting culture. An increased knowledge base collectively informs and enriches the data and digital strategy
Data Quality	Creating a culture of good quality, timely and accurate data. Placing data quality at the forefront of reporting culture so that it is disseminated and owned throughout the organisation	Improvement in the quality of data impacting patient care, organisational reputation and effecting the evidence that quantifies quality, performance and supports decision making
Training & support	Provide a comprehensive training and support offer to staff ensuring effective use of clinical systems. Tailored to functional role with an understanding of outputs and reporting dependencies within pathways and systems.	This creates standards and an understanding of the impact of inconsistent or poor use of clinical systems. Tailoring training and support creates a culture of data ownership and greater awareness of downstream impacts of poor practice.
Governance	Health leaders should ensure that there are robust governance processes in place within organisations and across Health boards to support the provision and use of accurate information	The cascading of consistent information through an established governance structure creates transparency and ownership of both challenges and opportunities throughout the organisation.

How services can use data for improvement

Going beyond business-as-usual to improve quality

Data quality improves when it is used for decision-making. Our experience of working with health organisations has shown that when information is used by clinical teams to inform their management of services, the quality of the data used improves.

Services should routinely used information and reporting as part of their **day-to-day business**. Structured activity reports, performance KPIs and capacity information will underpin all business meetings, and representatives from corporate services such as HR or finance should routinely attend weekly meetings with services.

Alongside the business-as-usual use of information, high performing organisations use data in a structured and directive manner to undertake a **collective, clinically driven process of improving quality**, where all aspects of service delivery can be considered and their inter-play fully understood. This would include:

- establishing a clear understanding of the current state, based on accurate and relevant information established through engagement between clinical, operational and corporate staff
- ensuring the use of adequate additional information to contextualise performance, such as benchmarking (both internal and external), best practice and clinical developments
- defining a set of improvement aims and expected outcomes, supported by a detailed set of metrics
- producing evidence-based plans for service delivery in line with the improvement aims, using the demand & capacity tools developed for the Trust
- monitoring and measuring improvement and change using these metrics, and then reviewing aims and performance at key milestones to extend, reset or change improvement aims.

This effective use of information will support the implementation of any quality improvement methodology. The ultimate aim for any organisation should be to **create a clinically-led collaborative learning environment** at service and divisional level, which results in ongoing quality improvement. This is particularly important when working across multiple hospitals and settings.

The fundamentals of good quality information

Getting the basics right to support better decision making

The National Data Resource Strategy outlines a clear vision for the use of data and expectations for how data is produced, managed and reported.

Our work with the health board demonstrates that more work is required to get the fundamentals of data quality and usage right before it can maximise the benefit of its information.

Data completeness

- Missing or incomplete data challenges the integrity of reporting
- Clinical activities and pathways should be aligned to data capture to ensure comprehensive datasets
- Clinicians need to describe the patients and the care delivered accurately and completely within the clinical systems

Data standardisation

- Creating data standards, with mandated fields defined entry options
- Rationalising options and variables where appropriate through the use of drop down options and pre configured fields
- Standardise data entry across geographies and care settings where appropriate

Structured data

- Minimise free text options to create a structured data architecture
- Removal of user options, pick lists limited to agreed codified fields
- Where scanning hard copy information ensure the use of reportable metadata is attributed

Digital data capture

- Where possible data and information to be captured via core clinical systems
- Clinical systems configured and aligned to service delivery and pathways
- Automatic checks should be built in at key points of the data pathway, including when data is entered, extracted from systems and loaded into the data warehouse

Reporting

- Dynamic and accessible reporting with contemporaneous data
- Coproduced and co-owned reporting, satisfying clinical and operational requirements alongside core statutory needs
- Training and engagement in providing analytical support into insights and development of reports and reporting tools

Feedback loop

- An embedded information improvement cycle that improves data quality.
- Use reporting tools to connect those that create and enter data with the output.
- Highlight performance deficiencies in data quality and data capture benchmarked against internal peers

A road-map for information improvement

A road-map for the short, medium and long term

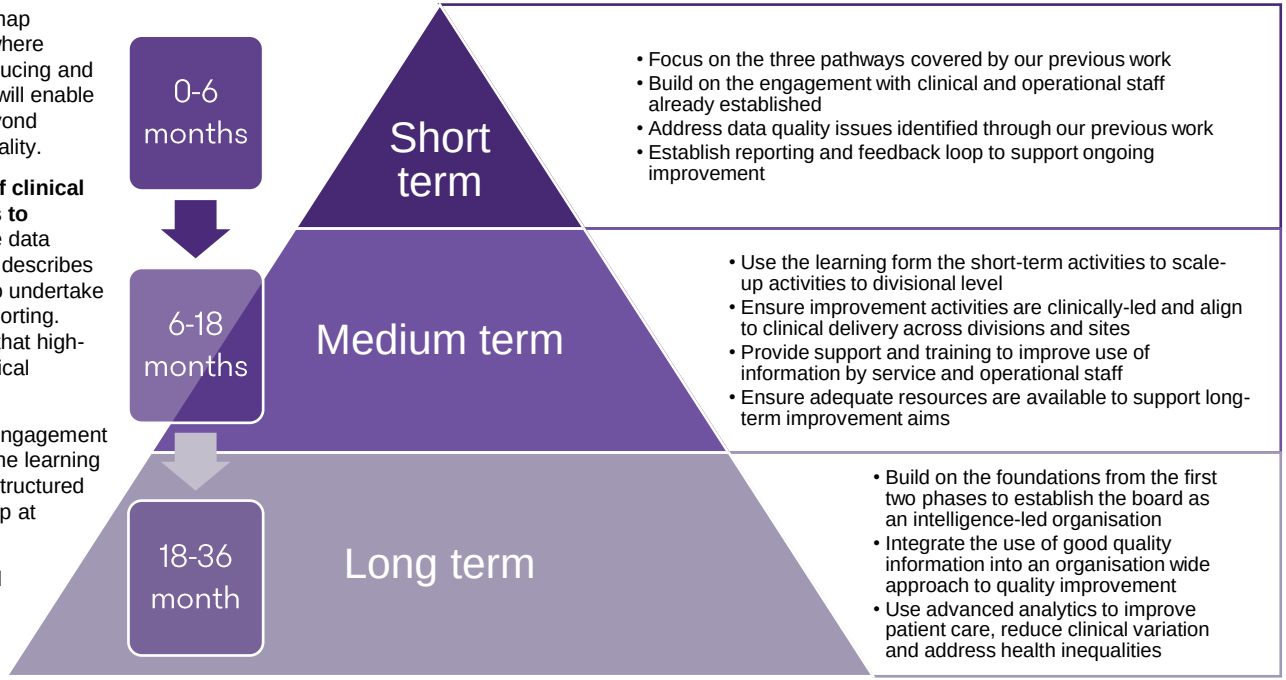
Build on the engagement from our work and scale-up improvement

The following pages outline a high-level road map designed to move the organisation to a point where clinical teams are routinely and frequently producing and using clinical data that they have faith in. This will enable the service and operational teams to move beyond business-as-usual to focusing on improving quality.

As our previous work demonstrated, the **use of clinical data by services identifies issues and leads to improved engagement and ownership** of the data produced and reported. As such, the roadmap describes practical tasks for clinical and corporate staff to undertake together to review and improve information reporting. Ultimately the road map leads to the activities that high-performing organisations undertake to use clinical information to improve the quality of services.

The roadmap will maximise the benefit of the engagement already established by our work, and will use the learning from this engagement to support moving to a structured approach to clinical engagement and ownership at divisional level.

The roadmap is split across short, medium and long term actions covering a three year period, as summarised in the graphic to the right.



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Road map: short term (0-6 months)

Delivering immediate improvement in identified pathways

Area	Clinical and service activities	Corporate support activities
Roles, responsibilities and resources	• Agree roles and responsibilities for improvement across cystoscopy, cholecystectomy and hysterectomy pathways to address issues outlined in appendix B, using task and finish group membership to maintain momentum • Ensure senior clinical ownership and input into of data improvement activities • Ensure service and operational staff understand data definitions and reporting requirements • Agree a structured approach to engaging corporate staff with service staff, outlined in appendix C	• Establish clear roles and responsibilities to support activities across BI, system config, clinical coding and other relevant areas • Review BI and IT resources available to support activities outlined in this document and the expectations in the National Data Resource strategy to ensure adequate resources are available, including the data infrastructure necessary to deliver a responsive service
Coding completeness	• Undertake review of targeted sample of incomplete coded activity and waiting lists to understand drivers • Work with administrative staff to ensure waiting list coding completed effectively • Engage with coding and BI staff to ensure adequate information available to support coding • Review completeness of coding and TCI list on a weekly basis	• Align current clinical system data entry points to clinical pathway, identifying recording points aligned to staff groups • Provide reporting capabilities at point of data entry to evaluate current data quality, completeness and highlight current gaps. • Provide and embed timely, dynamic reporting to quantify improvement in coding completeness.
Capacity information	• Ensure alignment between reported activity and capacity planning • Establish single approach to capacity planning across sites • Identify outpatient procedure slots, and ensure first and follow up slots are plan as used • Review capacity templates against reported activity once work completed on a monthly basis	• Provide prospective capacity information to teams consistently across sites • Develop monthly reconciliation reports to support improved alignment between clinical activity and capacity information • Establish a consistent approach to clinic template management with a centralised level of grip where appropriate.
Additional clinical information	• Work with central staff to support improved use of additional clinical information (eg ASA scores) within central information • Improve the identification of pre-op assessment activity within clinical data • Improve the identification of cystoscopies in the data • Reduce use of free text fields by having clear definitions of how different types of activities should be recorded, which should be consistent to all hospital sites, localities and specialties	• Work with service staff to improve the clinical relevance of activity data recorded • Ensure consistent configuration of clinical systems across all sites aligned to individual pathway – where possible ensure this data is available in central data warehouse • Continue to develop digital solutions to extracting clinical information from central systems – engage clinical staff to ensure process is as effective as possible • Create digital alternatives to manually captured data fields
Reporting and feedback loop	• Review the reports and information available to services to support service management, as outlined in appendix C • Support central staff to update report to meet requirements • Use reports routinely in service management meetings • Establish and formalise feedback loop to BI and other corporate teams	• Identify and map existing reporting structures for identified pathways to establish reporting baseline • Engage with services and update reports based on feedback received • Routine analytical attendance at service management meetings and clinical forums to support the use of reports and ensure their accuracy

Road map: medium term (6-18 months)

Scale-up short term improvements to divisional level

Area	Clinical and service activities	Corporate support activities
Capture learning from short term activities	• Review data improvement achieved across cystoscopy, cholecystectomy and hysterectomy pathways • Identify learning that can be applied across divisions and sites • Develop programme of improvement based on learning to be deployed at divisional level • Establish clinical champions based on the successes of the first phase of work	• Review learning from first phase to understand implications on central resources • Define and implement SOPs and approaches for improved data capture based on learning from phase 1 and as outlined in appendix C • Develop technical work programme to support divisional ownership of information improvement roadmap
Programme approach to improving information and its use	• Implement a structured process of service engagement across each division that establishes clinical ownership of data capture and reporting at a service level in line with appendix C • Monitor progress through a centralised, clinically led programme board – report progress to a board committee and measure against the expectations of the National Clinical Framework • Integrate monitoring of clinical data quality and use of reports into divisional performance management meetings	• Agree adequate resources to support the proposed programme od service engagement across each division • Establish DQ forum structure with links into existing governance structures • Establish scalable reporting structure to quantify improvement across agreed metrics including completeness and general data quality. • Create mechanism for feedback of data into existing service forums
Clinical alignment and data consistency	• Ensure the arrangements for moving to care streams at the health board have clearly defined digital and informatics strands that focus on the consistency of clinical information • Support central staff to reduce variation in data capture process and understand the implications of any changes to care delivery • Routinely review monitoring and reporting to ensure data capturing an reporting aligns to the work harmonising care delivery	• Ensure senior information and digital engagement is available to inform the review of care streams. • Establish data and information baselines for new structures to enable the need for managing improvement in data capture. • Enable reporting to measure the variation between different services and stage posts within service.
Data literacy	• Provide training to operational and clinical staff to improve data literacy skills • Use structured programme approach to support operational staff to improve use and understanding of reporting. • Identify Clinical and service engagement forums to embed reporting information into their agendas.	• Provide support and a training needs analysis (TNA) where gaps in data literacy are highlighted by developing data quality reporting. • Supporting a programme of peer support and champion/super user networks to engender best practice • Support for clinical teams to develop knowledge base for data insights
Policies and strategies	• Ensure senior clinical ownership and leadership to all data and informatics strategies • Include responsibilities for the production and use of information in all service and divisional leadership roles • Provide clinical leadership to discussion with national organisations to address constraints caused by national policy • Review resource implications of long term strategies on service and operational staff	• Develop and implement a revised data quality policy and a use of information policy to inform the long term aspirations in this road map aligned with the NDR expectations • Ensure digital strategies for the health board will address the issues identified • Engage with national organisations to agree timescales to address constraints caused by national systems • Review resource implications of long term strategies on central and corporate staff

Road map: long term (18-36 months)

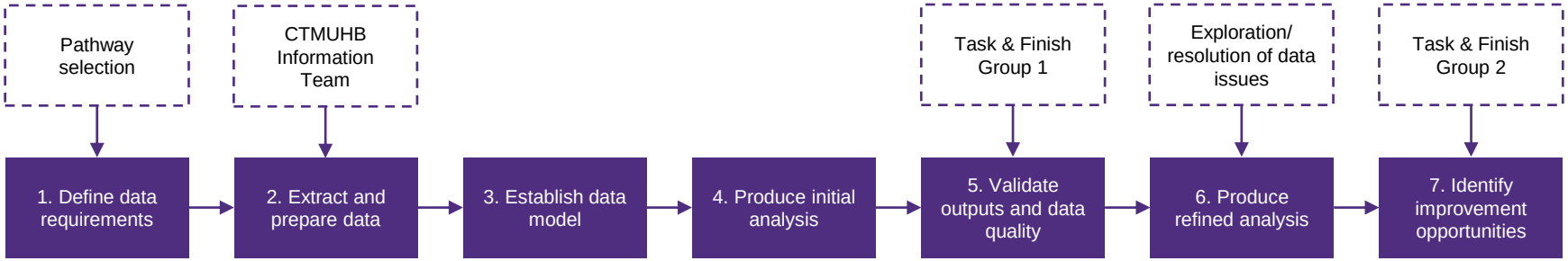
Building on success to become an information-led organisation

Area	Clinical and service activities	Corporate support activities
Establish a board wide approach to use of information	• Formalises the approaches established in the previous two phases as business as usual, aligned with the National Clinical Framework • Ensure clinical ownership of the approach across all divisions and sites • Mandate use of data in business cases proposals and service performance management • Defined use in productivity metrics and improvement planning linked to all job planning and appraisals	• Develop an executive and wider clinical leadership group to integrate and normalise best practice use of data • Outline expectations of executive corporate staff when working with services • Develop a performance framework to be agreed with divisions based on agreed metrics and data sources • Ensure resources are available and aligned with activities agreed
Integrated clinical reporting suite	• Work with central teams to develop the content and user interface for a, integrated reporting clinical reporting suite • Align board reporting through clinical and operational structures down to granular team level with a consistent hierarchical reporting structure. • Ensure reporting supports clinical priorities, so that services use the reporting to support business as usual	• Develop a single version of the truth reporting suite for use by clinical teams - linking performance, activity, outcome, finance and workforce data. • Enable and facilitate the standardisation of reporting across sites, systems and corporate domains • Ensure the data infrastructure and reporting platforms are fit for purpose and support clinical requirements
Align with quality improvement	• Align information improvement with the health board's approach to quality improvement • Establish combined clinical leadership to the use of QI data for plans informing quality improvement and service design • Include the effective use of information in the quality improvement training materials • Develop case studies for the use of information to develop, implement and monitor quality improvement	• Provide dedicated QI analytical support, as part of the board's wider BI team, to provide advance analytics to support quality improvement • Develop bespoke QI data reports to support service improvement, and produce routine monitoring of measures of quality and to respond to QI work • Ensure training is available to support Staff are to improve the quality of services through the use of data and analytics alongside evidence based QI techniques
Population health and clinical outcomes	• Ensure data production and reporting provides a comprehensive understanding of the health needs of the population served • Use improved clinical data to underpin collaboration across health and social care • Develop formal board plans to address population health needs, and address health inequalities across the health board	• Provide dedicated population health analytical support, as part of the board's wider BI team, to provide advance analytics to support population health management • Support the collection of accurate and complete data on need, activity, outcomes of care and resource use • Develop effective data sharing protocols with other agencies where appropriate
Clinical data assurance framework	• Establish a clinically-led assurance framework for all clinical data across the health board • Support record level reviews across all data sources to ensure data produced accurately reflects the care delivered • Report the outcomes of the assurance framework to a board committee as part of the health boar's data quality policy	• Establish a dedicated data quality team that audits patient level data • Provide insight and reporting tools aligned to assurance framework objectives. • Create reporting dashboards or similar tools to monitor levels of assurance around internal and external data - ensuring all DQ objectives are met

Appendices

Appendix A

Our approach – establishing the pathway data



The key benefits of this approach are:

- It has established a methodology for identifying and extracting pathway related data from a range of separate datasets and linking and consolidating this within a single data model, thereby enabling an analysis of all hospital activity along a patient's pathway.
- The process has been developed in conjunction with CTMUHB's BI team and can be taken forward, refined and applied to other pathways (we are handing over relevant tools, materials and documentation).
- Through increasing the level of clinical and operational engagement with the data, it has highlighted many areas for improving the quality, understanding and use of the Health Board's data – these are being brought together in a separate report containing a road map for improving use of data for improvement in CTMUHB.

Specific data challenge encountered during the work include

- **Availability of risk and complexity data** – ASA scores and other risk and complexity measures are not readily available from central systems, even if they are recorded in clinical datasets
- **Cystoscopy recording** – cystoscopies are hard to isolate within central datasets when carried out in outpatients, and practice appears to vary between sites regarding whether the procedure is recorded as a day case or outpatient procedure
- **Pre-op assessment data** – we were only provided with data covering two sites, and from discussions with the information team it appears pre-op data was not always easy to pull through into pathway data
- **Day case recording** – some patients who go home on the same day are not being recorded as day case, either because they were not planned as such or because data recording is incorrect

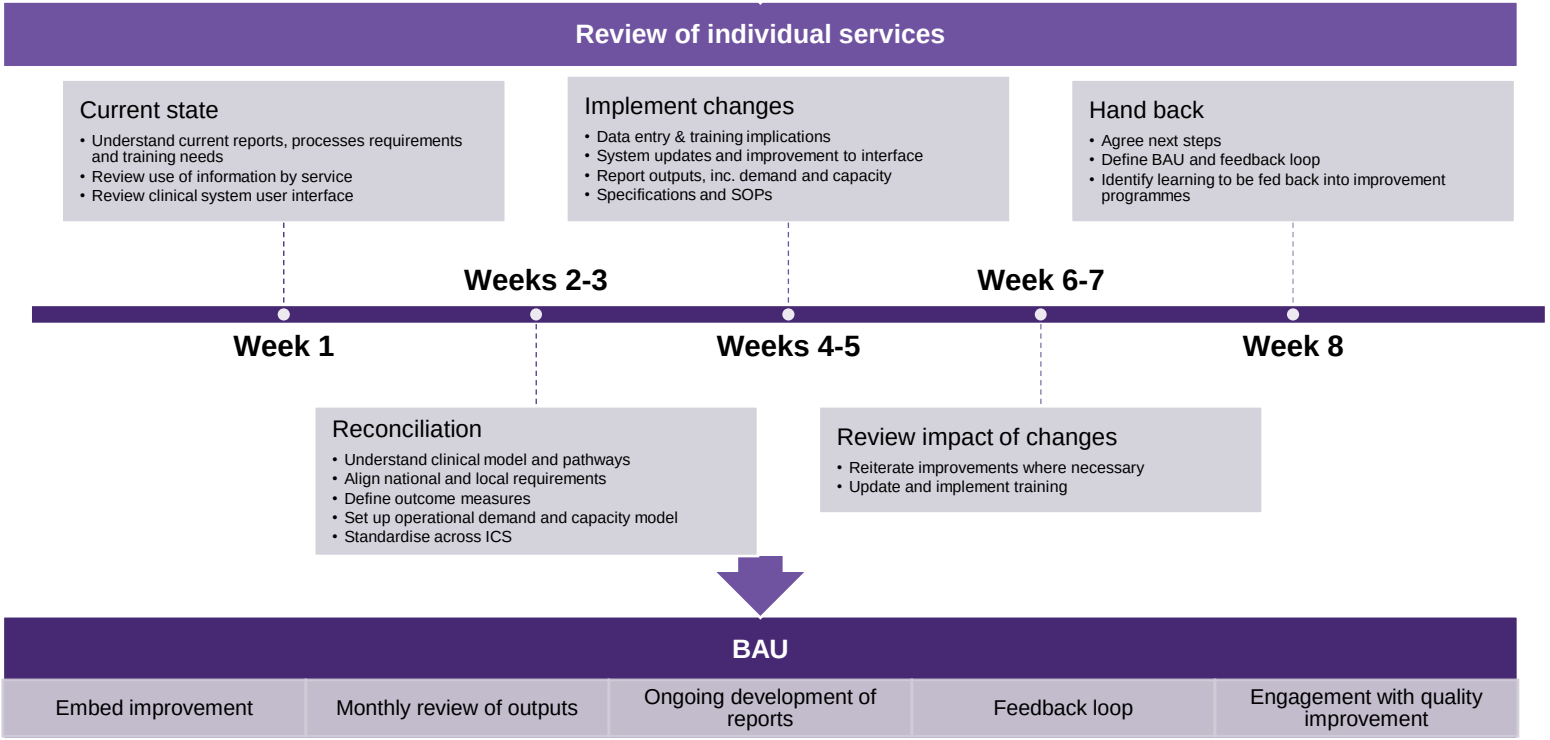
Appendix B

Detailed data recommendations based on our review of pathways

Area to address	What we found	Proposed way forward
1. Consistent recording of activity	• **Day case recording** – some patients who go home on the same day are not being recorded as day case, either because they were not planned as such or because data recording is incorrect • **Cystoscopy recording** – cystoscopies are hard to isolate within central datasets when carried out in outpatients, and practice appears to vary between sites regarding whether the procedure is recorded as a day case or outpatient procedure • **Issues with naming conventions** – specialty categorisations varied across the activity and waiting list datasets received • **Free text fields** – recording of consultant and site appear to use free text fields in some systems and therefore generate some inconsistencies	• Clarify and strengthen standard operating procedures for data recording • Provide clear definitions for how different types of activities should be recorded • Apply these consistently across all hospital sites, localities and specialties • Remove free text fields wherever possible • Identify where additional training is needed and implement a focused training programme
2. Accurate and complete clinical coding	• **Incomplete activity and waiting list coding** – significant numbers of records with diagnosis or procedure coding incomplete or uncoded • **Incomplete procedure coding**– relatively high number of NULL values in procedure coding in admitted patient and theatre datasets	• Provide clear documentation and guidance to coding staff • Extend clinical coding audit activity • Implement a targeted programme of training and support
3. Standardised capacity recording and reporting	• **Recording of outpatient procedures** – outpatient procedures are identified within activity data, but not included in capacity templates • **Allocation of outpatient new and follow up in capacity templates** – new to follow up ratios in the capacity data for some specialties do not reflect the activity actually delivered • **Inconsistent approach to capacity data reporting across ILGs** – the data is captured and reported in different formats in different localities	• Agree a CTM-wide approach to capacity recording and reporting • Document the process • Standardise systems and templates • Collate and review data centrally • Provide feedback to clinical and operational colleagues on any identified data quality issues
4. Centralised management of data	• **Availability of risk and complexity data** – ASA scores and other risk and complexity measures are not readily available from central systems, even if they are recorded in clinical datasets • **Pre-op assessment data** – we were only provided with data covering two sites, and from discussions with the information team it appears pre-op data was not always easy to pull through into pathway data	• Continue to work towards centralised data repositories and systems to bring consistency of data capture, management and reporting across sites and care settings • Identify how ASA scores and other risk and complexity measures can be brought together into central datasets and reporting
5. Clinical and operational engagement with data	• **Clinical confidence in health board data** – in all phases of our work we found that clinical confidence in health board data presented back to them was generally low • **Engagement with data and analytics** – clinical engagement was weak at the start of the pathway analysis work but improved markedly through the process • **Data literacy** – we found examples where understanding of data definitions and recording procedures was relatively low	• Continue to build clinical and operational engagement with dashboards and reporting, with clear avenues for support, feedback and queries • Extend pathway analysis to additional pathways and additional components of the pathway • Identify training and development needs for building towards a data-driven approach to clinical service delivery, based on high levels of data literacy and using methods such as statistical process control to drive continuous improvement

Appendix C

An approach to engaging with services on information and reporting



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AGENDA ITEM
4.1a

DIGITAL & DATA COMMITTEE

ORGANISATIONAL RISK REGISTER

Date of meeting	19th December 2022

FOI Status	Open

If closed please indicate reason	Not applicable – Public Meeting

Prepared by	Cally Hamblyn, Assistant Director of Governance & Risk
Presented by	Cally Hamblyn, Assistant Director of Governance & Risk
Approving Executive Sponsor	Chief Executive

Report purpose	FOR REVIEW

Engagement (internal/external) undertaken to date (including receipt/consideration at Committee/group)		
Committee/Group/Individuals	**Date**	**Outcome**
Service, Function and Executive Formal Review	October 2022	RISKS REVIEWED
Executive Leadership Group	7th November 2022	RISKS REVIEWED AND MANAGEMENT SIGN OFF RECEIVED
Audit & Risk Committee	12th November 2022	RISKS REVIEWED

ACRONYMS	

1. SITUATION/BACKGROUND

1.1 The purpose of this report is for the Digital & Data Committee to review and discuss the assigned risks on the organisational risk register and consider whether the risks escalated to the Organisational Risk Register are in accordance with the Risk Management Strategy.

2. SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

2.1 The risk updates for this period has been impacted by the implementation of the new Care Group Model. The Executive Leadership Group supported "Guiding Principles: Quality Governance & Accountability during the Operating Model Transition" where the following transitional arrangements have been agreed:

- **Organisational Risk Register:** Workshop approach to realign risks on the Organisational Risk Register led by Nurse Directors. Timeframe: Workshop Sept/Oct 22. Realignment to complete by 31.1.2023.
- Central Quality Governance Team to provide a report to Care Groups which will contain all **Datix Legacy Information** for Risk, Incidents, Claims, Complaints etc. The Nurse Directors to then undertake an exercise to align activity/data to Care Group Model – Timeframe for alignment 31.1.2023.

The Assistant Director of Governance & Risk, along with the Chief Operating Officer and/or Deputy Chief Operating Officers, has started to meet with Care Groups during October and November to review risks in terms of alignment to the new Care Group Model. The Organisational Risk Register will continue to be updated to reflect the changes being made as a result of this activity.

2.2 The following progress has been made since the last report:

- Monthly Risk Management Awareness Sessions (Virtually via Teams). The monthly sessions are set in the calendar until the end of 2022 and will continue beyond that date if required. 344 members of staff trained to date.
- Risks on the organisational risk register have been updated as indicated in red.

3 KEY RISKS/MATTERS FOR ESCALATION TO BOARD/COMMITTEE

3.1 NEW RISKS

Digital & Data

- Datix ID 5276 - Failure to deliver replacement Laboratory Information Management System, LINC Programme, by summer 2025. Risk rated as a 20.

3.2 CHANGES TO RISKs

a) Risks where the risk rating INCREASED during the period
Nil this period.

b) Risks where the risk rating DECREASED during the period
Nil this period.

3.3 CLOSED RISKS FROM THE ORGANISATIONAL RISK REGISTER

Nil this period.

3.4 DISCUSSION POINTS

3.4.1 Emerging Risks

The Assistant Director of Governance & Risk has been made aware of the following emerging risks in the service that are likely to be escalated to a future Organisational Risk Register return:

Central Support Functions:

- **Digital & Data -** MS Sustainability, Unsupported server operating systems, Safe transition from paper to digital record.

3.4.2 Updates Received since the Executibe Leadership Group

Since the Executive Leadership Group reviewed the Organisational Risk Register at its meeting on the 7th November 2022, updates have been received from the Digital & Data Function which have been captured in this update.

3.5 Organisational Risk Register - Visual Heat Map by Datix Risk ID (Risks rated 15 and above):

Consequence						
	5				4664 4887	
	4				4337	5276
	3					4699 4672 4671 5040
	2					
	1					
CxL		1	2	3	4	5
		Likelihood				

4. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	Yes (Please see detail below)
Related Health and Care standard(s)	Governance, Leadership and Accountability
	If more than one Healthcare Standard applies please list below:
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below) If no, please provide reasons why an EIA was not considered to be required in the box below.
	Not applicable for the Risk Register item.
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	There is no direct impact on resources as a result of the activity outlined in this report.
Link to Strategic Goals	Improving Care

5. RECOMMENDATION

5.1 The Committee are asked to:

- **Review** the risks assigned to the Committee as escalated to the Organisational Risk Register at Appendix 1.
- **Consider** whether the Committee can seek assurance from the report that all that can be done is being done to mitigate the risks.

Datix ID	Strategic Risk owner	Care Group / Service Function	Identified Risk Owner/Manager	Strategic Goal	Risk Domain	Risk Title	Risk Description	Controls in place	Action Plan	Assuring Committees	Rating (current)	Heat Map Link (Consequence X Likelihood)	Rating (Target)	Trend	Opened	Last Reviewed	Next Review Date
5276	Director of Digital	Central Function - Digital and Data	Assistant director of therapies and health science	Sustaining Our Future	Business Objectives - Operational Patient safety Digital Healthcare Wales interdependencies	Failure to deliver replacement Laboratory Information Management System, LINC Programme, by summer 2025,	**IF**: LINC Programme fails to deliver replacement Laboratory Information Management System (LIMS) by summer 2025 **THEN:** CTM would be without a supported Pathology LIMS system **RESULTING IN:** Without the implementation of the new LIMS system the pathology service may fail to produce accurate, timely patient results for diagnosis, monitoring and screening of patients which would impact treatment, patient flow and waiting times.	Currently LINC Programme reports progress against timeline to LINC Programme Board and Chief Executive Group.	As the NHS Wales Health Collaborative becomes part of the NHS Executive it has been agreed that the LINC Programme will move to Digital Health Care Wales	Digital & Data Committee Quality & Safety Committee	20	C4xL5	8 (C4xL2)	New Risk Escalated October 2022	26.10.2022	26.10.2022	26.11.2022
4887	Director for Digital	Central Support - Digital & Data Function	Medical Records Manager	Improving Care	Service / Business Interruption	Retrieval and filing of case notes in the POW Medical records Library	IF: The Medical Records Filing library at Princess of Wales is full to capacity making it very difficult for staff to retrieve and or file case notes. THEN: Risk of unable to manoeuvre mobile racking, therefore unable to access case notes Risk of fire as case notes close to source of ignition Risk of Fire Service or HSE closing access department Very High risk of upper limb injury Risk of notes falling from height causing injury (some case notes are in excess 8.3kg) Risk of Fire Service or HSE closing access to department RESULTING IN: If we could not retrieve any case notes, Consultants would be unable to make clinical decisions impacting on patient care. If the whole library was affected, this would impact 100 of thousands of patients care. Admissions/Outpatients would have to be cancelled staff refusing to continue to work in unsafe environment. Multiple and serious injuries to staff, possibly death.	(The case notes are very tightly packed on shelves. Mobile racking is failing due to age, lack of maintenance, and weight Case notes are being stored inappropriately on floors under desks, and insecurely at height. The working environment is congested, with no dedicated storage space for large ladders. Significant force is required to retrieve each file (123.N - this is 3 times higher than what is considered to be high force).) Broken Racking at Bridgend Offsite Stores - Repairs have been carried out with damaged racking in Bridgend North Rd Offsite stores. Temporary use of container deployed on site. Broken Racking at POW - On each occasion the racking has failed, the engineer has been able to repair it (£500 + VAT) but it continues to fail. Please see progress notes for more information. Access to this specific racking is permitted to Supervisors only, who only access it once a day. The Filing Library is closed to non-Medical Records staff, aside from the Porters who require access for emergency OOH admissions. Task and Finish group establish to address the above risks. Capacity has been identified at Glanrhyd and noticed served to SBUHB to vacate. It is hoped that we will be able to relocate notes to this area in mid-July, which will address the immediate H&S issues. Currently waiting for procurement process to be completed.	Relocation of Case Notes from POW/Bridgend Off-site Store to Glanrhyd Site. Timeframe 19.8.2022 Replace racking and review office environment of POW filing Library. Timeframe 30.01.2023 Creating additional long term storage space. Update 31.10.2022 - Approx. 30,000 records have already been redistributed across POW, North Road Offsite Store and Glanrhyd Library, to improve conditions at POW. Work is still ongoing at POW to redistribute records safely. Original broken rack mostly vacated but other racks holding notes have similar issues. Glanrhyd partly vacated by SBUHB but not fully available for use yet. The Medical Records Department plan to relocate 10 Registration Medical Records staff to the Library Offices in this space. Proposal put forward by an Operational Services Manager to relocate additional 17 Appointment Booking Centre staff into these same offices and also the Library area. This Library space is already identified for boxed records, compromising room for future growth and safer storage; this will affect the ongoing position at POW and North Road. Risk to be reviewed in 6/52, when SBUHB should have fully vacated and a decision made as to who/what will occupy remaining space at Glanrhyd Library.	Digital & Data Committee & Quality & Safety Committee	20	C5xL4	10 C5xL2	↔	27.10.2021	31.10.2022	12.12.2022
Redacted to removed risk 4664 from pubic domain as business sensitive																	
4337	Executive Lead: Director for Digital.	Central Support Function - Digital & Data	Chief Information Officer	Creating Health	Operational: • Core Business • Business Objectives • Environmental / Estates Impact • Projects Including systems and processes, Service /business interruption	Integrated IT Systems	**If:** The Health board does not have a unified electronic health and care record and systems which are integrated across the organisation and with our primary and social care providers **Then:** The Health board will be unable to deliver safe, high quality, clinically and cost effective care to patients **Resulting In:** Compromised safety of patients needing treatment that are reliant on clinical test results and information being available to clinicians to plan and deliver the treatment plan and the requirement for sub-optimal manual processes	**Key Controls** 1. SBUHB Service Level Agreement 2. Bridgend disaggregation and the one-CTM aggregation plan 3. NHS Wales Control Agreement and data sharing agreements 4. Numerous national service management boards and Technical oversight groups providing strategic, tactical and operation governance. 5. National ePR programme and systems **Gaps in Control** The full business case for the Bridgend / old-CT integration remains unfunded. There are currently a number of CTM systems that are not compatible with Bridgend systems. SBUHB have no process in place to incorporate the needs of Bridgend users in their developments. There is insufficient discretionary capital funding available to support delivery of the aggregation plan There is no data item integration with GP systems Numerous delays in NHS Wales progressing open architectural approach Strategic approach to becoming an anchor organisation to encourage SMEs not developed, resulting in challenges in proceeding with small agile developments Discipline of organisation in keeping to the supported application platforms is being challenged - in particular staff are keen to exploit the opportunities presented by the MS365 platform however there are no resources available to support, train or integrate this platform within the EPR architecture	**Update August 2022 -** Regarding the Bridgend/CT aggregation: Programme as set out in IMTP progressing to plan. Discretionary capital programme has made provision to support priority areas of the plan. Business case for all Wales PAS development which incorporates Bridgend / CT aggregation has been funded for the next 3 years(recd 24/8/22). All Wales programme for opening up the architecture starting to develop via National Data Resource however there are numerous challenges and delays faced in getting system and service changes and improvements being put in place. UPDATE 28/10 ICT Risk meeting: Regarding the Bridgend/CT aggregation: Programme as set out in IMTP progressing to plan with posts funded by WG being recruited to. Tactical approach to data sharing with primary care yet to be agreed, and funded, noting NDR programme has recently offered a non recurrent financial contribution . All Wales API for 5 data systems expected January 2023 as first step in truly opening up the architecture. UHB has approached DHCW to make a joint appointment to develop and maintain APIs to the Myrddin PAS, which will support the clinical services in managing patient flows within the UHB. Although funding for staff has been allocated, the market for skills of this nature is sparse and this provides challenges in recruiting and retaining staff.	Digital & Data Committee	16	C4 x L4	8 (C4xL2)	↔	14.10.2020	22.10.2022	01.12.2022
Redacted to removed risk 4671 from pubic domain as business sensitive																	

Datix ID	Strategic Risk owner	Care Group / Service Function	Identified Risk Owner/Manager	Strategic Goal	Risk Domain	Risk Title	Risk Description	Controls in place	Action Plan	Assuring Committees	Rating (current)	Heat Map Link (Consequence X Likelihood)	Rating (Target)	Trend	Opened	Last Reviewed	Next Review Date
4672	Executive Lead: Director for Digital.	Central Support Function - Digital & Data	Chief Information Officer	Creating Health	Operational: • Core Business • Business Objectives • Environmental / Estates Impact • Projects Including systems and processes, Service /business interruption	Access to a complete, integrated, and coded medical record.	**IF:** The Health Board is not able to record information accurately and reliably, with complete and up to date information **Then:** the data informing the clinical, regional and organisational decisions we and our partners (including WG) make, will be inaccurate, out of date or incomplete **Resulting in:** Degradation in our delivery of the quadruple aim and strategic objectives and damage to our reputational standing with our population and partners. Further we will be prevented from driving forward our ambitions to become a digital organisation, an exemplar for R&D and Value etc.	**Operational controls:** Coding key performance indicators covering productivity, demand and backlog robustly monitored Digitised Patient Notes programme board monitors scanning times, adherence of contractor to terms and quality of staff in maintaining a record DHCW annual coding quality audit. Coding Improvement and transformation plan established incorporating additional trained coding capacity, coding at source, use of data captured in other systems and e-forms implemented. Natural language programming resource deployed and outputs of programme being validated. Tactical - EPR programme with deployment of snomed-CT onotology server, WCP & E-forms etc. **Tactical controls:** Digital element of the strategic programme - Culture to digitise the EPR, our communications, how we do business National Architecture Review - encompassing (NDR /CDR & Sharing arrangements) Coding transformation programme . **Gaps in controls** Scanning time of outpatient activity to digitise the record is at 51 days cf maximum clinically safe time of 24-48 hours Quality of paper record and its filing is very poor with audits identifying over 70% of paper records are not maintained to acceptable standards Digital solutions not yet using snomed-CT/ structurally coded data Information and Technical Standards not being followed with national body favouring document rather than data exchange Vast amounts of clinical information stored in disparate spreadsheets not visible to central medical record or available to patients or system leaders (including value based healthcare) Digital transcription programme unsupported & unsupported from march 23	Update August 2022 - Consideration being given to Cessation of creating scanned records for any more new patients enabling scanning capacity to be put towards address backlog of active patients who already have a record in the scanning system - Development of a Health Board coding strategy for the development of the profession developed and being taken forward - Natural Language Programming (NLP) and data linkage being used to autocode targeted spells, improving levels of coding completion, based on Snomed-CT - Adoption of data level standards based architecture, - Coding transformation plan, - Opportunity for bi-directional real time integration between primary and secondary care available - National Data Resource (NDR), Clinical Data Repository (CDR) and integration programme Update October 2022 - Consideration being given to Cessation of creating scanned records for any more new patients enabling scanning capacity to be put towards address backlog of active patients who already have a record in the scanning system - Development of a Health Board coding strategy for the development of the profession developed and being taken forward, which underpins the coding transformation plan - Natural Language Programming (NLP) and data linkage being used to autocode targeted spells, improving levels of coding completion, based on Snomed-CT identified as increasingly successful and cost effective - Adoption of data level standards based architecture, - Opportunity for bi-directional real time integration between primary and secondary care available but requires tactical decision by UHB Board - National Data Resource (NDR), Clinical Data Repository (CDR) and integration programme UPDATE 28/10 ICT Risk meeting - no further update	Digital & Data Committee	15	C3 x L5	9 (C3xL3)	↔	05.06.2021	22.10.2022	01.12.2022
5040	Executive Lead: Director of Digital	Central Support Function - Digital & Data	Chief Information Officer	Creating Health	Operational: • Core Business • Business Objectives • Projects Including systems and processes, Service /business interruption	Digital Healthcare Wales {DHCW interdependencies	**IF:** The Health Board can not integrate new applications into its digital architecture in a timely fashion **Then:** there could be a detriment to patient care, inefficiencies in care provision and loss in confidence by Health Board staff in the technology provided to them leading to them using alternative software and bespoke systems (including paper based systems) to carry out their duties which are not integrated and major strategic priorities for the organisation (e.g. Bridgend aggregation and the deployment of the new Emergency Department system) not being delivered **Resulting in:** delays in clinical decisions and consequently treatment which may affect clinical outcomes, reduced levels of productivity and thus poorer access to services, staff appetite to work digitally and in accordance with the digital standards required to realise the full strategic benefits of an integrated record and repository not being realised. Other consequences include: 1. Loss of information integrity and accessibility as multiple copies of clinical records. 2. Failure and delay of digital system deployments (e.g. WEDS) 3. Possible breaches to the GDPR, safeguarding and information governance risks. 4. Mistrust by staff of the ICT systems and services	A Myrddin strategic programme group has been established, chaired by the CEO of DHCW to map out how the constraints can be overcome SLAs are in place between DHCW and NHS Wales organisations, however their futility has been exposed by demand pushing the waiting times for developments to start (not complete) to over 12 months Gaps in controls: WG have agreed some funding for the PAS element, however the DHCW IMTP continues to be a top down decision process rather than one being based on HB (user / customer) needs - driven in part by demand overwhelming their capacity {much of which is either Covid born or results from the significant overrun in establishing a minimum viable product to replace CanISC} and numerous critical constraints not continuing to be observed in the system whilst the architecture remains closed. HB carrying vacancies in critical areas with no capacity to cover the work from within. As a consequence programme to digitise the Emergency Department processes and records has been suspended. Data acquisition from DHCW products is a curates egg, some new APIs are being made available to standards, however latest PAS offering is via csv download, presenting challenges to adoption of standards within certain areas. UHB still awaiting availability of access to key HB data such as radiology and tests results.	National Data Resource Programme has accelerated plan to open up the architecture, with API management procured for all of Wales. National Funding received from WG for PAS integration work to create a second team supporting data migration. CTMUHB appointment process has commenced. WG funding for £7m awarded to support PAS integration 24/8/22 UPDATE 28/10 ICT Risk meeting - no further update October 22 - National Data Resource Programme has accelerated plan to open up the architecture, with API management procured for all of Wales & implementation date set for Jan 23 - will be limited in nature. National Funding received from WG for PAS integration work to create a second team supporting data migration. CTMUHB & DHCW appointment process has commenced. Included within this is a post for PAS integration developer.	Digital & Data Committee	15	C3xL5	9 C3xL3	↔	07.02.2022	22.10.2022	02.12.2022
4699	Executive Lead: Director of Digital	Central Support Function - Digital & Data (Information Governance)	Chief Information Officer	Creating Health	Patient / Staff /Public Safety Impact on the safety - Physical and/or Psychological harm & Statutory Duty / Legislation	Failure to deliver a robust and sustainable Information Governance Function	**IF:** The Health Board is not able to legally share the business and patient sensitive information for which it is a data controller and which it is required to shared for the delivery of care **Then:** There will be a loss of trust and confidence in the Health Board from its patients, population, staff and 'care providing partners' and thus will not have the information required to provide safe, high quality and effective care and to make informed evidenced based decisions. **Resulting in**: Poor outcomes for our population, a loss of reputation for our organisation, substantial delays in improving services, inability to collaborate regionally or deliver integrated care services.	**Key Controls:** - Adoption and implementation of All Wales IG and Data protection policies, - Continual improvement and progress made in mitigating non delivery of legislation (CLDC, DPA etc) - Mandatory training in Information Governance with auditing functionality (such as NIIAS) built in to monitor compliance, - Accessible but robust data protection process for new and existing data sharing arrangements (DPIA procedures) - Joint data controllership arrangements with DHCW + WASPI -Professional (clinical) training and approach to maintain an accurate and timely medical record **Gaps in Controls:** 1. Shortfall in trained IG professionals 2. Inability to legally stipulated timescales for Freedom if Information and Subject Access Requests	Cyber and Data Protection Improvement Plans being taken forward. - Timeframe: Quarterly updates Response to ICO audit recommendations being managed on a prioritised and smart basis (aligned to other improvement areas) Benchmarking with other organisations in Wales undertaken. (SB have 9wte, CTM 2.5wte funded, 1.5 wte now --> 0.5wte by end of Sept.) Procedures and requirement to initiate all programmes being enhanced to meet legal requirement of privacy by design **Update August 2022 -** Further attempt to recruit to two vacated positions in progress Re-allocation of coding staff to IG function on very short term basis to provide some continuity and cover. UPDATE 28/10 ICT Risk meeting - No further update October 22 - Actioning of Cyber and Data Protection Improvement Plans decelerated due to staffing. - Timeframe: Quarterly updates Response to ICO audit recommendations being managed on a prioritised and smart basis (aligned to other improvement areas) Benchmarking with other organisations in Wales undertaken. Procedures and requirement to initiate all programmes being enhanced to meet legal requirement of privacy by design Re-allocation of 1 coding staff to IG function and appointment of agency head of IG for 3 month period made, to sure up IG function. Recruitment process underway for Head of IG. IG Officer post currently delayed via the recruitment process.	Digital & Data Committee	15	C3xL5	12 C3xL4	↔	18.06.2021	22.10.2022	02.12.2022

AGENDA ITEM
4.2a

DIGITAL AND DATA COMMITTEE	
DIGITAL RISK REGISTER	
Date of meeting	19th December 2022
FOI Status	Open/Public
Prepared By	DIGITAL & DATA TEAM
Presented by	Andrew Nelson Chief Information Officer
Approving Executive Sponsor	Stuart Morris Director of Digital

Report purpose	FOR REVIEW

Engagement (internal/external) undertaken to date (including receipt/consideration at Committee/group)		
Committee/Group/Individuals	**Date**	**Outcome**
N/A		

ACRONYMS	
UHB	University Health Board

1. SITUATION/BACKGROUND

1.1 Managing risk and opportunity is a key strategic activity for the Organisation's success. As we continue to develop our enterprise risk management approach, it is essential that we connect the management of digital related risks with our wider clinical and organisational objectives.

2. SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

2.1 The risk register for Informatics is provided in appendix A, two risks are being proposed to have escalated to the threshold of 15 or above and require consideration by the Committee. These are:

- The re-procurement of the LINC system
- Workforce capacity and capability, in regards to both the digital and data competency of all staff and the capacity within the professional informatics team

2.2 These are difficult risks to mitigate in the present environment and members of the Committee are advised that further work is required to develop a plan for mitigating these.

2.3 The other risks identified remain a significant concern for the UHB. As reported last time the impact of these are continuing to be realised with the UHB facing two significant critical incidents on the Royal Glamorgan Hospital site over a two-day period. These incidents exposed the reliance of the UHB on a small number of staff, and our vulnerabilities both in terms of providing a 24/7 response across three sites and the lack of resilience in the architecture.

2.4 Likewise, the deficiencies in the core foundations of the digital infrastructure and capability are increasingly being reported as being of detriment to the organisation's ability to innovate and realise benefit from digital ways of working.

3. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	Yes (Please see detail below)
Related Health and Care standard(s)	Governance, Leadership and Accountability
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below) If no, please provide reasons why an EIA was not considered to be required in the box below.
	Not applicable for the Risk Register item.
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	There is no direct impact on resources as a result of the activity outlined in this report.
Link to Strategic Goals	Improving Care

3. RECOMMENDATION

3.1 Committee Members are asked to consider whether the risks related are comprehensive and the actions taken to mitigate them are sufficient relative to the operating environment and the competing demands on resources to mitigate other corporate risks and achieve organisational objectives.

Ref	Risk Title	Risk Description	Target Controls in place	Policies/Procedures/Protocols (inc expiry date)	Gaps in controls	StrategicAction Plan	Assuring Committees	Impact	Likelihood	Rating (current)	Significant Operational Risks - 1	Action Plan -1	Significant Operational Risks - 2	Action Plan -2
IntDig1	**Holding information securely and confidentially**	**IF:** The Health Board is not able to securely hold the business and patient sensitive information for which it is a data controller **Then:** The Health Board will not be trusted by our patients, population, staff and 'care providing partners' and thus will not have the information required to provide safe, high quality and effective care and to make informed evidenced based decisions. **Resulting in:** Poor outcomes for our population, a loss of reputation for our organisation, financial loss through penalties (& tools - potentially ransom and extortion) and a disabling infrastructure on which to deliver our strategic ambitions. In addition as a result of ICO +/- CRU enforcements our freedom to Act will be diminshed and external scrutiny will increase.	**Medical Records** **Cyber security** - UHB policies (cyber security, backup, Disaster Recovery etc) - Improving posture as measured the Cyber Assessment Framework (reduced risk of non compliance with NIS-D) - Continued rollout of the patches supplied by third party companies, such as Microsoft, Citrix, etc. - Creation of NHS Wales Cyber Unit to support NIS_D compliance - Investment programme in national software to improve robustness of DHCW provided tools - Capital funding has been made available by WG which will improve UHB's progress in complying with ISO27001 and Cyber essentials plus **Data Protection** - Adoption and implementation of All Wales IG and Data protection policies, - Continual improvement and progress made in mitigating non delivery of legislation (CLDC, DPA and) - Mandatory training in Information Governance with auditing functionality (such as NIJAS) built in to monitor compliance, - Accessible but robust data protection process for new and existing data sharing arrangements (DPIA procedures) - Joint data controllership arrangements with DHCW + WASPI -Professional (clinical) training and approach to maintain an accurate and timely medical record **Physical Estate** + CCTV and access controls on important buildings / rooms **Medical Devices & "Internet Of Things"** - Adoption of National policies and legislation re Medical Devices - Application of Network security measures and partitioning	Email use policy (6/20), IG policy (3/23), Info security policy (3/23), Internet Use policy (3/23), Being open policy and procedures (1/19), Business continuity policy (6/19), CCTV policy (6/20), DPIA procedure (3/20), Disposal of obsolete ICT equipment (12/19), Electronic data backup policy (9/20), Photography and Video recordings of patients policy (3/18), Cyber Incident Response plan (Outstanding) and Major Incident Plan (12/17), Freedom of Information Policy (9/22) , Mobile phone & media communication devices policy (4/15), Personal Data Breach Mgt Procedure (3/20), Security policy (12/21), Standards of Behaviour policies (4/22), Subject Access Procedure (9/22), Transmission of Manual Faxes Protocol (12/19), Records Management Policy (3/16), Fire policy (2/21),	**Cyber security** - Non compliance with policies (internal and external) - Technology to resist attacks not always available or purchased &/or we do not always have the resources to use the software we have effectively - Software and Servers out of support - no security patches available or servers just not being patched - Weaknesses in firewalls - Lack of skills and resources & insufficient investment into cyber improvement plan - Lack of awareness of cyber threats at all levels of the organisation - Electronic data backup policy (9/20), Photography and Video recordings of patients policy (3/18), Cyber Incident Response plan (Outstanding) and Major Incident Plan (12/17), Freedom of Information Policy (9/22) , Mobile phone & media communication devices policy (4/15), Personal Data Breach Mgt Procedure (3/20), Security policy (12/21), Standards of Behaviour policies (4/22), Subject Access Procedure (9/22), Transmission of Manual Faxes Protocol (12/19), Records Management Policy (3/16), Fire policy (2/21), - Significant competing priorities and Insuffient resource within the IG and digital teams to enable the organisation to mitigate its data protection risks - Information Asset Register, incorporating data sharing arrangements not complete, with no underlying network of information asset owners and administrators -Compliance auditing not deployed on all systems and almost impossible on paper record - No paper record tracking - Significant barriers to data sharing - many political and economical as opposed to technical or legislative - GDPR/Brexit: UK adequacy of personal data protection considered not robust Physical security measures not fully implemented -Curation (ordering and management) of the individual patient record is substandard in some areas -Physical environment for storing medical records is considered to be high risk both in terms of safety and in regards to ensuring timely availability of the case note	**Cyber security** - Integrated improvement plan drawing together: National Cyber Assurance (NIS-D) Framework - Cyber essentials improvement plan (then Cyber Essentials Plus) - ISO27001 compliance plan for voice and comms - Internal Audit Improvement Plans - Mandatory training module introduced for cyber & Implement regular phishing exercise for staff to maintain awareness - Cyber resilience exercises & Incident Management Plan (Major incident etc) - Improved threat assessment and organisation at a national level (including improved transparency of DHCW's posture as a key provider) - Improvements in the documentation of the service catalogue to cover disaster recovery, backup, data sharing for all systems - Improvements in the management of networked medical devices **Data Protection** - IG toolkit & response - ICO improvement plan - IG training - All Wales collaboration on data sharing / privacy engineering (Associated with NDC/CDR) and the Data Promise **Information Hub security and estate improvement plan** **Medical records estate improvement plan (incorporating electronic patient record and scanned record programme)**	Digital and Data Cttee	5	4	20	**Ransomware Attack resulting in loss of critical services and possible extortion RR =20** -->**IF**: The Health Board suffers a major ransomware attack. **Then**: there could be potential data loss and subsequent loss of critical services. **Resulting in**: Catastrophic service loss to all clinical and business services adversely impacting on population health management, patient care, business continuity, health and wellbeing of staff, organisational relationships, substantial financial risk and the UHB's other routine and improvement work - culminating in a culture of mistrust of the Health Board and all things digital leading to the likelihood of the opportunities that present from digital transformation being less likely to be achieved.	Cyber and Data Protection Improvement Plans being taken forward. - Timeframe: Quarterly updates NIST Framework adopted by the Health Board to have continuous improvement approach to applying the NIS-D Cyber Assessment Framework, understand and mitigating the identified risks. Staff awareness and training initiatives increased & incident management plan maturing Infrastructural architectural changes being put in place. Timeframe - Quarterly updates Network Monitoring pilot being initiated as initial stage of improving management of end points (devices on the network) **Update November 2022** - Risk realised as an Issue in August 2022 as the GP Out of hours software provider was subject to Ransomware - Adastra system still not fully restored	**Lack of a resilient and performant Digital Network Infrastructure and Assets RR= 15 IF**: The Health Board suffers regular local and/or national network issues and/or outages to critical clinical and business systems or performance issues in accessing and using systems. **Then**: there could be a detriment to patient care, inefficiencies in care provision and loss in confidence by Health Board staff in the technology provided to them leading to them using alternative software and bespoke systems (including paper based systems) to carry out their duties which are not integrated. **Resulting in**: delays in clinical decisions and consequently treatment which may affect clinical outcomes, reduced levels of productivity and thus poorer access to services, staff appetite to work digitally and in accordance with the digital standards required to realise the full strategic benefits of an integrated record and repository not being realised. Other consequences include: Loss of information integrity and accessibility as multiple copies of clinical records. Threat of malware being introduced on to the network from unmanaged data, systems and software. Possible breaches to the GDPR, safeguarding and information governance risks. Mistrust by staff of the ICT systems and services they are using	**Update November 2022** Main core switches replaced at PCH and new data centre has been handed over. Log of major incidents discussed at weekly Senior Management Team with process for learning and improvement established. Revised procedures introduced for approval of critical level developments following further outage at PCH attributed to tiredness amongst network team. Proposal to address critical deficiencies in the UHB network which have arisen due to severe shortage of network staff is underway. Device replacement programme prioritised towards ED departments BT remain on track to complete the lower level design which will provide the configuration to put in 3 GB connectors for POW. A minicomp to establish diverse routes for the LAN at POW has commenced and we anticipate the work will be completed by December 2022. A firmware upgrade of the Mitel telephony system has been completed with WSMI (which enables upgrading of wifi phones) in place .
IntDig2	**Effective governance, leadership and accountability**	**IF:** The Health Board does not have vision for digital services & clear strategy/operational programmes in place, with effective governance structures, which allow for effective and efficient decision making, underpinned by robust accountability processes and structures and facilitated by a cadre of professional, clinical and ~~or~~ technical leaders who have the requisite skills and resources and are enabled to act **Then:** Improving the quality and effectiveness of care and improvements in the health and wellbeing of our population through the use of digital tools and ways of working will be unachievable **Resulting in:** A vicious cycle of underperformance, outdated ways of working, challenges in recruitment and retention and anticipated benefits failing to be realised	**Internal** Organisational CTM UHB strategy and IMTP approved (presently under development) Resourced Strategic Outline Programmes of which digital, intelligence and privacy are key facets (Requires refresh) Collective ownership and awareness of cyber security, IG, Intelligence and Digital at board level, with board level directors post Clear governance structure: Digital and Data Committee (board sub committee - assurance), Digital Delivery Board (Management) , Project profolio board (programme initiation) Appropriate programme management (constituted and resourced - with SROs etc) Appropriate comms, engagement, implementation and support teams across system groups and ILGs (requires development) Policy Control Schedule ICO and Datix reporting Service KPIs, Financial and Procurement reporting, Benefits Monitoring Professional / competency register (Not in place) Robust SLAs with Swansea Bay, WHSSP & DHCW Robust contracts with 3rd parties WAO / Internal Audit Programme WASPI / Information sharing agreements frameworks for NHS Wales data sharing **All Wales** NHS Wales architectural and governance reviews underpinning 'A Healthier Wales' and 'Informed Health and Care' National assurance and standards setting committees including (WTSB, WISB, WIAB, SMB, DSSMB) National Programme Management Committees	Standing Financial Instruments (6/21), Scheme of Delegation (4/22), IG policy (3/23), Business continuity policy (6/19), Major Incident Plan (12/17), Standards of Behaviour policies (4/22), Records Management Policy (3/16),	- NHS Wales governance, data controllership and single tenancy arrangements increase risk of UHB complying with data controllership responsibilities and reduce UHB's ability to meet service need and service change requirements - Significant gaps in capacity and skills available to fulfil data protection responsibilities - Discord between professional and executive leadership teams on resource allocation and stewardship of IG functions - Weak governance structures for some local programmes - Weak and disconnected processes for the control of digital projects - Lack of skills and resources to deliver programme and attain benefits - Cyber training not mandated - Lack of awareness of cyber threats at all levels - Internal NHS Wales approach built on trust, (e.g. limited governance arrangements over SB, WHSSP, DHCW SLAs with no alternatives) - Delays in establishing NHS Wales CDO office to advice on technical and information standards, with many services failing to meet standards - Limited progress in taking forward architecture review and NDR /CDR (exacerbated by Covid) - Limited engagement in Digital Delivery Board (DDB) from outside of finance and digital (exacerbated by operating model devoid of clinical leads for digital) - Limited knowledge of present exposure to certain types of risks - Immature governance arrangements & digital capabilities in regards to IOT and small cloud based initiatives. - Resources allocated to digital programme insufficient to deliver infrastructure and services which underpin the organisation's annual plan (numerous functions: benefits realisation, engagement, cyber, asset management)	-Organisational operating model - IMTP digital programme with associated Target Operating Model - Project governance standards -Estates compliance groups (e.g. asbestos, electrical safety, portable appliance testing group, fire) - Training and education to fully optimise the technology that has been deployed - Updated Change request and SON procedures - Adoption of Technical and Information Data standards (through architectural review board) - Data Protection and cyber improvement plans incorporating board level development and knowledge of data protection requirements and good practice - National (HEIW and DHCW) training programmes in digital competency and data literacy for digital and non-digital workers	Digital and Data Cttee	5	3	15	**Lack of Effective IG & Cyber security resource RR=15 - IF:** The Health Board is not able to legally share the business and patient sensitive information for which it is a data controller and which it is required to shared for the delivery of care **Then:** There will be a loss of trust and confidence in the Health Board from its patients, population, staff and 'care providing partners' and thus will not have the information required to provide safe, high quality and effective care and to make informed evidenced based decisions. **Resulting in**: Poor outcomes for our population, a loss of reputation for our organisation, substantial delays in improving services, inability to collaborate regionally or deliver integrated care services.	Actioning of Cyber and Data Protection Improvement Plans decelerated due to staffing. - Timeframe: Quarterly updates Response to ICO audit recommendations being managed on a prioritised and smart basis (aligned to other improvement areas) Benchmarking with other organisations in Wales undertaken. Procedures and requirement to initiate all programmes being enhanced to meet legal requirement of privacy by design Re-allocation of 1 coding staff to IG function and appointment of agency head of IG for 3 month period made, to sure up IG function. Recruitment process underway for Head of IG but band 6 position being held back via recruitment process.	**Workforce Capacity and Capability RR=15** - IF: The Health Board has an insufficient volume and proportion of staff who are skilled in informatics and who are digitally competent to enable our patients and population to benefit from the opportunities AI and digital Then: The Health Board's ability to deliver its strategy and the quadruple aim in the medium and longer terms will be reduced. Resulting in: A decline in our population's relative health and wellbeing status and increasing inequity	Virtual training libraries. Cyber awareness and IG mandatory training. Establishment of a small number of clinical informatic posts.
IntDig3	**Obtaining information fairly and efficiently**	**IF:** The Health Board is not able to obtain information fairly and efficiently/effectively **Then:** the joined up digital record which enables our strategic ambition and digital strategic programmes (citizen portal, integrated care record, evidence based decision making) will not be achievable and we will either remain on a paper record, a disintegrated record, or will not be trusted to hold a record **Resulting in:** Poor outcomes for our population, a loss of reputation for our organisation, financial loss through penalties and a disabling infrastructure on which to deliver our strategic ambitions	**Obtaining Information fairly** CLDC reliance on Indirect consent IG policy and toolkit (GDPR /PERC) use of privacy notices WASPI / Data sharing arrangements / Data Promise. Research and Development regulations (Including ethics committee) **Obtaining Information Efficiently/Effectively** Digital element of the strategic programme - Culture to digitise the EPR, our communications, how we do business Corporate IMTP One CTM - Bridgend / CT aggregation (Digital systems, business logic & data repositories) MS Business Platform Transformation Programme (inc Website & Intranet Development) Corporate capital and revenue programmes Workforce mobilisation programme Staff and Patient training UHB Infrastructure and Telecommunication strategies Estates transformation Financial statutory instruments	IG policy (3/23), Info security policy (3/23), Internet Use policy (3/23), Business continuity policy (6/19), CCTV policy (6/20), DPIA procedure (3/20), Electronic data backup policy (9/20), Photography and Video recordings of patients policy (3/18), Major Incident Plan (12/17), Mobile phone & media communication devices policy (4/15), Personal Data Breach Mgt Procedure (3/20), Security policy (12/21), Standards of Behaviour policies (4/22), Subject Access Procedure (9/22), Transmission of Manual Faxes Protocol (12/19), Medical Device Mgt Policy (2/23), Patient Information Guidelines (3/23), Patient Positive ID policy (1/23), Patient wristbands (3/09), Records Management Policy (3/16), Accessing interpreter and translation services policy (7/21), PECR procedure (xx)	Absence of a policy and procedures on a 'unified communications position for the UHB'. (multi modal channels of care are unmanaged and unamanageable, overwhelming our stadd and resulting in vital informaiton being lost or missed. Obtaining Information Efficiently/Effectively Much of medical record still paper based or using process which do not optimise effective ways of working enabled by digital tools Immaturity of the national and local Information for the patient (e.g. citizen portal) & digital inclusion programme Digital support tools such as e-observation, e-prescribing not available UHB's own information not readily available - challenges getting full data out of DHCW & people storing their own data or signing up to have the data stored by a third party in the cloud without the UHB having full and timely access Cyber controls enforced prior to alternative enablers being implemented resulting in professionals not being enabled to deliver value to the population & the organisation Significant cost pressures anticipated - from both providing the hardware and replacing it and from license cost inflation / specification changes One CTM - Bridgend / CT aggregation business case not funded Workforce mobilisation programme not fully funded or rolled out Staff and Patient training sub optimal Population not digitally enabled (e.g. not all have access to tools and connectivity to use UHB's digital offerings) UHB Infrastructure and Telecommunication strategies not implemented Estates transformation not yet determined NHS Wales governance, data controllership and single tenancy arrangements increase risk of UHB complying with data controllership responsibilities and reduce UHB's ability to meet service need and service change requirements	-Electronic patient record programme (incorporating DPN & WCP) -Citizen portal programme -Patient and staff digital inclusion programme, - Infrastructure programme (inc consideration of BYOD) - Digital promise & data sharing programmes - Coding improvement and transformation plan - Programme to provide single sign on functionality	Digital and Data Cttee	4	2	8				
IntDig4	**Recording information accurately and reliably**	IF: The Health Board is not able to Record record information accurately and reliably Then: the data informing the clinical, regional and organisational decisions we and our partners (including WG) make, will be inaccurate, out of date or incomplete Resulting in: Degradation in our delivery of the quadruple aim and strategic objectives and damage to our reputational standing with our population and partners.	**Recording Information Accurately:** Digital element of the strategic programme - Culture to digitise the EPR, our communications, how we do business National Architecture Review - encompassing (NDR /CDR & Sharing arrangements) Workforce skills & development programme (TBD) Coding transformation programme Information and Technicial Standards Clinical audit **Recording Information Reliably** NIS-D improvement programme (All-Wales) Information and Technicial Standards Cyber resilience UHB Infrastructure and Telecommunication strategies Workforce mobilisation programme Staff and Patient training Robust SLAs with Swansea Bay, WHSSP, DHCW Robust contracts with 3rd parties (e.g. BT for PSBA, Microsoft, CITO and other service & systems providers)	IG policy (3/23), Info security policy (3/23), Being open policy and procedures (1/19), CCTV policy (6/20), Photography and Video recordings of patients policy (3/18), Medical Device Mgt Policy (2/23), Patient Positive ID policy (1/23), Patient wristbands (3/09), Records Management Policy (3/16), Accessing interpreter and translation services policy (7/21),	**Recording Information Accurately:** Significant data quality issues persist & little cultural ownership of the problem Backlog of unwritten Discharge Advice Letters extends to 5 months in some specialties Vast majority of clinical events not coded or conforming to technical and information standards Workforce skills & development programme dependent on individuals Ongoing use of unstructured paper records and poor record keeping **Recording Information Reliably** Network & software not configured to support digital / virtual ways of working Digital support services and response times insufficient to enabling reliance on digital ways of working Financial and workforce resource and competence issues Covid response has left much to be re-architected and optimised Continuing and pervasive use of Whats App	-Electronic patient record programme (incorporating DPN, WCP & e-forms) - IG plan, - Improving Data Quality Initiative, - Adoption of data level standards based architecture, - Coding transformation plan, - Data democratisation and use - NDR, CDR and integration programme - Update to all Wales email policy to extend to - NDR, CDR and integration programme	Digital and Data Cttee	3	4	12	**Failure to deliver replacement Laboratory Information Management System, LINC RR=20** -->IF: LINC Programme fails to deliver replacement Laboratory Information Management System (LIMS) by summer 2025THEN: CTM would be without a supported Pathology LIMS system RESULTING IN: Without the implementation of the new LIMS system the pathology service may fail to produce accurate, timely patient results for diagnosis, monitoring and screening of patients which would impact treatment, patient flow and waiting times.	As the NHS Wales Health Collaborative becomes part of the NHS Executive it has been agreed that the LINC Programme will move to Digital Health Care Wales	**Access to a complete, integrated, and coded medical record. RR = 15 IF:** The Health Board is not able to record information accurately and reliably, with complete and up to date information **Then:** the data informing the clinical, regional and organisational decisions we and our partners (including WG) make, will be inaccurate, out of date or incomplete **Resulting in**: Degradation in our delivery of the quadruple aim and strategic objectives and damage to our reputational standing with our population and partners. Further we will be prevented from driving forward our ambitions to become a digital organisation, an exemplar for R&D and Value etc.	Update October 2022 - Consideration being given to Cessation of creating scanned records for any more new patients enabling scanning capacity to be put towards address backlog of active patients who already have a record in the scanning system - Development of a Health Board coding strategy for the development of the profession developed and being taken forward, which underpins the coding transformation plan - Natural Language Programming (NLP) and data linkage being used to autocode targeted spells, improving levels of coding completion, based on Snomed-CT identified as increasingly succesful and cost effective - Adoption of data level standards based architecture, - Opportunity for bi-directional real time integration between primary and secondary care available but requires tactical decision by UHB Board - National Data Resource (NDR), Clinical Data Repository (CDR) and integration programme
IntDig5	**Using information effectively and ethically**	**IF:** The Health Board does not, or can not, use information effectively and ethically **Then:** we will not drive optimal decision making, we will not speed up the time to diagnoses, we will not be able to innovate or contribute to research and development initiatives which drive wider value realisation for the UHB or our community and if we do not act ethically we will tarnish our brand and that of the NHS **Resulting in:** Less support from our population and thus from policy makers and other partners if we act unethically, threatening the sustainability of our efforts and the clinical and cost effectiveness of our practices.	**Using Information Effectively:** Data Democratisation Programme Digital population strategy (not yet developed) Clinical Data Repository / National Data resource programme & agreed standards Workforce skills and development programme (quality and quantity of workforce with appropriate digital skills) Infrastructure improvement programme (Capacity, resilience and functionality) Clinical Informatics Programme Service KPIs, Financial and Procurement reporting, Benefits Monitoring Medical Devices Legislation National Digital & Intelligence Resource Libraries DPIA process **Using Information Ethically:** Data Protection legislation (GDPR, CLDC, PERC etc) - with compliance monitoring Ethical Standards (SEWREC) Adoption and implementation of All Wales IG and Data security policies NHS Wales Data Promise (tbd) Medical Devices & AI Legislation	Email use policy (June-20), IG policy (3/23), Info security policy (3/23), Internet Use policy (3/23), Being open policy and procedures (1/19), CCTV policy (6/20), DPIA procedure (3/20), Photography and Video recordings of patients policy (3/18), Mobile phone & media communication devices policy (4/15), Personal Data Breach Mgt Procedure (3/20), Standards of Behaviour policies (4/22), Subject Access Procedure (9/22), Medical Device Mgt Policy (2/23), Patient Information Guidelines (3/23), Records Management Policy (3/16), In service testing of electrical equipment procedure (7/18), Fire policy (2/21),	**Using Information Effectively:** Data Democratisation Programme not yet defined - no progress on data promise Digital population strategy not yet developed Delays in Clinical Data Repository / National Data resource programme & compliance with agreed standards Workforce skills and development programme still being developed Infrastructure improvement programme failing to keep pace with demand Gaps in our knowledge around Medical & other IOT devices National Digital & Intelligence Resource Libraries **Using Information Ethically:** Ethical Standards not clear regarding use of private companies who limit access to those who consent to share data NHS Wales Data Promise initiative slow in being progressed and now made more complicated by NHS England initiative Limited availability and thus clinical access and ownership of clinical and business information	-NDR / CDR Programme - Electronic patient record programme (incorporating DPN & WCP) - Data democratisation (including Business Intelligence development) - Workforce skills and development (with HEIW) - Infrastructure improvement programme - Digital population strategy	Digital and Data Cttee	3	4	12	**DHCW Interdependencies RR = 15** --> **IF:** The Health Board can not integrate new applications into its digital architecture in a timely fashion **Then:** there could be a detriment to patient care, inefficiencies in care provision and loss in confidence by Health Board staff in the technology provided to them leading to them using alternative software and bespoke systems (including paper based systems) to carry out their duties which are not integrated and major strategic priorities for the organisation (e.g. Bridgend aggregation and the deployment of the new Emergency Department system) not being delivered **Resulting in:** delays in clinical decisions and consequently treatment which may affect clinical outcomes, reduced levels of productivity and thus poorer access to services, staff appetite to work digitally and in accordance with the digital standards required to realise the full strategic benefits of an integrated record and repository not being realised. Other consequences include: 1. Loss of information integrity and accessibility as multiple copies of clinical records. 2. Failure and delay of digital system deployments (e.g. WEDS)	National Data Resource Programme has accelerated plan to open up the architecture, with API management procured for all of Wales & implementation date set for Jan 23 - will be limited in nature. National Funding received from WG for PAS integration work to create a second team supporting data migration. CTM/HB & DHCWappointment process has commenced. Included within this is a post for PAS integration developer.		
IntDig6	**Sharing information appropriately and lawfully**	**IF:** The Health Board does not share information appropriately and lawfully, thereby failing in our duty to appropriately balance risk and benefits **Then:** we will not have the information and knowledge to support care delivery and population health management **Resulting in:** Poor outcomes for our population, a loss of reputation for our organisation, financial loss through penalties and a disabling infrastructure on which to deliver our strategic ambitions	**Data Protection** - Adoption and implementation of All Wales IG and Data protection policies supplemented by appropriate CTM policies and procedures - Mandatory training in Information Governance with auditing functionality (such as NIJAS) built in to monitor compliance, - Accessible but robust data protection process for new and existing data sharing arrangements (DPIA procedures) - Joint data controllership arrangements with DHCW + WASPI - Data sharing arrangements with Local Authorities, GPs and other direct care providers - DPIA process	Email use policy (June-20), IG policy (3/23), Info security policy (3/23), Internet Use policy (3/23), Asbestos Mgt plan (1/22), Being open policy and procedures (1/19), Business continuity policy (6/19), CCTV policy (6/20), DPIA procedure (3/20), Disposal of obsolete ICT equipment (12/19), Electronic data backup policy (9/20), Policy for handling persistent and serial complaints (3/24), Photography and Video recordings of patients policy (3/18), Major Incident Plan (12/17), Mobile phone & media communication devices policy (4/15), Personal Data Breach Mgt Procedure (3/20), Security policy (12/21), Standards of Behaviour policies (4/22), Subject Access Procedure (9/22), Transmission of Manual Faxes Protocol (12/19), Medical Device Mgt Policy (2/23), Patient Information Guidelines (3/23), Patient Positive ID policy (1/23), Patient wristbands (3/09), Records Management Policy (3/16), In service testing of electrical equipment procedure	**Data Protection** - Data sharing agreements are not in place for a number of historical data flows, with asset registers not always up to date or incomplete - No national data sharing framework in place to support NDR - WASPI arrangement does not cover all CTM LAs - No data sharing agreement with GPs in place to enable operational public health and managing the population on an integrated care basis - No national data sharing framework in place to support NDR - No access to national risk pool type arrangement for independent NHS contractor services (e.g. GPs, dentists, optoms) - Challenges with the SBU / CTM data sharing regarding population data	- National data promise - POW/CT PAS aggregation - Local and National NDR CDR programme (incorporating data sharing arrangements) - Population Health Management Programme - WCCIS programme development	Digital and Data Cttee	3	3	9	**Integrated IT Systems RR=16** -->**If:** The Health board does not have a unified electronic health and care record and systems which are integrated across the organisation and with our primary and social care providers **Then:** The Health board will be unable to deliver safe, high quality, clinically and cost effective care to patients **Resulting In:** Compromised safety of patients needing treatment that are reliant on clinical test results and information being available to clinicians to plan and deliver the treatment plan and the requirement for sub-optimal manual processes		**Update November 2022 -** Regarding the Bridgend/CT aggregation: Programme as set out in IMTP progressing to plan with posts funded by WG being recruited to. Tactical approach to data sharing with primary care yet to be agreed, and funded, noting NDR programme has recently offered a non recurrent financial contribution . All Wales API for 5 data systems expected January 2023 as first step in truly opening up the architecture. UHB has approached DHCW to make a joint appointment to develop and maintain APIs to the Myndon PAS, which will support the clinical services in managin patient flows within the UHB,	

Digital Operating Model
Final Internal Audit Report

October 2022

Cwm Taf Morgannwg University Health Board

GIG CYMRU NHS WALES
Partneriaeth Cydwasanaethau
Gwasanaethau Archwilio a Sicrwydd
Shared Services Partnership
Audit and Assurance Services

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Cwm Taf Morgannwg University Health Board

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Executive sign-off:	Stuart Morris, Director of Digital
Committee:	Audit & Risk Committee

Audit and Assurance Services conform with all Public Sector Internal Audit Standards as validated through the external quality assessment undertaken by the Institute of Internal Auditors

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NHS Wales Audit and Assurance Services would like to acknowledge the time and co-operation given by management and staff during the course of this review.

Executive Summary

Purpose

To ensure that the organisation has an appropriate digital operating model that supports staff, enables transformation and reflects the current operating environment.

Overview

We have issued limited assurance on this area. The Health Board understands its target digital operating model. However, this is not fully operational as yet, and requires increased funding.

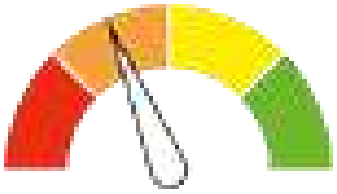
The matters requiring management attention include:

- The steering and stakeholder ownership governance level has not yet been established.
- There is a lack of digital clinical leadership across the Health Board which has impacted on engagement.
- The staffing resource within digital is not sufficient to meet the full organisational need.
- The funding for equipment has not kept pace with requirements, leading to an out of data asset base.

Other recommendations / advisory points are within the detail of the report.

Report Opinion

Limited



More significant matters require management attention.

Moderate impact on residual risk exposure until resolved.

Assurance summary[1]

Objectives		Assurance
1	Control & Governance	Limited
2	Digital Structure	Limited
3	Digital Skills	Reasonable
4	Equipment and Support Structure	Limited

[1]The objectives and associated assurance ratings are not necessarily given equal weighting when formulating the overall audit opinion.

Key Matters Arising

		Objective	Control Design or Operation	Recommendation Priority
1	Steering Level	1	Operation	High
2	Digital Clinical Leadership	1	Operation	High
3	Digital Resource	2	Operation	High
4	Development Resource	2	Design	Medium
5	Skills	3	Operation	Medium

6	Digital Equipment	4	Operation	High
7	Digital Literacy	4	Operation	Medium
8	Support	4	Operation	Medium

1. Introduction

1.1 In line with the 2022/23 Internal Audit Plan for Cwm Taf Morgannwg University Health Board (the 'Health Board' or 'organisation') a review of the digital operating model was undertaken.

1.2 A digital operating model is the combination of multiple dimensions that collectively deliver the digital and IT services to an organisation. Organisations must ensure that they design a digital operating model that fully supports business needs and enables the digital organisation to deliver on its mandate.

1.3 The relevant lead director for the review is the Director of Digital.

1.4 The potential risks considered in the review are as follows:

- Health Board staff do not have adequate support to enable objectives to be met.
- The Digital Directorate cannot fulfil the Health Board's requirements.

2. Detailed Audit Findings

Objective 1: The control and governance structure for digital ensures appropriate risk management, decision making and ownership of digital.

2.1 The governing committee for digital is the Digital and Data Committee. Its terms of reference:

- makes clear that it is the delegated committee for digital;
- includes digital and data strategies oversight;
- includes digital risk management;
- oversees digital transformation; and
- notes that KPIs are to be reported on.

2.2 The level under the Committee is the Digital Delivery Board (DDB). However, there is limited attendance from stakeholder and wider service representatives and as such does not enable an ownership or steering functionality on behalf of the service and stakeholders.

2.3 There is a gap at the steering and ownership level of the digital operating model. A target operating model (TOM) was proposed in July 2021 which set out Strategic Capability Boards to manage and push the delivery of the programmes within the Digital Strategy. These boards would have membership from stakeholders and facilitate the ownership of digital, however they have not been set up and, as the DDB is not acting as a steering or ownership mechanism, then clear ownership of digital is not in place. (Matter Arising 1)

2.4 The concept of ownership of digital within the Health Board is not embedded. It appears that the culture is of IT being something that is done by IT as opposed to digital being a facilitator that is owned by the service. Part of the reason for this is a perception of under delivery of IT projects and weaknesses in the infrastructure, which has led to frustration within the clinical staff cohort and a lack of engagement.

Without this cultural change the digital model for transformation of services cannot happen. However, the Health Board's revised operating model has a clinical engagement work stream that seeks to alleviate this lack of engagement.

2.5 There are structures in place to enable digital engagement with the clinical staff groups, these include the Chief Clinical Information Officer (CCIO) / Chief Nurse Information Officer (CNIO) Teams channels, the CTM Improvement Group and extant clinical networks.

2.6 In addition, we note that there is now an end user group operating as a function of IT which is focussed on the user experience and training to help ensure digital is focussed on users' needs.

2.7 There is a limited amount of digital clinical leadership in place, with a single CCIO and CNIO. We note that the CNIO role is not yet formally defined. These roles enable the link between clinical staff groups, management and the digital directorate and support the development of clinical information needs and encourage and empower staff to engage in digital transformation. The lack of capacity in this space restricts the ability of the Health Board to fully embed digital. A move towards having a digital lead representing different staff groups in each area would better enable the embedding of digital and the ownership by the service. (Matter Arising 2)

2.8 We note that there have been frequent changes to the accountability line for Digital, with changes of Executive and in the Assistant Director for Informatics (ADI) role. This has led to a loss of visibility of Digital at the highest level of the organisation, although the recent appointment of the Director of Digital should resolve this.

2.9 The Digital Directorate is split into a number of functions and streams and there are structures to oversee and govern the delivery level of Digital.

2.10 In addition to regular meetings with department heads, there are weekly senior team meetings which include all department heads. The purpose of these meetings is to provide updates across the directorate and ensure each area is aware of work ongoing across the directorate. These meeting include a strategic feed from the Director of Digital to ensure that the directorate is aware of issues at that level.

2.11 There is a specific group for dealing with digital and IM&T risks, this group reviews all identified risks held on the directorate risk register and escalates those which score above 15 to the corporate risk register.

2.12 The directorate management structure enables reporting from the directorate level to the Committee level, via the Digital Delivery Board, and we note that there is consistency of messaging throughout the structure.

Conclusion:

2.13 The digital operating model is appropriate, but it is not fully operating as set out. The reason for this is partly because the defined governance framework has not been fully established, partly due to change at senior level, and partly due to the lack of digital clinical leadership which has fed into a lack of engagement and embedding of digital throughout the organisation. There are actions in train to try to resolve these matters and to focus digital on users and their needs. The

established directorate's management structure enables workstream information sharing within the directorate and management. However, as the model is not fully functional at present, we have provided **Limited** Assurance over this objective.

Objective 2: The staffing and structure of the Digital Directorate is appropriate to meet the support needs of Health Board staff and for the delivery of digital transformation.

2.14 The current Digital Directorate structure is relatively flat, although we understand that this is being reviewed and some reconfiguration has already happened. The review has two aspects: firstly to restructure in line with the current funding position for digital; and secondly, in line with what an ideal future position would look like that enables the directorate to provide the full service required by the organisation. This work will then enable the gaps and the associated costs to be fully defined.

2.15 Management acknowledge gaps within the digital structure. The Health Board employs approximately 80 staff within the digital structure, which is low in comparison to other organisations. There has also been an historic reliance on the use of agency / contractor staff. Whilst we note that the use of temporary staff provides a valuable resource pool for the Health Board, the continued use temporary staff results in increased costs, staffing instability, and a loss of organisational knowledge.

2.16 The changes in the Health Board environment due to the rapid roll out of digital solutions mean that there is an increased asset base to support, along with an increased staff support requirement. The current structure is more focussed on this than enabling transformation and digital projects, with the transformation structure being under-resourced, with a low number of staff involved in projects. There is also under resourcing for ongoing change management. Although change managers are included within business cases, this support is time limited and is not fully supporting the embedding of digital systems into organisational processes.

2.17 While the organisation has rolled out digital solutions and has implemented office 365, the structure within the organisation is not sufficient to maximise the potential for these products, with no 365 team and limited support and training available. There appears to be an appetite for digital transformation and digital functionality within the Health Board, but without the directorate structure to support this and enable rollout of solutions the Health Board will struggle to gain the benefits. (Matter Arising 3)

2.18 There is very little development resource within the directorate due to historical decisions to use Digital Health & Care Wales (DHCW) as much as possible. This has meant that there is a great deal of reliance on DHCW, and on the pace and prioritisation decisions within DHCW for the development and roll out of the national solutions, with limited ability for the Health Board to develop its own solutions. As such, the directorate is not able to provide an agile service to the wider Health Board and fully control the development of digital solutions that meet the Health Board's objectives and priorities. (Matter Arising 4)

Conclusion:

2.19 The Digital Directorate structure is appropriately defined and is being reviewed in order to maximise the use of the staff resource in place and to define a required staff resource position that is fit for digital support and delivery. There are gaps within the currently structure, along with under provision of development and transformation resource. Without appropriately resourcing the Digital Directorate the directorate will not be able to fully support the organisation. Accordingly we have provided **Limited Assurance** for this objective.

Objective 3: The knowledge and skills within the Digital Directorate is appropriate to meet the Health Boards' needs.

2.20 Linked to the shortages within the directorate structure, there are shortages in key skills. Although the full skills shortage has not at present been fully assessed, the work on restructuring the directorate that is underway is considering the need for digital skills as part of that process. (Matter Arising 5)

2.21 These gaps are acknowledged by management and include development and integration skills, analytics skills, Office 365 and gaps within technical areas such as infrastructure and cyber security. The skills gap within the Digital Directorate is hindering the ability of the organisation to move forward with digital transformation and the support of the organisational strategy.

2.22 Skills and training needs are identified within the directorate as part of the PADR process, and opportunities are also identified via contact from providers. We note that there is funding in place for a training contract which allows training to be provided when needs are identified. Training is provided to enhance skills in areas such as clinical coding, business informatics (BI) training on Qlik, ITIL, clinical systems and infrastructure.

Conclusion:

2.23 Training is available for digital staff with training needs being identified via the PADR process and by supplier contacts. There are acknowledged skills gaps and work is underway to fully define the required skills and the gaps. Accordingly, we have provided **Reasonable** Assurance for this objective.

Objective 4: Health Board staff have access to the right equipment and level of digital support, through the right channels to enable them to deliver their objectives.

2.24 Historically the Health Board has not invested in its digital architecture to the extent that would enable it to provide a fully digital service at present, this has been identified within a recent external review by 4C and changes are being enacted. The current position is such that the Health Board is not investing sufficient funding into the provision of technology that will enable it to meet its stated digital strategy and objectives (Matter Arising 6)

2.25 The Health Board made a decision to opt for a thin client model using I-GEL and Citrix which provides staff with low performance computers to run applications where most of the actual processing is done on a remote server linked over a

network, however the age of some of the devices mean that they are not all fit for use in a modern digital environment. We note that a large number of laptops were provided as part of the Covid response, out of necessity this was reactive and did not always evaluate the user need.

2.26 We note that the knowledge of the equipment that is in place and the use of this is improving, with a recent purchase of an asset management package which will identify both older equipment and equipment with problems, together with the use of equipment. The stated intention of the TOM is to use this information to match user need with the right level of equipment to get better value and minimise staff dissatisfaction. Work is also ongoing to identify the use of Office 365 products to ensure that the allocated licence matches the need, and so avoiding unnecessary expenditure whilst ensuring staff have the appropriate tools.

2.27 There is a process within the Health Board for trialling equipment and different configurations to identify those that work best. There have been delivery successes using this approach, such as devices for the Welsh Clinical Nurse Record (WCNR) and carts for use with the Welsh Emergency Department System (WEDS).

2.28 However, we note that there are a lot of old devices in place due to the underfunding of the equipment refresh programme. The Health Board's identified required funding for a six year replacement plan is £2.3m, however the allocation is only £300k, although additional funding is provided for specific projects such as £200k for WCNR. Without staff having access to up to date devices the organisation may struggle to enable its digital transformation and the TOM may not operate, the Digital Strategy may not be delivered and people may become disengaged. (Matter Arising 6)

2.29 We note that the ICT risk register includes a risk relating to the replacement programme. This was scored at '12' in April 2022, so has not been escalated to the corporate register. As this risk has the potential to impact on transformation programmes and service delivery the assessed scoring may not fully reflect the impact.

2.30 As the Health Board moves towards greater digital transformation staff across the Health Board will need to be involved in process design and accept the need for the use of digital solutions. At present there is no stated expectation by the Board that staff should maintain a level of digital literacy. In some cases it appears that staff are not able, or are unwilling to attempt to resolve issues themselves, which increases the demand on the digital support resource. (Matter Arising 7)

2.31 The digital operating model for support blends human contact with self-help guides for users, however as previously noted, resourcing is an issue and as such the human aspect has not been fully provided.

2.32 Health Board staff can access support by either calling the help desk number or by logging a call online. Management acknowledge that while the support requirements for the Health Board have changed, the support structures have not fully adjusted. The Office 365 roll out has led to this being the focus of a large number of calls, and as digital services get rolled out there is more need for 24/7 support.

2.33 We note that funding was provided for two staff as part of the Office 365 implementation, but this funding expires in September 2022 and no ongoing support provision is currently funded. A digital champions group for Office 365 was established, but there is limited capacity to support others.

2.34 Feedback from clinician groups is that the help desk is not very responsive and without a fix at first contact approach, with the user being passed between departments and often having to wait for a call back. Again, this has been acknowledged by management and work is ongoing to improve support within clinical systems teams, improve information collection at first point of contact, and improve problem management in order to fix issues at source. (Matter Arising 8)

2.35 We note that the structure is being revised, and new leadership and focus on service management has been installed for the help desk. In addition, there is work ongoing to assess increasing the methods of providing support, including 'floor walking'.

2.36 There are self-help and 'how to' guides available for staff within the Health Board, however the collation and presentation of these, alongside other information is not well structured with information situated in a number of different places, although we note that work is ongoing to develop the digital SharePoint site.

Conclusion:

2.37 The support channels for staff have not been fully adjusted to meet the changed requirements although work is ongoing in this area and improvements have been made. There has been historic under investment in technology, which means that the equipment currently in place is not always up to date and fully suited for a digital organisation. Work is ongoing to match available equipment to job function to maximise the use of the available resources and processes are in place to identify the best suited equipment for digital solutions. However, the Health Board should recognise that the technical equipment needed to support its stated intention and strategy will need appropriate funding. Accordingly, we have provided limited assurance for this objective.

Appendix A: Management Action Plan

Matter Arising 1: Steering and ownership level (Operation)			**Impact**
There is a gap at the steering and ownership level of the digital operating model. A TOM was proposed in July 2021 which set out Strategic Capability Boards to manage and push the delivery of the strategic programmes. These were to have membership from stakeholders and so facilitate the ownership of digital, however they have not been set up and as the digital delivery board (DDB) is not acting as a steering or ownership mechanism then this governance level is not in place.			Potential risk that the Digital Directorate cannot fulfil the Health Board's requirements.
Recommendations			**Priority**
1.1	An appropriate steering and ownership governance tier should be established that enables stakeholders to own, steer and oversee the delivery of digital objectives.		**High**
Agreed Management Action		**Target Date**	Responsible Officer
1.1	Accept A new governance and ownership arrangement will be created to align to the Health Board Transformation Change Programme and delivery board created as part of the Care Group Model Implementation.	Qtr 3 2022/2023	Director of Digital

Matter Arising 2: Limited Digital Clinical Leadership (Operation)			**Impact**
There is a restricted amount of digital clinical leadership in place, with a single CCIO and CNIO. The lack of capacity in this space restricts the ability of the Health Board to fully embed digital.			Potential risk that Health Board staff do not have adequate support to enable objectives to be met.
Recommendations			**Priority**
2.1	The Digital Clinical leadership structure should be revised and improved. • The CNIO role should be formalised; and • a network of digital clinical leaders should be established that mirrors the Health Board structure to ensure that each area as a defined leader who can act as a conduit and help embed digital.		**High**
Agreed Management Action		**Target Date**	**Responsible Officer**
2.1	Accept Digital Clinical Leadership will be developed and formally recognised as part of the Strategic Leadership Group within the Digital & Data Directorate. A new set of roles & capabilities will be identified as part of the new Digital & Data Governance arrangements.	Qtr 3 2022/2023	Director of Digital

Matter Arising 3: Digital Resource (Operation)			**Impact**
The current structure in place is not sufficient to fully support the organisation, enable digital transformation and digital projects. There are gaps within the structure with a low number of staff involved in projects, limited change management support for fully supporting the embedding of digital systems into organisational processes and there is no dedicated Office 365 team. This means that the directorate is not meeting the demands of the organisation for digital functionality and the organisation is not maximising the benefits from investment in digital technologies.			Potential risk that the Digital Directorate cannot fulfil the Health Boards requirements.
Recommendations			**Priority**
3.1	As part of the review of the directorate structure, consideration should be given to ensuring that the structure and resources includes: • appropriate digital leadership within the structure; • ongoing change management support; • digital transformation and project resource; and • Office 365 team and support.		**High**
Agreed Management Action		**Target Date**	**Responsible Officer**
3.1	Accept A Digital Leadership Change Process will be initiated in the Autumn of 2022. A subsequent review of senior management support and related resources will commence in the first half of 2023.	Qtr 3 2022/2023 Qtr 4 2022/2023	Director of Digital Director of Digital

Matter Arising 4: Development Resource (Design)			**Impact**
There is very little development resource within the directorate due to historical decisions to use DHCW as much as possible. This has meant that there is a great deal of reliance on DHCW, and on the pace and prioritisation decisions within DHCW for the development and roll out of the national solutions, with limited ability for CTMU to develop its own solutions. As such the directorate is not able to provide an agile service to the Health Board and fully control the development of digital solutions that suit the Health Board's objectives and priorities.			Potential risk that the Digital Directorate cannot fulfil the Health Boards requirements.
Recommendations			**Priority**
4.1	The balance between the use of DHCW solutions and development of in house solutions within the operating model should be reviewed to ensure that it matches the needs of the organisation. Consideration should be given to increasing the level of in house development resource in order to provide Health Board specific digital solutions at a pace that suits the Health Board.		**Medium**
Agreed Management Action		**Target Date**	**Responsible Officer**
4.1	Accept Development resources will be considered and proposed as part of subsequent structural reviews. Acknowledgement that any development resource proposal will need to be prioritised against other financial decision points for the Health Board.	Qtr 2 2023 / 2024	Director of Digital

Matter Arising 5: Skills (Operation)			**Impact**
The full skills shortage within the Digital Directorate has not been fully assessed. However, we note that the ongoing work on restructuring the directorate is considering the need for digital skills as part of that process.			Potential risk that the Digital Directorate cannot fulfil the Health Boards requirements.
Recommendations			**Priority**
5.1	The skills required by the Digital Directorate should be fully defined and mapped to those already in place. A structured training & development plan should be defined to meet skills shortages, alongside the use of temporary staff to meet gaps short term.		**Medium**
Agreed Management Action		**Target Date**	**Responsible Officer**
5.1	Accept Full review of the capacity and capability required will be completed in 2023 as part of a phased approach to the future target operating model for the Digital & Data Directorate.	Qtr 2 2023 / 2024	Director of Digital

Matter Arising 6: Digital Equipment (Operation)			**Impact**
Historically the Health Board has not invested in its digital architecture to the extent that would enable it to provide a fully digital service at present. The current position is such that the Health Board is not investing sufficient funding into the provision of technology that will enable it to meet its stated digital strategy and objectives. We also note the volume of old devices in place, due to the underfunding of the equipment refresh programme. The required funding for a six year replacement plan is £2.3m, however the allocation is only £300k. Without staff having access to up to date devices the organisation may struggle to enable digital transformation and the TOM may not operate, the Digital Strategy may not be delivered and people may become disengaged.			Potential risk that the Digital Directorate cannot fulfil the Health Boards requirements.
Recommendations			**Priority**
6.1	The Health Board should ensure that appropriate funding is provided to enable equipment to be kept up to date.		**High**
Agreed Management Action		**Target Date**	**Responsible Officer**
6.1	Accept Appropriate funding will be identified as part of the IMTP process for a 2023 submission.	Qtr 4 2022/2023	Director of Digital

Matter Arising 7: Digital Literacy (Operation)			**Impact**
At present there is no stated expectation by the Health Board that staff should maintain a level of digital literacy. In some cases staff are not able, or are unwilling to attempt to resolve issues themselves, which increases the demand on the digital support resource.			Potential risk that the Digital Directorate cannot fulfil the Health Boards requirements.
Recommendations			**Priority**
7.1	The Health Board should clearly state that minimum digital literacy is a requirement, with provision of training if required.		**Medium**
Agreed Management Action		**Target Date**	**Responsible Officer**
7.1	Accept Digital literacy to be included within the workforce and organisational development plan as part of the IMTP.	Qtr 4 2022/ 2023	Director of Digital

Matter Arising 8: Support (Operation)	**Impact**
The support structures for the Health Board have not been fully adjusted to reflect organisational needs. Support is available for Health Board staff, with two methods for accessing this, either by calling the help desk number or by logging a call online. It is acknowledged by management that the support requirements for the Health Board have changed, however the support structures have not fully adjusted. Feedback from clinician groups is that the help desk is not very responsive without a 'fix at first contact' approach, with the user being passed between departments and often having to wait for a call back. We note that the structure is being revised, and new leadership and focus on service management has been installed for the help desk. In addition, there is work ongoing to assess increasing the methods of providing support, including 'floor walking'.	Potential risk that the Digital Directorate cannot fulfil the Health Boards requirements.

Recommendations		**Priority**
8.1	The work to restructure support should be finalised, with greater provision of: - fix at first contact; - use of process automation for handling calls; - use of digital champions within services; - a structured SharePoint site; and - how to guides.	**Medium**

Agreed Management Action		Target Date	Responsible Officer
8.1	Accept A phased programme of work will be developed alongside the structural review. This programme is likely to run for 12 months.	Qtr 3 2023/ 2024	Director of Digital

Appendix B: Assurance opinion and action plan risk rating

Audit Assurance Ratings

We define the following levels of assurance that governance, risk management and internal control within the area under review are suitable designed and applied effectively:

	**Substantial assurance**	Few matters require attention and are compliance or advisory in nature. **Low impact** on residual risk exposure.
	**Reasonable assurance**	Some matters require management attention in control design or compliance. **Low to moderate impact** on residual risk exposure until resolved.
	**Limited assurance**	More significant matters require management attention. **Moderate impact** on residual risk exposure until resolved.
	**No assurance**	Action is required to address the whole control framework in this area. **High impact** on residual risk exposure until resolved.
	**Assurance not applicable**	Given to reviews and support provided to management which form part of the internal audit plan, to which the assurance definitions are not appropriate. These reviews are still relevant to the evidence base upon which the overall opinion is formed.

Prioritisation of Recommendations

We categorise our recommendations according to their level of priority as follows:

Priority level	Explanation	Management action
High	Poor system design OR widespread non-compliance. Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in system design OR limited non-compliance. Some risk to achievement of a system objective.	Within one month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. Generally issues of good practice for management consideration.	Within three months*

* Unless a more appropriate timescale is identified/agreed at the assignment.

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Medical Records Management
Final Internal Audit Report

October 2022

Cwm Taf Morgannwg University Health Board

NWSSP Audit and Assurance Services

GIG CYMRU NHS WALES
Partneriaeth Cydwasanaethau
Gwasanaethau Archwilio a Sicrwydd
Shared Services Partnership
Audit and Assurance Services

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Distribution:	Diane Chick, Medical Records Manager
Committee:	Audit and Risk Committee

Audit and Assurance Services conform with all Public Sector Internal Audit Standards as validated through the external quality assessment undertaken by the Institute of Internal Auditors.

Acknowledgement

NHS Wales Audit & Assurance Services would like to acknowledge the time and co-operation given by management and staff during this review.

Disclaimer notice - please note

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Executive Summary

Purpose

To provide assurance that a process is in place for the management of medical records that ensures that records are available when and where needed and are safe and secure.

Overview of findings

We have issued reasonable assurance on this area. Overall there are good processes in place for the management of health records. The key weaknesses lie within the processes for the move away from paper records.

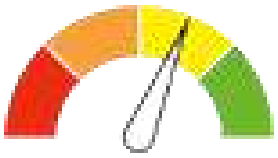
The matters requiring management attention include:

- Storage space is running out within the Williamstown site.
- Storage space has run out within Princess of Wales, and rack systems are broken.
- The digitisation project has stalled and been subject to delays.
- Poor quality of files returned to health records is impacting on scanning, and may present a patient safety risk.
- The development of e-forms has not progressed.

Other recommendations / advisory points are within the detail of the report.

Report Classification

Reasonable



Some matters require management attention in control design or compliance.

Low to moderate impact on residual risk exposure until resolved.

Assurance summary[1]

	Assurance objectives	Assurance
1	Policies, procedures and guidelines	Reasonable
2	Record storage	Reasonable
3	Record transportation and availability	Reasonable
4	Move away from paper	Limited

Key Matters Arising

		Objective	Control Design or Operation	Recommendation Priority
2	Williamstown Storage	2	Operation	Medium
3	Princess of Wales Storage	2	Operation	Medium
4	Reporting	3	Operation	High
5	Digitisation Project	4	Operation	High
7	File Quality	4	Operation	High
8	e-Form Development	4	Operation	High

[1] The objectives and associated assurance ratings are not necessarily given equal weighting when formulating the overall audit opinion.

1. Introduction

1.1 In line with the 2022/23 Internal Audit Plan for Cwm Taf Morgannwg University Health Board (the 'Health Board' or the 'organisation') a review of medical records management has been undertaken.

1.2 The purpose of the review is to provide assurance to the Audit and Risk Committee that a process is in place for the management of medical records that ensures that records are available when and where needed and are safe and secure.

1.3 The Health Records department is responsible for the storage and provision of patient records for the majority of services proved by the Health Board. Some services are responsible for, and store, their own records, in particular Mental Health and Therapies. Health records are stored in a number of areas across with Health Board, with the two main storage facilities are within Princess of Wales, and the main storage unit in Williamstown, which hosts over a million records. Our audit work focussed on these main storage areas.

1.4 Storage of records has become an issue for the Health Board, and in order to address this, and provide a modern electronic record the Health Board has been moving towards digitising the patient record to enable this to be viewable from any site on a variety of devices.

1.5 The potential risks considered in the review are as follows:

- Inappropriate access to confidential information;
- Inaccessibility of records impacts on patient care; and
- Inefficient processes lead to increased costs.

2. Detailed Audit Findings

Audit objective 1: Appropriate policies, procedures and guidelines are in place for medical records management that cover the full records lifecycle and ensure standardisation of processes and record content.

2.1 There is a current record management policy (Reference Number: GC02a) which provides guidelines for Health Board staff dealing with corporate, non-clinical and clinical records to ensure records are maintained, managed and controlled effectively.

2.2 Within Health Records there is an up to date set of local operating procedures for the Williamstown Hub which cover all key items regarding medical record management such as: how to request records from the hub; processing case notes requests; tracking and filing case note types; and dealing with email requests.

2.3 Health Records within Princess of Wales operate a different record management process as the process is manual, dealing with physical records. Their procedures are current and include Tracking Holding Room Procedure; POW - Maesteg request procedures; POW - Late Bookings procedures and POW - Miscellaneous Team procedures.

2.4 We note that in addition to the different procedures, the responsibilities of the Health Records departments in Princess of Wales and in Royal Glamorgan differ, due to the historical basis of the respective departments. This may make it difficult to standardise processes across the Health Board and meet the differing expectations of staff. **(Matter Arising 1)**

Conclusion:

2.5 There are guidelines in place for medical records management, with an overarching policy in place which is supported by local procedure documentation at both key sites. Princess of Wales have different responsibilities and operate different processes due to the historical positioning of Bridgend. We have provided reasonable assurance over this objective.

Audit objective 2: Medical records storage facilities ensure that records are protected from unauthorised access, destruction or theft, and from accidental damage from environmental hazards.

2.6 Health records are stored at a number of places across the Health Board. The main storage areas are the Williamstown Hub which serves the old Cwm Taf area, and Princess of Wales which serves the Bridgend area.

2.7 Records are also stored with receipt and distribution areas in each hospital which handle temporary storage and transit for records moving between sites.

2.8 We also note that there are some services that handle and store their own records, in particular Mental Health and Therapies, and these areas are outside Health Records' control.

2.9 All storage areas are secure from the general public. Access to areas is controlled either via (TDSi) a swipe card, as is the case at Princess of Wales, or digital door lock and TDSi as at Williamstown. At Williamstown visitors are required to sign in and out of the building and CCTV monitoring is in place, which is monitored 24/7 by porters at the Royal Glamorgan hospital.

2.10 Storage of records within the Williamstown Hub is secure. Records are generally stored on 'off floor' racking and without over compression of files within rack spaces. However, space the Hub is running out. This is partly due to a block on the destruction of records due to the requirement to retain records for the infected blood inquiry.

2.11 Other departments use Williamstown to store archived records such as Mental Health, Therapies, Maternity, and Sexual Health. These additional records are not managed and the allocated area is full, with boxes of records stacked on top of boxes on floor areas which are now collapsing and may be causing damage to records. The current storage of these records may represent both a manual handling to staff risk and a fire risk within the site.

2.12 Furthermore, the roof at the Williamstown Hub leaks, particularly in poor weather conditions and buckets are used to capture water leaking from the roof. No records have been damaged to date, but the risk of damage remains and is not captured on the departmental risk register. **(Matter Arising 2)**

2.13 As noted above, the security of records within Princess of Wales is maintained, as the Health Records area within Princess of Wales have their own internal storage areas within the hospital. However, these areas have run out of appropriate storage for records, which are now stored on the floor, under desks between racks, and on top of the racks, although additional storage is provided in off-site locations on a Bridgend Industrial estate.

2.14 The movable rack system within the Princess of Wales department has a number of sections which cannot be used due to mechanical breakdown, which prevents staff retrieving those patient records required for clinics. We understand that there have been attempts to resolve the issue with the rack, but it remains broken. In addition, other departments have access to the health record section which increases the opportunity for records to become misplaced and not tracked accordingly. **(Matter Arising 3)**

Conclusion:

2.15 Medical records are stored in sites with a good level of physical security and in general the storage protects the records from loss or damage. There are leaks within the roof at Williamstown however, and both sites are running out of space to store records, mainly due to the moratorium on record destruction due to the infected blood enquiry. This is particularly pronounced with Princess of Wales with records stored in inappropriate areas within the departments. The old and damaged racking within Princess of Wales prevents access to records. We note that work is ongoing to source additional storage facilities, but at the time of our fieldwork this has not been completed. We have provided reasonable assurance over this objective.

Audit objective 3: Physical records are transported appropriately, tracked and records are available when and where needed by operational staff.

2.16 Storage within the Health Records department uses a consistent method that ensures records can be easily retrieved.

2.17 Retrieval of records from store is undertaken by Health Records staff. Clinic lists are provided to Williamstown staff, and records are recovered before the clinic date, then tracked and dispatched via the contractor 'Just Wales', within secure cages.

2.18 As records are stored on site at Princess of Wales, clinics make request for records direct to the team based at Princess of Wales. The team collate the required records for each clinic, track them and pass them to clinical staff.

2.19 The target timescale for retrieval and dispatch of records is 10 days in advance, however at present, due to workload, this time is currently at six days. This means there is less time to undertake additional searches should records not be immediately located.

2.20 There is a facility to make phone requests for records which are required urgently, and these requests are expedited by health records staff.

2.21 Records are transported in secure cages by the contractor (Just Wales). There are three record transport trips a day, each carrying up to six cages. The Health Board also has an arrangement with the contractor to retrieve records from the remote storage units in Bridgend via secure transportation.

2.22 Records are delivered to receipt and distribution areas (r&d) within each hospital which are staffed by health records staff. The r&d teams sort and transfer the records to individual clinics or file them in clinic 'pigeon holes' for collection by non health record staff.

2.23 The return of files to storage replicate the above process in reverse. Health records staff retrieve records from clinic areas and move to the r&d area and from there to the main storage facility.

2.24 File movements are tracked on WPAS. Records are tracked out from storage via WPAS, and then tracked back in upon return to Williamstown Hub. The file is tracked to a user and it is the user's responsibility to track any further movement of the record once the record has left Medical Records. Our testing of a sample of records did not identify any matters of concern, with the tracking process being accurate.

2.25 In the event of a record not being located there is a defined procedure for health records staff to follow in order to try and locate it. If a missing record is required for clinic, a duplicate patient file is produced to enable the patient to be seen and collect forms from that episode. These can then be added to the original file when located.

2.26 There is a log of missing records held at both Williamstown and PoW, and if a record remains missing for one month, then a Datix incident should be raised. However, we note that currently the procedure for raising Datix incidents is not always followed and there is no monitoring or reporting on missing records.

2.27 Furthermore, there is no structured reporting on the operation of Health Records which demonstrates the value of the department such as, total of records provided, percentage of missing or unavailable records etc. This would also enable the identification of areas where misplaced records occur at a higher rate. **(Matter Arising 4)**

Conclusion:

2.28 Records are securely transported between sites and there is an effective process for tracking the location of records across the Health Board. There is a procedure in place for actioning when a record is not immediately located, however we note that this is not always completely followed. In addition there is no formal monitoring and reporting on the Health Records function. Accordingly, we have provided reasonable assurance over this objective.

Audit objective 4: An appropriate process is in place to move away from physical records and to ensure that paper records are archived and destroyed appropriately.

2.29 As noted above, since 2018 there has been no destruction of records (unless the record has been digitised and verified) due to the infected blood inquiry. This is impacting on available storage in Williamstown and Princess of Wales. One solution to this is the digitisation of records. While Williamstown records are being digitised, due to the different WPAS systems in place, there is no digitisation programme for records held at PoW.

2.30 The Health Board started a digitisation project using a contractor. The organisation planned to scan 314k records within two years, which represented the bulk of anticipated live treatment records. Health Board staff were then to scan additional appointment information for those records, known as 'forward scanning'.

2.31 The digitisation project was interrupted by Covid in March 2020 which caused a significant delay, with scanning paused for nine months. It resumed in January 2021 but, due to Covid restrictions and sickness, only a small team were available to scan documents which resulted in further delays. We note that there is a 'recovery' plan in place up to get back on track by July 2023.

2.32 These delays have meant that efficiency savings have not yet been achieved as anticipated.

2.33 The digitisation project has also been effected by changes in management, such as the loss of executive sponsorship and oversight. The original project included a project board and associated monitoring which was set up by the previous executive. However, due to staff leaving, the senior risk office role for the project was vacant and work has moved into 'business as usual', with reporting to the service management board. This has meant that there has been limited routes for reporting progress and raising issues to senior management has impacted on the resolution of issues. **(Matter Arising 5)**

2.34 The process for scanning legacy files is undertaken by the contractor (Gateway). The original plan was to scan on site, but in order to catch up two off site locations are used by the contractor.

2.35 Records are selected for scanning by Health Board staff. These records are for active patients, that do not have an appointment within six weeks. A pick list is created and 60 boxes of records a day are sent for scanning. We note that there is a process for rapidly scanning records that have gone offsite but are needed urgently for clinical reasons.

2.36 Records are passed to the contractor for scanning, and the documents returned to Williamstown for quality assessing and tracking back in. As part of this process the contractor provides a spreadsheet to show the documents returned from scanning off site. We note that feedback from the quality assessments is that the scans are 98% good.

2.37 We understand that there have been issues with the scanning software (middleware) which has resulted in the scanned version of the records being lost. However the underlying reasons for this have not been established and there has been no record or reporting of the impact of this due to the absence of a project structure. **(Matter Arising 6)**

2.38 Once the legacy record is scanned, Health Board staff operate a process called forward scanning. This is the process where new appointment information is scanned into the digitised record. This allows the record to be viewed digitally in clinic.

2.39 The success, and speed of this process is impacted by poor quality of the paper records being returned. Clinics are provided with folders containing 'smart' forms as header sheets, and with a file structure in place. However, when files are returned to Health Records a large number of these files need to be reassembled to correct mistakes in filing. Staff also write on the smart forms and there have been occasions where multiple patient records have been included within a single file, or incorrect patient's information within a file (including, we understand, in one instance a 'do not resuscitate' warning). Our testing of a sample of returned files found that 70% needed to be corrected by health records staff. This is impacting on the success of the scanning process and represents a patient safety risk. We note that Health Records had not been formally monitoring and reporting these issues, although the issue has been recently raised and funding provided for staff to work with clinics to ensure they understand the filing requirements. **(Matter Arising 7)**

2.40 A further process for the removal of paper is the development of e-forms for use in clinical areas which would remove the need for paper by directly creating the electronic patient record.

2.41 We understand that there are a large number of different forms used throughout the Health Board to record information, (approximately 500). Reducing this number requires clinical input to rationalise and understand the forms that are required, but there has been a lack of engagement in this process. We also note that there is a skill shortage of IT staff who can develop e-forms, and so this aspect is not being moved forward. Work has been undertaken by the project lead to identify forms that are used the most, in order to maximise the benefits from the limited resource. **(Matter Arising 8)**

2.42 Once scanned images have passed the quality checks the record is quarantined for seven weeks and then marked for secure disposal. All disposal is carried out by a registered company which provides a certificate of destruction. A separate record is kept at Williamstown of records destroyed.

Conclusion:

2.43 There is contract in place for the digitisation of records held in Williamstown. The progress of this has been impacted by a number of factors, including Covid and the loss of executive sponsorship. There is a good process for scanning records, but this is impacted by the poor quality of paper files returned to Health Records.

2.44 A second phase for the removal of paper is the development of e-forms, but this has not progressed due to both a lack of available resource within digital and clinical engagement. Once records are scanned the quality is confirmed and there is a process for secure disposal of the physical record. We have provided limited assurance over this objective.

Appendix A: Management Action Plan

Matter Arising 1: Departmental responsibilities (Design)			**Impact**
The responsibilities set out in the local policies of the Health Records departments in Princess of Wales and in Royal Glamorgan differ due to the historical basis of the respective departments. This will make it difficult to fully standardise processes across the Health Board and lead to differing expectations from staff.			Potential risk of: • Inefficient processes lead to increased costs
Recommendations			**Priority**
1.1	The responsibilities of the Health Records departments across the Health Board should be standardised. Linked to this the procedures operating within each site should be standardised as much as possible, given the limitations imposed by digitisation.		**Medium**
Agreed Management Action		**Target Date**	**Responsible Officer**
1.1	Accept There are challenges to standardising the operational procedures of the Health Records teams due to the variances between the digital systems used within the Princess of Wales and the rest of the Health Board. It should also be noted that some of the Health Records personnel within the Health Board are not under the direct responsibility and accountability of the Director of Digital. The Health Board has devised a programme of work to standardise the PAS in use across the Health Board. This programme is planned until the Autumn of 2024. Process will be aligned as practically possible prior to the completion of the programme.	Qtr 2 2024/2025	Director of Digital

Matter Arising 2: Williamstown Storage (Operation)			**Impact**
There are issues with the Williamstown storage facility: • Space is running out, partly due to the requirement to retain records for the infected blood inquiry. • Other departments are using Williamstown to store records, however these are not being stored appropriately and managed. The allocated area is full, with boxes of records stacked on top of boxes on floor areas which are now collapsing and may be causing damage to records. • The roof is subject to leaks, which risks damaging records.			Potential risk of: • Loss or damage to records
Recommendations			**Priority**
2.1	Work should start to identify records which could immediately be destroyed when the moratorium relating to the infected blood inquiry ends. These records should be moved to an alternate location.		**Medium**
2.2	Departments that use the facility should be requested to ensure that their records are stored safely and appropriately, and that they have an appropriate archiving and disposal process in place.		**Medium**
2.3	The risk associated with the leaking roof should be included on the departmental risk register, and appropriate actions defined.		**Medium**
Agreed Management Action		**Target Date**	**Responsible Officer**
2.1	Partial Agreement Identification of records to be destroyed can commence and complete by end of Qtr 3 2022/2023. The Health Board is currently reviewing its estate, with a view to reducing some of its existing facilities. An alternative location would need to be procured. This	Qtr 3 2022/2023	Director of Digital

	cannot be resolved quickly due to continued financial pressures for the Health Board. An alternative location cannot be procured within the existing financial envelope of the Health Board. ***Audit Note*** *– We recognise the limitations to space and agree with the approach to identify the relevant records.*		
2.2	Agreed Review of all records stored within the Hub	Qtr 3 2022/2023	Director of Digital
2.3	Agreed Risk Register to be updated.	Qtr 3 2022/2023	Director of Digital

Matter Arising 3: Princess of Wales storage (Operation)			**Impact**
Storage space within PoW has run out. Records are now stored on the floor, under desks, between racks, and on top of the racks. In addition, the movable rack system within the department has a number of sections which cannot be used due to mechanical breakdown which prevents staff retrieving those patient records required for clinics. There have been attempts to resolve the issue with the rack, but it continues to break and become unusable. Other departments have access to the health record section which increases the opportunity for records to become misplaced and not tracked accordingly.			Potential risk of: • Loss or damage to records • Injury to staff
Recommendations			**Priority**
3.1	Appropriate storage space and facilities for records should be provided.		**Medium**
3.2	Access to the records storage area should be restricted to health records staff.		**Medium**
Agreed Management Action		**Target Date**	**Responsible Officer**
3.1	Agreed Additional space has been identified on the Glanrhyd site.	Qtr 2 2022/2023	Director of Digital
3.2	Disagree with recommendation. Capacity within the existing Health Records team at the Princess of Wales is limited. As such services need to be able to retrieve records to ensure timely delivery of services. These staff are familiar with the site and have been accessing records as part of routine business processes. ***Audit Note*** *– Restricting records access to just health records staff is good practice. However, we acknowledge that there are limitations to staffing and operational practicalities make this difficult at the current time. We note that the agreed action in matters arising 1.1 and 4.2 may help address this matter.*	N/A	

Matter Arising 4: Reporting (Operation)			**Impact**
There is no monitoring or reporting on missing records and the procedural requirement for raising Datix incidents after 30 days is not always followed. In addition, there is no structured reporting on the operation of Health Records which demonstrates the value of the department such as total of records provided, % of records provided at point of need etc.			Potential risk of: • Loss or damage to records
Recommendations			**Priority**
4.1	Datix incidents should be raised for records missing over 30 days as per the procedure guidance.		**High**
4.2	A formal reporting process for health records should be established which includes key performance indicators such as, but not limited to: - Number of records provided - Percentage of records available at point of need - Number untracked / missing records.		**High**
Agreed Management Action		**Target Date**	**Responsible Officer**
4.1	Agreed Datix to be updated.	Qtr 3 2022/2023	Director of Digital
4.2	Agreed Performance report to be created as part of routine service provision.	Qtr 3 2022/2023	Director of Digital

Matter Arising 5: Digitisation project (Operation)			**Impact**
Management of the digitisation project has been impacted by a loss of executive sponsorship and oversight. The original project included a project board and associated monitoring, which was set up by the previous executive. Due to staff leaving the senior risk office role for the project was missing and so the work moved into business as usual, with reporting to the service management board. This has meant that there has been limited routes for reporting progress and issues to senior management and impacted on the resolution of issues.			Potential risk of: • Loss or damage to records • Increase costs
Recommendations			**Priority**
5.1	A project structure for digitisation should be re-established, and led by the executive sponsor. The structure should include monitoring and reporting of progress and issues, with resolution sought for any issues and communication to clinical services.		**High**
Agreed Management Action		**Target Date**	**Responsible Officer**
5.1	Agreed Programme board to be re-established.	Qtr 3 2022/2023	Director of Digital

Matter Arising 6: Software failures (Operation)			**Impact**
There have been issues with the scanning (middleware) software which has resulted in the scanned copy of the records being lost, leading to the need to rescan the files. However, the underlying reasons for this have not been established and there has been no record or reporting of the impact of this due to the absence of a project structure.			Potential risk of: • Loss or damage to records • Increase costs
Recommendations			**Priority**
6.1	The underlying reason for failures should be established and corrected to prevent future issues. The progress of scanning and any issues should be reported within the structure referred to in MA4		**Medium**
Agreed Management Action		**Target Date**	**Responsible Officer**
6.1	Agreed Underlying Issue to be identified and reported.	Qtr 3 2022/2023	Director of Digital

Matter Arising 7: File quality (Operation)			**Impact**
The success, and speed of the scanning process has been affected by poor quality paper records being returned. Clinics are provided with folders containing 'smart' forms as header sheets, and with a file structure in place. However, often when files are returned to Health Records a large number need to be reassembled to correct mistakes in filing, which results in delays to the process. We understand that staff write on the smart forms, and there have been occasions where multiple patient records have been included within a single file, or incorrect patients information within a file (including 'do not resuscitate' warning). Our testing of a sample of returned files found that 70% required health records staff to correct.			Potential risk of: • Loss or damage to records • Increase costs • Patient safety is impacted
Recommendations			**Priority**
7.1	The retuned files should be monitored and a record kept of errors in files, and the source of the files. These errors should be reported to the clinical service areas, noting that there is a professional requirement on staff to ensure appropriate record keeping and requesting that all staff ensure that file quality is maintained.		**High**
Agreed Management Action		**Target Date**	**Responsible Officer**
7.1	Agreed Standard Operating Procedure to be developed for reporting quality issues with the paper record.	Qtr 3 2022/2023	Director of Digital

Matter Arising 8: e-forms (Operation)			**Impact**
There has been limited progress in the use of e-forms to remove paper from the system. There are approximately 500 different forms in use. These require clinical input to rationalise and define those forms that are actually required and we note that there is a lack of engagement in this. We also note that there is a skill shortage of IT staff who can develop e-forms.			Potential risk of: • Loss or damage to records • Inaccessibility of records impacts on patient care • Increased costs
Recommendations			**Priority**
8.1	As part of the project structure referred to above, a workstream for developing e-forms should be established. This should include clinical input. the Health Board should seek to increase the amount of e-form development skills in place by training existing staff and recruiting to the project.		**High**
Agreed Management Action		**Target Date**	**Responsible Officer**
8.1	Agreed Workstream to be created to oversee the development of a work plan for e-Forms (including Clinical Input).	Qtr 3 2022/2023	Director of Digital

Appendix B: Assurance opinion and action plan risk rating

Audit Assurance Ratings

We define the following levels of assurance that governance, risk management and internal control within the area under review are suitable designed and applied effectively:

	**Substantial assurance**	Few matters require attention and are compliance or advisory in nature. **Low impact** on residual risk exposure.
	**Reasonable assurance**	Some matters require management attention in control design or compliance. **Low to moderate impact** on residual risk exposure until resolved.
	**Limited assurance**	More significant matters require management attention. **Moderate impact** on residual risk exposure until resolved.
	**No assurance**	Action is required to address the whole control framework in this area. **High impact** on residual risk exposure until resolved.
	**Assurance not applicable**	Given to reviews and support provided to management which form part of the internal audit plan, to which the assurance definitions are not appropriate. These reviews are still relevant to the evidence base upon which the overall opinion is formed.

Prioritisation of Recommendations

We categorise our recommendations according to their level of priority as follows:

Priority level	Explanation	Management action
High	Poor system design OR widespread non-compliance. Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in system design OR limited non-compliance. Some risk to achievement of a system objective.	Within one month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. Generally, issues of good practice for management consideration.	Within three months*

* Unless a more appropriate timescale is identified/agreed at the assignment.

NHS Wales Shared Services Partnership
4-5 Charnwood Court
Heol Billingsley
Parc Nantgarw
Cardiff
CF15 7QZ

Website: Audit & Assurance Services - NHS Wales Shared Services Partnership

AGENDA ITEM
4.4

DIGITAL & DATA COMMITTEE

Medical Records Assurance Report

Date of meeting	19 December 2022
FOI Status	Open/Public
If closed please indicate reason	Not Applicable - Public Report
Prepared by	Stuart Morris, Director of Digital
Presented by	Stuart Morris, Director of Digital
Approving Executive Sponsor	Stuart Morris, Director of Digital
Report purpose	FOR NOTING

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

Committee/Group/Individuals	Date	Outcome
N/A		

ACRONYMS

CTMUHB – Cwm Taf Morgannwg University Health Board
GBS - Gateway Bureau Services - commercial scanning partner

1. SITUATION/BACKGROUND

1.1 The purpose of this report is to update the Committee on the progress of the Medical Records progress, with particular focus on the Digital Patient Notes Programmes.

2. SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

2.1 As previously reported to the Committee, there is a backlog of scanning patient records into the Digital Patient Notes - Cito application, for reference by clinicians providing care. As a result, there are clinical safety and financial implications due to the lack of progress in the commercial scanning programme of legacy records (pre-existing paper). There are also clinical safety concerns resulting from a backlog of in-house scanning of day-forward records (additional paper created for patients with digital legacy records).

2.2 Legacy scanning is provided by Gateway Bureau Services (GBS) on behalf of Civica, the lead supplier for a 5-year contract to supply the Cito software application from April 2019 to March 2024, and within this period a 2-year programme to scan @314,000 records into the Cito application, by January 2023.

2.3 Day forward scanning is done by the CTM Scanning Bureau at Williamstown. The agreed target is for the Medical Records team at the Hub to scan material within 48 working hours of the folders' receipt.

2.4 **Legacy record contract progress**. GBS have been unable to progress with scanning at the rate agreed in January 2021, when a revised go-live plan was agreed following a pause due to Covid-19. This is attributed to the fallout of the Covid-19 pandemic, including social distancing affecting staff retention and staff accommodation to perform at the required level of throughput. The result is that they have currently scanned 31% of the expected records, equating to 55.7% of the contracted images at the end of July 2022. The plan was to have scanned 64% of the material by this point. Progress is being closely monitored.

2.5 **Day forward scanning backlog.** Due to a combination of factors, including staff-resourcing, extra clinical activity and poor record keeping, the in-house team have struggled to achieve the 48-hour target to prepare and scan day-forward material for digital patients into Cito. Slippage against this target began in late 2021 and has consistently deteriorated.

2.6 **Day forward contingency measures**. There is a process to fast-track specific patients if it's known they are expected back soon but this, due to high volumes of activity, is subject to some delays. There is also a process to expedite scanning if a patient returns sooner than expected. All day-

forward material is tracked in the same way as paper notes, so the records can be located, subject to user compliance with tracking procedures.

2.7 As a result of the above – an options appraisal will be presented to the Executive Leadership Group on Monday 12 December 2022.

2.8 During November 2022, a specialist team conducted a peer review of the Medical Records function. A draft report will be provided in December and it is anticipated that the findings of this report will be presented to the next Digital & Data Committee.

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

3.1 Continued delay in scanning patient records and potential impact on delivery of care

3.2 Potential for project to not deliver its original planned savings plan

4. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	Yes (Please see detail below)
	Delay in patient records being provided
Related Health and Care standard(s)	Governance, Leadership and Accountability
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below)
	Equality Impact Assessment to be completed as part of each project
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	Yes (Include further detail below)
	Extension of contract / Additional Resources
Link to Strategic Goals	Improving Care

5. RECOMMENDATION

5.1 The Committee is asked to **NOTE** the report

AGENDA ITEM
4.5

DIGITAL & DATA COMMITTEE

DATA PROTECTION IMPROVEMENT PLAN UPDATE

Date of meeting	19 December 2022

FOI Status	Open/Public

If closed please indicate reason	Not Applicable - Public Report

Prepared by	Andrew Nelson, Chief Information Officer
Presented by	Andrew Nelson, Chief Information Officer
Approving Executive Sponsor	Stuart Morris, Director of Digital

Report purpose	FOR NOTING

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

Committee/Group/Individuals	Date	Outcome
N/A		

ACRONYMS

IG – Information Governance

UHB – University Health Board

ICO – Information Commissioner's Office

DPIA'S – Data Protection Impact Assessment

NSCS – National Cyber Security Council

1. SITUATION/BACKGROUND

1.1 The purpose of this report is to update the Committee on UHB's progress in enacting the recommendations made by Officers of the Information Commissioner following their assurance visit in January 2022.

2. SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

2.1 Further to their assessment in January 2022, Officers of the Information Commissioner made 35 recommendations regarding actions the UHB should to be taking to reduce the UHB's risk of non-compliance with data protection legislation. A visit to review progress was made by the officers of the ICO in August 2022 at which they identified that they required a higher threshold of evidence to be available than the UHB had offered.

2.2 Since the August 2022 visit the UHB has continued to take a risk based approach to all areas of its operations. The focus around data protection has largely been on cyber security, acting on advice of the NCSC and in reacting to the Russian cyber attack on the GP Out of hours software provider and in ensuring that DPIAs , data sharing agreements and cyber security impact assessments have been undertaken for all new activities or changes in activities. A more detailed description of the cyber actions is provided in the confidential paper the UHB's cyber improvement plan, whilst an update on the progress made in delivering the ICO's recommendations is provided in the Excel document attached. Some progress has also been made on strengthening the privacy notice in line with the ICO's requirements and on making more staff aware of data protection and cyber security matters.

2.3 The staffing position in both IG and cyber security continues to be one of concern. As at the 5th December 2022, the UHB has an Interim Head of IG, a Freedom of Information Officer and an IG administrator in post, and has offered and received verbal acceptance for an individual to take on the IG Officer position, who is scheduled to take up post in January 2023.

2.4 A further follow up meeting with the officers of the ICO is planned for the 8th December 2022.

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

3.1 Noting the focus of the ICOs report, the Committee is asked to endorse the present risk based approach to data protection, which has identified the requirement to prioritise improving the UHB's cyber posture as the most immediate priority.

4. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	Yes (Please see detail below)
	Ransomware attack has demonstrated significant impact on patient care and staff welfare.
Related Health and Care standard(s)	Governance, Leadership and Accountability
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below)
	Equality Impact Assessment to be completed as part of each project
Legal implications / impact	Yes (Include further detail below)
	UHB non-compliance with GDPR & NIS-D
Resource (Capital/Revenue £/Workforce) implications / ıct	Yes (Include further detail below)
	Potential fine for non-compliance with GDPR & NIS-D
Link to Strategic Goals	Improving Care

5. RECOMMENDATION

5.1 The Committee is asked to **NOTE** the report and the present risk-based approach to data protection.

AGENDA ITEM
5.1

DIGITAL & DATA COMMITTEE
DIGITAL PROGRAMME ASSURANCE REPORT

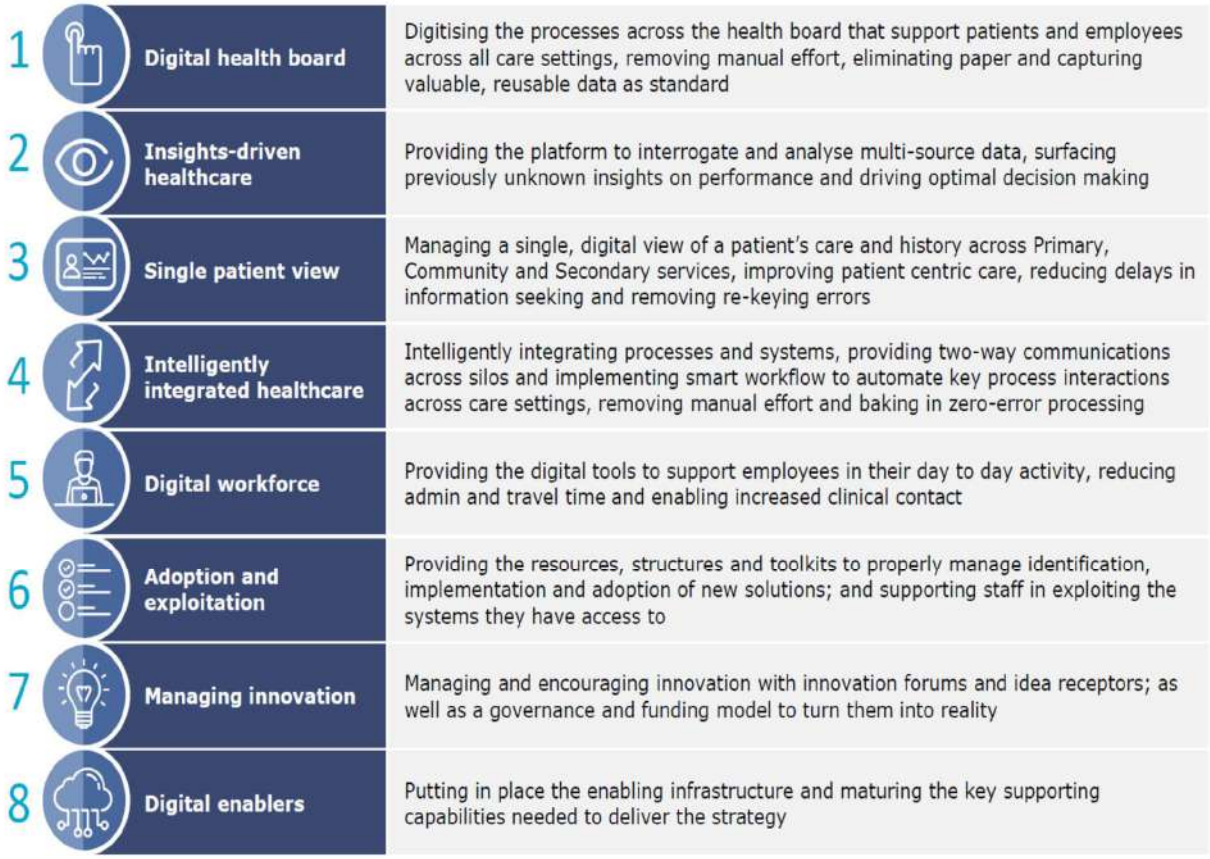
Date of meeting	19th December 2022
FOI Status	Open/Public
If closed please indicate reason	Not Applicable - Public Report
Prepared by	Andrew Nelson, Chief Information Officer
Presented by	Andrew Nelson, Chief Information Officer
Approving Executive Sponsor	Stuart Morris, Director of Digital
Report purpose	FOR NOTING

Engagement (internal/external) undertaken to date (including receipt/consideration at Committee/group)		
Committee/Group/Individuals	**Date**	**Outcome**
N/A	N/A	

ACRONYMS	
CTM	Cwm Taf Morgannwg
DHCW	Digital Health and Care Wales
ILG	Integrated Locality Group
PCH	Prince Charles Hospital
POWH	Princess of Wales Hospital
RGH	Royal Glamorgan Hospital

1. SITUATION/BACKGROUND

1.1 This is a summary report, providing a brief update on the progress, risks and challenges in delivering the prioritised digital objectives as identified in the corporate Integrated Medium Term Plan across our 8 strategic solutions (listed below).



2. ASSESSMENT

2.1 In summary our 'subjective' assessment is that of the 39 programmes which have thus far been agreed should be taken forward this year:

- 21/39 continue to carry a medium/high to high level of risk of non-delivery of the targeted objectives in 2022/23.

- 16/39 have not progressed in line with the programmed timescales.

Of schemes approved for delivery in 2022/23	September Risk to delivery	%	September Programme Status	%	November Risk to delivery	%	November Programme Status	%
High Risk	13	33%	11	28%	14	36%	13	33%
Medium High Risk	8	21%	4	10%	6	15%	3	8%
Medium Risk	9	23%	10	26%	7	18%	10	26%
Low Risk /Completed	9	23%	14	36%	12	31%	13	33%
Not started	0	0%	0	0%	0	0%	0	0%
Total	39		39		39		39	

Of all major informatics schemes	September Risk to delivery	%	September Programme Status	%	November Risk to delivery	%	November Programme Status	%
High Risk	16	32%	15	30%	17	34%	17	34%
Medium High Risk	10	20%	4	8%	9	18%	4	8%
Medium Risk	10	20%	11	22%	8	16%	10	20%
Low Risk /Completed	9	18%	15	30%	12	24%	15	30%
Not started	5	10%	5	10%	4	8%	4	8%
Total	50		50		50		50	

2.2 The underlying assessment for each deliverable in the Informatics programme with short notes is provided in the accompanying Excel spreadsheet.

2.3 The Informatics team self-assessment is that there has been good progress over the quarter, with a number of challenging programmes being delivered on time and to budget, and with minimal detriment to the major projects such as the Bridgend aggregation work and the Prince Charles Hospital Ground and First Floor Project.

2.4 Highlights include:

- Implementation of the Velindre PAS, which is supporting Multi Disciplinary Teams (MDT) working on a local and network basis, and has addressed a number of the bugs in the PAS and WCP applications
- The Digital Service for Patients and Public (DSPP) project has gone into private beta – this is a project that enables the population to securely authenticate and over time access their record and take greater responsibility for their care
- Parc Prison partnership agreement has been signed, although a recent diagnostic of the infrastructure and devices used on that estate indicates they are likely to be unable to cope with the NHS applications
- The order to replace the end of life paediatric cardiology application has been placed
- A clinical informatician has commenced in post, with their initial focus being on undertaking a proof of concept to develop an application to support the integrated hub for the 6 goals programme using MS power applications.
- Paper proposing the requirements to commission Welsh Community Care Information System (WCCIS) for the digitisation of the workflow and clinical notes in mental health has been agreed by the Executive Team.

- The Bridgend programme is proceeding to plan, with the data migration continuing, and the recruitment of the team progressing well. The key risk to delivery remains the availability of sufficient capital.
- The e-Whiteboard, Onelist and electronic transfer of care applications, commissioned to enable the 6 goals unscheduled care improvement programme have been delivered to the agreed specification on time and from within existing resource.

- The DCHW coding audit indicated that the team had achieved improvements in quality as well as completion in all areas. The figures presented below indicated that the UHB surpassed the minimum coding standards of 90% for primary diagnosis and primary procedures and 80% for secondary diagnoses and secondary procedures in all localities:

Coding Quality	PCH & RGH		POW	
Percentage Correct	2022	2021	2022	2021
Primary Diagnosis	95.35%	93.27%	99.10%	98.15%
Secondary Diagnosis	94.75%	92.04%	96.63%	94.10%
Primary Procedure	97.25%	92.61%	97.30%	93.22%
Secondary Procedure	94.68%	91.50%	94.74%	90.34%

- Collaboration commenced with SBUHB & C&V to deploy Natural Language Processing (NLP) technologies across the 3 HBs to produce Snomed-ct coded data item information for ED, Outpatient and Inpatient activity.
- HAPI FHIR server established as basis for local Clinical Data Repository (CDR) and has been populated with demographic, doctor doctor, and local reference data.
- A toolkit to take data out of our warehouse and put it into Fast Healthcare Interoperability Resources (FHIR) format continues to be developed and is operational for demographic data.

2.5 Sufficient resourcing, in particular workforce capacity of informatics professionals to deliver the requisite actions, remains the critical constraint and risk to the overall programme and professionally there are increasing concerns that the numbers of incidents is increasing as risks manifest themselves.

3. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	Yes (Please see detail below)
	Alerts and notifications not being acknowledged Discrepancies between the paper and electronic maternity record Backlog in coding
Related Health and Care standard(s)	Governance, Leadership and Accountability
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below)
	Equality Impact Assessment to be completed as part of each project
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	There is no direct impact on resources as a result of the activity outlined in this report.
Link to Strategic Goals	Improving Care

4. RECOMMENDATION

4.1 Members of the Committee are asked to **NOTE** the progress made in delivering the Digital & Data programme

AGENDA ITEM
6.1

DIGITAL & DATA COMMITTEE

Patient Centred Contact

Date of meeting	19 December 2022
FOI Status	Open/Public
If closed please indicate reason	Not Applicable - Public Report
Prepared by	Stuart Morris, Director of Digital
Presented by	Stuart Morris, Director of Digital
Approving Executive Sponsor	Stuart Morris, Director of Digital
Report purpose	FOR NOTING

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

Committee/Group/Individuals	Date	Outcome
N/A		

ACRONYMS
UHB – University Health Board

1. SITUATION/BACKGROUND

1.1 The purpose of this report is to update the Committee on the launch of a new programme of work to review all Patient Contact Processes across the Health Board. This programme has been launched under the Unified Change Programme Governance Structure (reference Appendix 1).

2. SPECIFIC MATTERS FOR CONSIDERATION BY THIS MEETING (ASSESSMENT)

2.1 The outline scope of the programme is:

- Enhance existing Patient contact processes & services
- Review & where appropriate redesign Patient contact touch points
- Ensure alignment with national plans & strategies (for example the Digital Services for Patients & the Public (DSPP)
- Creating & Protecting Value
- Redesigning & creating new roles to support future ways of working

2.2 The drivers for this programme are:

- Improving Data Quality
- Process Efficiency & Service Sustainability
- Environment Sustainability

2.3 Things to be considered (but not limited to):

- Data Flow Requirements
- Approaches for Remote Patient Monitoring
- Developing the Virtual Ward
- Increasing Physical Hospital Capacity
- Proactive admission avoidance
- Safer early discharge
- Helping our patients to "wait well"
- Example Interface(s)
  - NHS Wales App
  - Digital Health & Care Wales Systems
- Development of Strategic Partners

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

3.1 Nothing to be escalated from this report

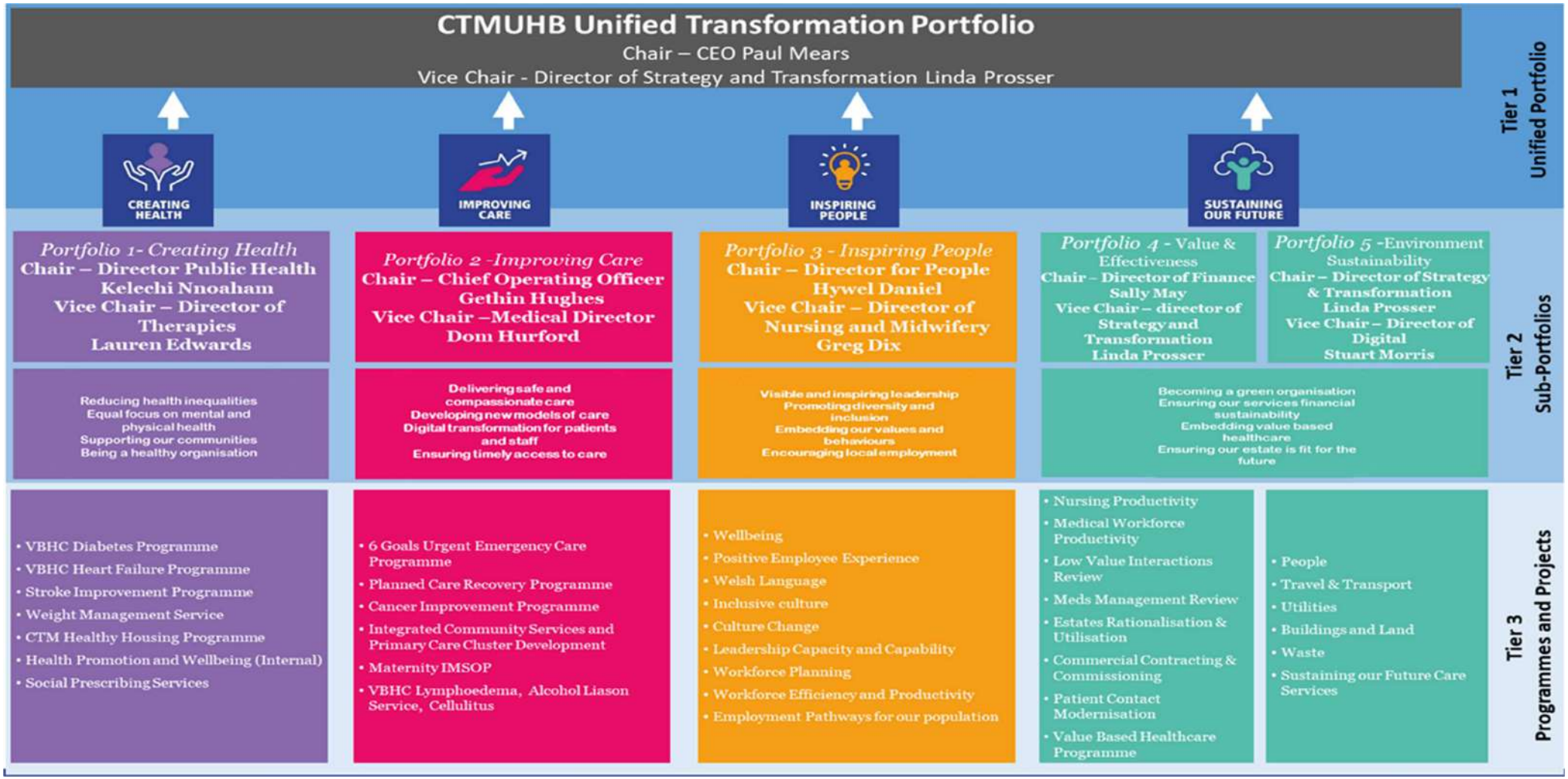
4. IMPACT ASSESSMENT

Quality/Safety/Patient Experience implications	There are no specific quality and safety implications related to the activity outined in this report.
Related Health and Care standard(s)	Governance, Leadership and Accountability
Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.	No (Include further detail below)
	Equality Impact Assessment to be completed as part of each project
Legal implications / impact	There are no specific legal implications related to the activity outlined in this report.
Resource (Capital/Revenue £/Workforce) implications / Impact	Yes (Include further detail below)
	Resources to deliver
Link to Strategic Goals	Improving Care

5. RECOMMENDATION

5.1 The Committee is asked to **NOTE** the report

Appendix 1


CTMUHB Unified Transformation Portfolio
Chair – CEO Paul Mears
Vice Chair - Director of Strategy and Transformation Linda Prosser
Tier 1 Unified Portfolio
CREATING HEALTH
IMPROVING CARE
INSPIRING PEOPLE
SUSTAINING OUR FUTURE
Portfolio 1- Creating Health
Chair – Director Public Health
Kelechi Nnoaham
Vice Chair – Director of Therapies
Lauren Edwards
Portfolio 2 -Improving Care
Chair – Chief Operating Officer
Gethin Hughes
Vice Chair –Medical Director
Dom Hurford
Portfolio 3 - Inspiring People
Chair – Director for People
Hywel Daniel
Vice Chair – Director of Nursing and Midwifery
Greg Dix
Portfolio 4 - Value & Effectiveness
Chair – Director of Finance
Sally May
Vice Chair – director of Strategy and Transformation
Linda Prosser
Portfolio 5 -Environment Sustainability
Chair – Director of Strategy & Transformation
Linda Prosser
Vice Chair – Director of Digital
Stuart Morris
Tier 2 Sub-Portfolios
Reducing health inequalities
Equal focus on mental and physical health
Supporting our communities
Being a healthy organisation
Delivering safe and compassionate care
Developing new models of care
Digital transformation for patients and staff
Ensuring timely access to care
Visible and inspiring leadership
Promoting diversity and inclusion
Embedding our values and behaviours
Encouraging local employment
Becoming a green organisation
Ensuring our services financial sustainability
Embedding value based healthcare
Ensuring our estate is fit for the future
• VBHC Diabetes Programme
• VBHC Heart Failure Programme
• Stroke Improvement Programme
• Weight Management Service
• CTM Healthy Housing Programme
• Health Promotion and Wellbeing (Internal)
• Social Prescribing Services
• 6 Goals Urgent Emergency Care Programme
• Planned Care Recovery Programme
• Cancer Improvement Programme
• Integrated Community Services and Primary Care Cluster Development
• Maternity IMSOP
• VBHC Lymphoedema, Alcohol Liason Service, Cellulitus
• Wellbeing
• Positive Employee Experience
• Welsh Language
• Inclusive culture
• Culture Change
• Leadership Capacity and Capability
• Workforce Planning
• Workforce Efficiency and Productivity
• Employment Pathways for our population
• Nursing Productivity
• Medical Workforce Productivity
• Low Value Interactions Review
• Meds Management Review
• Estates Rationalisation & Utilisation
• Commercial Contracting & Commissioning
• Patient Contact Modernisation
• Value Based Healthcare Programme
• People
• Travel & Transport
• Utilities
• Buildings and Land
• Waste
• Sustaining our Future Care Services
Tier 3 Programmes and Projects

DIGITAL & DATA COMMITTEE – FORWARD WORK PLAN 2022				
Origin of Request	**Category of Report / Presentation (Deferred Item/ Additional Item/ Ad-Hoc Item)**	**Item Title**	**Lead Officer**	**Intended Meeting Date**
Follow Up from Annual Report 2021-22 received September 2022	Standard Agenda Item (annually)	Committee Self Assessment Outcome and Improvement Plan	Director of Governance	19 December 2022
Committee Referral from Audit & Risk Committee – 24 October 2022	Additional Item	Internal Audit Reports – Digital Operation Model and Medical Records Management	Director of Governance	19 December 2022
Requested at agenda planning meeting	Additional Item	Grant Thornton – Clinical Information Review – presentation	Director of Digital	19 December 2022
Requested at agenda planning meeting	Additional Item	Patient Centred Contact Highlight Report	Director of Digital	19 December 2022