



<b>AGENDA ITEM</b>
3.5

<b>DIGITAL AND DATA COMMITTEE</b>
-----------------------------------

<b>Update on progress made in taking forward recommendations made by NHS Wales Internal Audit and the Welsh Audit Office</b>
--

<b>Date of meeting</b>	28/09/2022
<b>FOI Status</b>	Open/Public
<b>If closed please indicate reason</b>	Not Applicable - Public Report
<b>Prepared by</b>	Andrew Nelson, Chief Information Officer
<b>Presented by</b>	Andrew Nelson, Chief Information Officer
<b>Approving Executive Sponsor</b>	Stuart Morris, Director of Digital
<b>Report purpose</b>	FOR DISCUSSION / REVIEW

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

<b>ACRONYMS</b>	
UHB	University Health Board

## 1. BACKGROUND

1.1 There are a number of outstanding recommendations made by the UHB's auditors which relate to informatics services. These include:

- Clinical Coding (2014)
- Data Quality
- NIS-D

- ICT Service Management
- Cyber Security

1.2 The latest status of the UHB in taking forward these recommendations is provided in the assessment section.

## **2. ASSESSMENT**

2.1 Audit undoubtedly plays a key role in assuring the UHB's activities and in providing support and advice to the organisation on best practice from an independent standpoint. It is a test of the UHB's maturity as to how it responds to the recommendations made and how it manages those of a strategic nature, which it could be argued will never ultimately be achieved, as there is always room for improvement.

2.2 Following 30 months of covid which has seen: high paced digital transformation; significant changes in societal behaviours and norms; increasing health needs of our population, the near collapse of social and residential care services and mounting governmental debt priorities and expectations have inevitably changed.

2.3 The update on recommendations made by Internal Audit services and the Welsh Audit Office has been provided overleaf. None of the 10 recommendations have been fully completed, despite 7 of them being over 2 years old. Whilst improvements have however undoubtedly been made or attempted, there is clear disparity between corporate and service priorities & resource allocation decisions of the Board, as laid out in the IMTP, and the audit recommendations.

2.4 As such over the course of the next month we will seek to review the objectives and underlying rationale for the recommendations from a more tactical perspective & consider how digital processes can achieve similar outcomes to those advised.



GIG  
CYMRU  
NHS  
WALES

Bwrdd Iechyd Prifysgol  
Cwm Taf Morgannwg  
University Health Board

Ref	Date added	Recommendation	Priority	Management Action Agreed	Updates During this period/latest update	Previous Updates
Clinical Coding Follow Up Review 01	Oct-19	Raising the importance of good quality medical records throughout the Health Board;	High	<p>In 2014, we found that the quality of medical records across the Health Board was not of a good standard, with key information required for accurate clinical coding often missing or inappropriately filed. Our work has found that there continues to be issues with the quality of medical records within the Health Board. In 2018, NWS produced a report into clinical coding documentation. This review was undertaken as part of ongoing service improvement work to improve the quality of clinical coding data. The primary aim of this review was to assess the quality of the clinical documentation held within case notes. Overall administrative documentation was of good quality, but there were issues with loose paperwork and records being filed out of order. There were also issues with deceased notes and unplanned admissions. The quality of information for coders in the notes was poor. Only half of the clinical entries contained a diagnosis and of these, a third would be unable to be used for coding purposes. This report highlights that there are issues that need to be addressed by the Health Board.</p> <p>In our 2014 report, we noted the re-establishment of the Health Records Committee. The aim of this was to give the necessary focus to the quality of medical records to enable coders to code accurately. However, this Committee was disbanded in August 2017 and we are unaware of any new arrangements in place to monitor and ensure the quality of medical records.</p>	<p>Analysis undertaken by members of the 'Digital Patient Notes' Programme, responsible for the implementation and realisation of benefits associated with the CITO-scanned records solution, has found that over 50% of paper records persist in being mis-filed. This has had profound consequences on the UHB's ability to scan notes, as up until now all mis-filings have been corrected at source. Concerningly this level of mis-filing has been identified after a 4 month exercise, which provided extra training resource, to skill up ward clerks concluded. As identified, the solution to this is the strategic delivery of a digital EPR with error checks built in and greater democratisation of the clinical record. The latter being a programme that has commenced with the focus being on extracting data item level information from documents and the roll out of clinical e-forms.</p>	<p>Update January 2020 The completeness of the documentation is the responsibility of multiple staff groups across the hospital sites. Both the content and quality of the record will be improved through the plans now being implemented to commence digitisation in November 2019. This process will reduce the risk of documents being lost from within the record as they will be scanned and held digitally. E-forms will also be introduced to capture information electronically, live at the point of care. These forms will be structured and will require the clinical user to provide answers to mandatory questions and use standard terminology through the use of drop-down menus. This should aid completeness and accuracy, as well as legibility of information captured. Digitisation of the critical mass of active patients is expected to take 2 years to complete, but improvements will begin for individual patients from the point of go-live. Rollout of e-form development is planned to commence in April 2020 and this will involve a development programme gradually converting existing paper forms to e-forms. Work will be done to identify those which are highest priority for development, but this is likely to target the highest volume and least complex forms in the first stages. These measures will assist in regards to the completeness of the record and the timely availability of information.</p> <p>Greater focus is needed on every aspect of medical records management, which is clinically led and an organisation wide.</p> <p>November 2020 Update - The completeness of the documentation is the responsibility of multiple staff groups across the hospital sites. Both the content and quality of the record will be improved through the plans to commence digitisation, which have been delayed due to COVID-19 until 20/21. This process will reduce the risk of documents being lost from within the record as they will be scanned and held digitally. However it will not improve the quality of the casenote itself without additional steps being taken prior to digitisation. E-forms will also be introduced to capture information electronically, live at the point of care. These forms will be structured and will require the clinical user to provide answers to mandatory questions and use standard terminology through the use of drop-down menus. This should aid completeness and accuracy, as well as legibility of information captured. Digitisation of the critical mass of active patients is expected to take 2 years to complete, but improvements will begin for individual patients from the point of go-live. Rollout of e-form development has also been delayed until 20/21. This will involve a development programme gradually converting existing paper forms to e-forms. Work will be done to identify those which are highest priority for development, but this is likely to target the highest volume and least complex forms in the first stages. These measures will assist in regards to the completeness of the record and the timely availability of information.</p> <p>January 2021 Update In relation to the quality of medical records and the NWS 2018 report looking into the quality of clinical coding documentation, the Clinical Coding department has employed a coding trainer who will implement a coding education and engagement plan. The plan will cover areas such as the training of trainee coders on how to extract clinical information from health records and building/developing working relationships with staff across the UHB to improve on the quality and availability of the case notes. The CITO software planned for implementation in early 2021 will provide clinical coding colleagues with real-time, single-view access to critical patient information on demand. Staff who were initially involved in the project are currently being invited to reconnect and to promote awareness of the project and its benefits among their colleagues. Terms of reference are currently being drafted for a Performance and Clinical Information Strategy Group (PCISG), the group among other functions will provide a forum for stakeholders to collaborate, monitor and address issues relating to clinical data quality. These are actions that the P&amp;I Directorate can take forward, however we are eagerly anticipating any update as to what potential role a Health Records Committee or alternative plan will have on the quality of medical records within the UHB.</p> <p>May 2021 - No further update to report.</p> <p>July 2021. Information on this recommendation has been received and will be escalated to the ILGs for comment next quarter. Revised implementation date not provided. September 2021 Update. All of the processes previously described are still ongoing, including an aspect of training in the Junior Doctor Induction Course. Query has gone to Medical Records Update January 2020 The content and the quality of the Health record is the responsibility of all clinical users adding information to the record and this is monitored and reported by the Clinical Audit team. This is emphasised within staff induction programmes where the importance of accurate Health Records and the impact on Clinical Coding is noted.</p> <p>The Management Board have approved additional resource to recruit a Clinical Coding Auditor/Trainer and our stated intent within our IMTP is to take this action forward utilising this much needed resource. November 2020 Update - this audit work was previously undertaken by the Clinical Audit Department. They may be able to provide an update for this purpose. It was reported at the Health Records Committee but may be reported elsewhere as well. The Committee was not responsible for acting on this report. January 2021 Update The UHB Clinical Audit Team (CAT) currently undertake an annual audit of the quality of case notes which looks at the documentation in case notes and is aligned to the Health Records Committee (HRC) which no longer exists. The Performance and Clinical Information function will shortly begin conversations around areas of overlap between the HRC and PCISG. The outcome of which will inform which group will provide oversight and assurance responsibilities in relation to the results of CAT medical records quality audit.</p> <p>The newly appointed clinical coding trainer has previous experience with auditing and will be undertaking internal coding audits as a part of her responsibilities. The results of these internal coding audits will be made available to the leadership of the Performance and Information (P&amp;I) Directorate and the relevant oversight and assurance groups.</p> <p>May 2021 - No further update to report. July 2021. Information on this recommendation has been received and will be escalated to the ILGs for comment next quarter. September 2021 Update. The Clinical Audit Team will be undertaking a documentation audit of both acute and community case notes during October / November 2021 using AMaT (audit management software) to support the data capture. Clinical Audit facilitators will be taking a random sample of case notes to retrospectively conduct the audit and report publication is planned for the end of November. November 2021 Update - nothing further to report at this meeting. February 2022 Update. A response will be available at the next meeting - plan in place to meet the Manager for Medical Records in the next month. April 2022 Update - Nothing further in this month - will be chased again in the coming month. Pressure of work at present is significant. June 2022 - Update Will be available for August 2022. August 2022 - nothing further to report.</p>
Clinical Coding Follow Up Review 03	Oct-19	Developing a programme of routine audits of medical records to provide assurance that the quality of medical records is improving;	Medium/ Low	<p>The quality of the patient record has a direct impact on the coders ability to undertake their role. As highlighted previously, work by NWS into the quality of documentation highlighted concerns with loose paperwork, and the filing of deceased patient records.</p> <p>As part of the annual clinical audit and effectiveness plan, there is currently a Health Board wide audit of the quality of case notes. This audit is looking at documentation in case notes and is aligned to the health records committee, however this committee has been disbanded so we are unsure where the results of this audit are reviewed. The current audit plan shows that this audit was also undertaken last year but there is no record of the report. The results of the current audit are due for publication in March 2019.</p>	<p>Audits pertaining to both the completeness and accuracy of the record have been undertaken in a number of areas, such as theatre notes, discharge summaries and births. Numerous issues have been identified and escalated to the appropriate level. Recently the more significant challenge faced by the coding team has been the ability to access and the availability of the required records, as clinical teams fall behind in completing summaries, hoard the records because of the delays in the scanning programme &amp; DHCW fall behind in opening up the architecture.</p>	<p>Update January 2020 The content and the quality of the Health record is the responsibility of all clinical users adding information to the record and this is monitored and reported by the Clinical Audit team. This is emphasised within staff induction programmes where the importance of accurate Health Records and the impact on Clinical Coding is noted.</p> <p>The Management Board have approved additional resource to recruit a Clinical Coding Auditor/Trainer and our stated intent within our IMTP is to take this action forward utilising this much needed resource. November 2020 Update - this audit work was previously undertaken by the Clinical Audit Department. They may be able to provide an update for this purpose. It was reported at the Health Records Committee but may be reported elsewhere as well. The Committee was not responsible for acting on this report. January 2021 Update The UHB Clinical Audit Team (CAT) currently undertake an annual audit of the quality of case notes which looks at the documentation in case notes and is aligned to the Health Records Committee (HRC) which no longer exists. The Performance and Clinical Information function will shortly begin conversations around areas of overlap between the HRC and PCISG. The outcome of which will inform which group will provide oversight and assurance responsibilities in relation to the results of CAT medical records quality audit.</p> <p>The newly appointed clinical coding trainer has previous experience with auditing and will be undertaking internal coding audits as a part of her responsibilities. The results of these internal coding audits will be made available to the leadership of the Performance and Information (P&amp;I) Directorate and the relevant oversight and assurance groups.</p> <p>May 2021 - No further update to report. July 2021. Information on this recommendation has been received and will be escalated to the ILGs for comment next quarter. September 2021 Update. The Clinical Audit Team will be undertaking a documentation audit of both acute and community case notes during October / November 2021 using AMaT (audit management software) to support the data capture. Clinical Audit facilitators will be taking a random sample of case notes to retrospectively conduct the audit and report publication is planned for the end of November. November 2021 Update - nothing further to report at this meeting. February 2022 Update. A response will be available at the next meeting - plan in place to meet the Manager for Medical Records in the next month. April 2022 Update - Nothing further in this month - will be chased again in the coming month. Pressure of work at present is significant. June 2022 - Update Will be available for August 2022. August 2022 - nothing further to report.</p>

Ref	Date added	Recommendation	Priority	Management Action Agreed	Updates During this period/latest update	Previous Updates
Data Quality 01	Oct-19	<p>1. Directorate Managers need to:</p> <ul style="list-style-type: none"> <li>□ Remind consultant, medical and nursing staff of the need to complete outcome forms for all patients seen.</li> <li>□ Remind outpatient receptionists of the importance of inputting outcome forms on WPAS in a timely manner.</li> <li>□ Remind Medical Secretaries to check that outcomes that have been input on WPAS align to outcomes as per dictated letters. Where necessary additional training should be requested to ensure that all staff are aware of their responsibilities in completing the above steps correctly.</li> </ul> <p>2. Management should engage with the two directorates where the electronic outcome form was trialled to understand why it has been adopted in one area and not in the other. Following the conclusion of this engagement the Health Board should consider trialling the electronic outcome forms within all Directorates.</p> <p>3. Consideration should</p>	High	<p>We fully agree with all the recommendations and will incorporate this into our action plan. We intend to secure additional resource to assist in the monitoring and implementation of this action plan. A forum will be set up to oversee this work stream and detailed action plan.</p> <p>A process of 'cashing up' at the end of every clinic is required to ensure clinic and administration staff have processed the patients using the outcome form and WPAS. This process needs to include the initiation of diagnostic tests and request forms being processed to cut down on 'dead time' waits for diagnostics. This process needs to be mandated and managed by the clinic manager. Temporary administration and nursing staff need to undertake mandatory training in cashing up clinics.</p> <p>The Assistant Director of Scheduled Care together with the Assistant Director of Performance and Information will engage with the two directorates where the electronic outcome form was trialled to understand why it has been adopted in one area and not in the other. Following the conclusion of this engagement the Health Board will consider trialling the electronic outcome forms within all Directorates.</p> <p>An appointment with no outcome registered report needs to be circulated in order that administration managers can act on patients who have no outcome, validating the patient's position on the pathway. All staff need to understand the implications of failure to comply. Weekly reports need to be circulated to services including consultants with non-compliance addressed by relevant professional leads. Updated Management Response - These recommendations are accepted, though the ownership at ILG level will be through the Hospital Service Managers. Regular performance meetings have been set up in two of the three ILGs, where this will be a regular performance/compliance agenda item. These two</p>	<p>The number of uncashed appointment remains a problem, with numerous directorates citing resource constraints as a factor. Regular exception reporting is sent to all directorates. Targeted work in the Bridgend locality recently reduced the volume from 5000 to 1000 and the plan is to try and sustain the practice by incorporating validation and data quality into the planned care programmes performance reports. The e-outcome solution will go unsupported in 12 months and having rolled it out to all the medical specialties plus ENT, which are the directorates that wished to adopt it, there is now going to be no further development until a replacement for the Jayex system is procured.</p>	<p>December 2020 Update - There has been limited progress in taking action to address the previous recommendations.</p> <p>The onset of Covid-19 clearly impacted on the UHB's ability to deliver elective activity, as it concentrated all its efforts in responding to the pandemic. As a consequence, the UHB lost the momentum it had built up through the establishment of a Planned Patient Flow Project to take forward both the recommendations of the Internal Audit report, as well as the those of the Delivery Unit report arising from their supportive intervention on waiting list management.</p> <p>As has been rightly pointed out by our Internal Audit colleagues, the PID did not make reference explicitly to two of the actions from their report (Findings 4 &amp; 5) and whilst the PPF Project may not have been the right forum for aspects of Finding 4 (temporary secretaries), it should have made explicit reference to the action, especially given the focus on training. Finding 5 (watch list functionality) is not something that the UHB can amend and whilst we were seeking a response from NWIS regarding what might be feasible and over what timescale (current thinking is that this may well not be technically feasible), it is not documented within the PID as it should.</p> <p>IA colleagues have noted that a number of changes have occurred within the Health Board, as a result of turnover and ownership of the agreed actions within the report has not been clearly transferred to individuals now responsible for this area, which is accepted.</p> <p>My WPAS Team are still sending out regular reports to relevant departments requesting errors to be rectified and whilst the volume of errors reduced, this was linked to reduced activity during Covid-19, as opposed to any improvement, as noted by IA colleagues.</p> <p>We have not been able to focus on this over the last ten months and now have to restart our work through the new operating model, working with our ILG colleagues. On the positive side, much of the groundwork is in place, though the follow-up report from our IA colleagues is a timely reminder of just how much work remains.</p> <p>January 2021. Implication of covid have meant that this has not been able to receive the appropriate management focus - this will be remedied in the next two months. May 2021 Update - Operational pressures have meant that an update has not been possible this month - a full update will be available at the next meeting.</p> <p>Nothing further to report this month.</p> <p>July 2021 Update. Additional information received from Information colleagues to be escalated the ILGs immediately.</p> <p>September 2021 Update. Nothing further to add - target date now December 2021.</p> <p>November 2021 Update - limited discussion with colleagues from ILGs indicates that the main aims of this recommendation are being undertaken, though this assurance has not been possible across the UHB given the other operational issues which continue to be ongoing. A final review will be undertaken by the time of the next meeting. February 2022 Update.</p> <p>ILGs have been asked about progress in these areas specifically and the following responses have been received / discussed:</p> <p>RTE ILG - within the ILG all appropriate actions are being undertaken;</p> <p>M&amp;C ILG - letters have been drafted for all appropriate staff groups reminding them to ensure that the recommendations are implemented;</p>
Data Quality 02	October 2019	<p>1. Directorate Managers and their teams should review the report of patients recorded as being on a closed pathway to ensure that they are on the correct pathway. Day-case and inpatients should be moved back to an open pathway so that they receive the required treatment on a timely basis.</p> <p>2. Analysis should be undertaken of the cases where the pathway has been incorrectly closed to identify if they are common to one directorate, department or person. Where necessary, further investigation should be undertaken to why these errors are routinely occurring and further training provided.</p> <p>3. Consideration should be given to escalating the incorrectly closed pathway reports to ensure Service Group Managers and more senior staff within the Health Board are made aware of the ongoing issue. UPDATED RECOMMENDATION - We have re-raised our original</p>	High	<p>We are fully in agreement with the recommendations and will incorporate this into the action plan response (see above).</p> <p>Recommend clinic outcome letters are an opportunity to validate patient outcomes, a SOP will detail the actions to be taken to achieve this. Where staff are unable to achieve the required standards, a performance monitoring process will be instigated.</p> <p>Agree there is a need for a regular monitoring report to be tabled at Directorate meetings for improvement purposes. UPDATED MANAGEMENT RESPONSE - We agree with the recommendations, noting that the draft Data Quality Assurance Framework and the additional training material developed offer an opportunity to ensure staff are accountable for their actions and this will need to be reinforced through the new operating model.</p> <p>The Performance &amp; Information Directorate will regularly carry out analyses to target additional training towards specific Directorates and/or individuals and escalate concerns to the ILG Hospital Service Managers. This will commence in the new year, with a regular process in place by the end of January 2021.</p> <p>The same risk regarding two instances of core operational systems having to be used by all ILGs applies.</p>	<p>Reports identifying discrepancies or potential errors in the waiting list continue to be sent on a routine basis to old CT services. Management of data quality for POW is operationally provided by SBUHB under the terms of the SLA. Discussions will commence as part of the SLA management arrangements as to whether the SBUHB team wish to continue to provide the service, in line with CTM UHB's requirements or whether it is mutually beneficial for this function to be provided by CTM.</p>	<p>December 2020 Update - See above response. January 2021. Implication of covid have meant that this has not been able to receive the appropriate management focus - this will be remedied in the next two months. May 2021 - nothing further to report this month.</p> <p>July 2021 Update. Additional information received from Information colleagues to be escalated the ILGs immediately.</p> <p>September 2021 Update. Nothing further to add - target date now December 2021.</p> <p>November 2021 Update - limited discussion with colleagues from ILGs indicates that the main aims of this recommendation are being undertaken, though this assurance has not been possible across the UHB given the other operational issues which continue to be ongoing. A final review will be undertaken by the time of the next meeting. February 2022 Update.</p> <p>ILGs have been asked to comment on progress in these areas specifically - M&amp;C and RTE have indicated that the actions are undertaken - formal response expected from Bridgend ILG imminently.</p> <p>April 2022 Update - Nothing further to report for this month - anticipate it will be at the next meeting.</p> <p>June 2022 Update - weekly reports are received for action at CSG level. Management actions have been undertaken. Work continues as trends and repeat issues are identified within the CSGs. Final confirmation needed from one of the ILGs.</p> <p>August 2022 Update - Nothing further to report for this month - anticipate it will be at the next meeting.</p>

Ref	Date added	Recommendation	Priority	Management Action Agreed	Updates During this period/latest update	Previous Updates
Data Quality 05	October 2019	The process for monitoring patients who are awaiting diagnostic investigation results should be reviewed to ensure all Medical Secretaries are utilising a standard approach that is user friendly and does not restrict access, thus allowing visibility to other staff members. <b>UPDATED RECOMMENDATION - A review of the watch list process should be undertaken and following that guidance produced that ensures all Medical Secretaries are using a standard approach that is user friendly and does not restrict access, allowing visibility to other staff members.</b>	Medium	A review of this process and guidance will be carried out, potentially with external support to assist and add pace to the review. Consistent guidance and emphasis on use will then be provided. Management teams will ensure that locally held spreadsheets are not replacing the mandatory addition to the formally report QL. Request internal audit re-assessment of this in next year's audit plan. <b>UPDATED MANAGEMENT RESPONSE - A technical assessment on the potential upgrading of watch list functionality to facilitate performance management of Medical Secretaries will be commissioned.</b>	Directorate teams are able to see the complete waiting list including patients awaiting at the stage 2 diagnostic stage, by clinicians via the QL and Qlik application. Web based help is available to support training in the use of Qlik and there is a small amount of ad hoc support. Given the present level of capacity within the BI team (which is 2 developers) there is no ability to provide face to face training in the present financial environment.	December 2020 Update - See above response January 2021. Implication of covid have meant that this has not been able to receive the appropriate management focus - this will be remedied in the next two months. May 2021 Update - Nothing further to report this month. July 2021 Update. No change reported. September 2021 Update. Nothing further to add - target date now December 2021. Informal discussion with SGMs suggests strongly that Medical Secretaries are provided with support with training. November 2021 Update - limited discussion with colleagues from ILGs indicates that the main aims of this recommendation are being undertaken, though this assurance has not been possible across the UHB given the other operational issues which continue to be ongoing. A final review will be undertaken by the time of the next meeting, February 2022. Update - limited discussion with colleagues from ILGs indicates that the main aims of this recommendation are being undertaken, though this assurance has not been possible across the UHB given the other operational issues which continue to be ongoing. A final review will be undertaken by the time of the next meeting. April 2022 Update - Nothing further to add this month - anticipate that a response will be ready at the next meeting. June 2022 Update - Colleagues in RTE confirm that limited progress continues with work ongoing with the functionality of the watchlist and governance process. Diagnostic reporting and waiting lists are a priority within all recovery plans and will progress the watch list process for tracking and formal QL use. Anticipate similar responses from colleagues from MC and BILG at the next meeting. August 2022 Update. Operational pressures have made this difficult to assess. Nothing further to add this month - anticipate that a response will be ready at the next meeting.
Cyber Security Follow Up 03	Jun-20	<b>Original Recommendation</b> - A formal patch management procedure should be developed that sets out the mechanisms for patching / updating all items within the Health Board. <b>Updated Recommendation</b> - A formal patching strategy and SOP should be developed for the patching process that sets out the mechanism and processes for this.	Medium	<b>Original Management Response</b> - Formal patching strategy is being put in place and will be submitted to Digital Strategy Steering Group (DSSG) in June. <b>Updated Management Response</b> - A formal patching strategy and SOP are currently being worked on and should be ready to publish by July 2020.	Whilst the policy has yet to be fully documented, the patch management arrangements within the UHB have been greatly approved with a lot of protection being provided by means of virtual patching and through the mandation of patching practices, which force systems to be updated.	<b>Current Position</b> - We note that the process for patching has been amended, with a rota in place for patching of servers. We also note that the Health Board has purchased the Ivanti patch management solution to help improve the patching process. However, at present there is no strategy as stated in the initial management response, and no standard operating procedure (SOP) in place for the patching process. The progress made and the evidence that we reviewed we consider the original recommendation to be partially implemented and have reclassified the remaining elements as Medium priority. July 2020 update - DT & AE drafting patching policy, summary of patching completed but yet to be finalised and produced as SOP. Expected to be finalised by end of August 2020. August 2020 Update - Due to the pressures of Covid 19 and the resources required for the roll out and ongoing maintenance of Microsoft 365, the timescale has been reset to December 2020. January 2021 - work is continuing on the patch management procedure. March 2021 - a draft procedure is in progress and will be presented to the RAGCSB to review at the April 2021 meeting. May 2021 - there has been a delay in completing the procedure due to work pressures, date has been extended to July 2021. July 2021 Update - A policy and procedure will be presented to the RAGCSB August meeting. September 2021 - meetings have been organised to commence the policy and procedure, which will be completed by the end of October 2021. November 2021 - No further update provided. January 2022 Update - No update since last time, owing to focus on NIS_D prioritised actions and staff reductions. April 2022 Update - The SOP has still not been created. Director of Digital to review the work plan for the Cyber team and provide a date by which this will be completed. Date to be identified by the end of May 2022. June 2022 Update - Requesting a revised date for completion - Work is underway and planned to be completed by the end of July 2022. Cyber Security Manager will draft the document and circulate for approval. August 2022 Update - no further update provided on this occasion
Cyber Security Follow Up 05	Jun-20	<b>Original Recommendation</b> - The organisation should provide additional resource for a minimum defined period to allow for the data communications team to improve network security. <b>Updated Recommendation</b> - Work should continue to improve the network security of the Health Board. Following the firewall audit, the firewall rules should be amended to increase the security position.	Medium	<b>Original Management Response</b> - Data communications security will be addressed by the new posts discussed in finding 2. <b>Updated Management Response</b> - The firewall audit has been received and confirmed as accurate. Work has commenced in addressing the recommendations highlighted in the audit. The Cyber team have received the Cisco Implementing Advanced Cisco ASA Security and will be addressing the firewall rules starting in June 2020.	August update remains valid. Work is continuing and additional resources are being made to the network team. However as clearly identified in the infrastructure review, the UHB resource allocation decisions knowingly do not enable all of the demands to be met, thus the programme is prioritised and constrained by both capital and revenue	<b>Current Position</b> - As noted above, resources have been provided for cyber security and one of the posts is within the server team. The current position with the firewall is that the rules have not been changed to restrict access from NHS Wales, however in order to improve the security of the Health Board, a company has been engaged to undertake a firewall audit. The purpose of this is to look at the firewall configuration and rules, which will form the basis of the control moving forward. We note that control over changes to the firewall rules is moving to the cyber security team with training for the cyber security team booked with Cisco in order to do this. The process for changing the firewall rules has been improved with a standard form in place for requests, which are channelled through the cyber team for approval before being discussed and agreed at the Change Advisory Board (CAB). January 2021 - work is continuing on addressing the rules on the Firewalls where the bulk of the work should be completed by the end of February 2021. Additional hardware and software licenses have been procured for the upgrade of the Solarwinds network and performance management environment. A date has been set for the upgrade to be completed by Friday 12 February. Based on the progress made and the evidence that we reviewed we consider the original recommendation to be partially implemented and the remaining elements remain as Medium priority. July 2020 update: Firewall project to restart in August with gradual handover of firewall rules from Data Comms to Cyber Security Team. Training scheduled between Data Comms Team and Cyber Team to begin handover. We have an additional temporary resource within Cyber Security Team also looking at networking areas and Solarwinds. August 2020 Update - work on the updating of software versions on each firewall is now complete along with configuring each firewall as per recommendations. There has been an issue in auditing the rules on each firewall due to a licensing issues with Solarwinds. The ICT Department have requested a quote from the supplier on the cost of increasing the licenses on Solarwinds to address this issue. March 2021 - work is continuing to address the firewall rules with a review audit by SICL currently being procured. Work is still carrying on to get the new Solarwinds environment set up. May 2021 - a meeting has taken place with SICL and the firewall configuration files have been provided as part of the review process. Work on the firewall rules is continuing. In March ICT procured software called Skybox for a one year as a Proof of Concept. Once installed and configured the software will enable ICT to address more complex firewall rules and help manage the administration more effectively. The new Solarwinds environment is now up and running. July 2021 Update - The Skybox server has had to be rebuilt as the configuration ISO was out of date. There has been a few issues with the configuration, however the contract will not commence until the software is up and running. September 2021 - work is continuing on the installation of the Skybox application. Work has been delayed due to the Firewall replacement programme on the PCH and RGH Firewalls which is due to be completed by the end of October 2021. November 2021 - No further update provided January 2022 Update - End of year resources have been provided to improve network security, however requirements will remain. April 2022 Update - The SOP has still not been created. Director of Digital to review the work plan for the Cyber team and provide a date by which this will be completed. Date to be identified by the end of May 2022. June 2022 Update - Request to change date to November 2022. Significant progress around the re-configuration of main site firewall rules has been made by the Cyber lead for networks. Ongoing constraints around resourcing rollouts for networking remain though. Plan to complete in the Autumn of 2022. August 2022 Update - Request to change date to November 2022. Significant progress around the re-configuration of main site firewall rules has been made by the Cyber lead for networks. Ongoing constraints around resourcing rollouts for networking remain though. Plan to complete in the Autumn of 2022.

Ref	Date added	Recommendation	Priority	Management Action Agreed	Updates During this period/latest update	Previous Updates
IT Service Management Follow Up 03	Apr-22	The process of clarifying and agreeing digital services with the wider organisation should be completed.	Medium	The new Digital Director will be working with the Head of Service Management feeding back responses from the service	August update remains valid - Whilst the criticality of services and required response times are being noted and documented and additional work has been undertaken to improve on boarding on new services from Project phase into BAU, (the documented process for which will be signed off at the end of September) it should be noted that , our approach to managing external suppliers is not sufficiently responsive to meet these requirements, nor is our support model, which presently provides a less than optimal service 9-5 due to insufficient capacity. Until further resources are allocated towards these functions then the process lacks value.	June 2022 Update - SLAs, Recovery Point Objective (RPO) and Recovery Time (RTO) figures will be agreed for each service as we establish and improve our documentation, service onboarding and management of services. This will be run in parallel with the development of the knowledge base but given the capacity and competing pressures. August 2022 Update - work ongoing / will roll into the Autumn of 2022. Propose to change date to November 2022
IT Service Management Follow Up 04	Apr-22	A process for monitoring the change process to ensure compliance with all the requirements of the process should be established.	Low	Will be reviewed by the Head of Service Management when in post	Process being developed.	June 2022 Update - Will be reviewed by the Head of Service Management once the 3 higher priority recommendations have been addressed. Propose to extend to end of Q3 2022/2023 August 2022 -
Digital Strategy	Apr-22	3.1. Work should continue to ensure benefits are fully defined within business cases, along with a baseline position and a process for benefits realisation. 3.2 Consideration should be given to defining an overall benefits position for the Digital Strategy.	Medium	All moderate to major digital developments now require a business case and are subject to a degree of scrutiny which incorporates not only the anticipated benefits but the process by which these benefits will be measured and actions taken where there is limited delivery . In regards to overall benefits measuring, the UHB is committed to ensuring that this is incorporated within the WG digital and data strategy and that there is alignment to the Value Based Health Care Programme. In addition to this, the Health Board is currently reviewing its operating model and there is an opportunity to re-align and strengthen the relationship and ways of working between major digital developments and the change hub where the Agreed A process for baselining and ensuring that all critical systems that the UHB actively supports have cyber and data protection improvement plans plus documented backup and disaster recovery programmes has been agreed and initiated. The UHB will be taking a pragmatic approach in that the documentation will incorporate that required to operationally support the systems and provide on-call services. Incident response and business continuity plans already in place in the clinical services will be attached to these documents within a central 'asset register / service catalogue'	Delivery of greater benefits realisation will be driven by the unified change programme. The new operating model is yet to be tested as to whether the resource within CTM improvement team will have their focus set on optimising ways of working to realise the benefits of digital or will have a narrower focus aimed at patient flow and waiting times.	June 2022 Update - Operating model phase 1 nearing completion, 2nd stage yet to commence. 2022 - new operating model and proposed digital operating model to be completed by September 2022 August
NIS Directive 1.1 and 1.2	May-22	1.1 Management should have plans in place to map other critical systems to the CAF. 1.2 Management should ensure that any records of discussions and information pertaining to the CAF are captured for future annual self-assessments.	Medium	A process for baselining and ensuring that all critical systems that the UHB actively supports have cyber and data protection improvement plans plus documented backup and disaster recovery programmes has been agreed and initiated. The UHB will be taking a pragmatic approach in that the documentation will incorporate that required to operationally support the systems and provide on-call services. Incident response and business continuity plans already in place in the clinical services will be attached to these documents within a central 'asset register / service catalogue'	Documentation for a number of the critical systems has been updated and we continue to work our way through the documentation of systems on a priority basis , in line with our cyber improvement plan.	June 2022 Update - On track - Development programme initially focus on 20 critical systems working to have in place a target knowledge base established and has made fast progress, as pragmatic approach of enhancing operational documents rather than creating separate information taken. Planned to complete at the end of Q3 2022/2023 August 2022 -



### 3. IMPACT ASSESSMENT

<b>Quality/Safety/Patient Experience implications</b>	Yes (Please see detail below)
	Poor data quality inevitably leads to poor patient care and experience  Poor cyber hygiene leads to greater risk of loss of privacy and poor patient care
<b>Related Health and Care standard(s)</b>	Effective Care
<b>Equality Impact Assessment (EIA) completed - Please note EIAs are required for <u>all</u> new, changed or withdrawn policies and services.</b>	No (Include further detail below)
	Not required.
<b>Legal implications / impact</b>	Yes (Include further detail below)
	GDPR, DPA, NIS-D
<b>Resource (Capital/Revenue £/Workforce) implications / Impact</b>	There is no direct impact on resources as a result of the activity outlined in this report.
	As recommendations have not been completed to avoid their being an impact
<b>Link to Strategic Well-being Objectives</b>	Provide high quality, evidence based, and accessible care

### 4. RECOMMENDATION

The Digital and Data Committee are requested to:

- **NOTE** the present status and challenges to delivering the recommendations of the UHB's auditors.
- **APPROVE** the proposed course of action whereby the management team will seek to review the objectives and underlying rationale for the recommendations from a more tactical perspective & consider how digital processes can achieve similar outcomes to those advised.