AUDIT COMMITTEE
Tuesday, 24 April 2018
2.30pm – 4.30pm

CORPORATE MEETING ROOM, HQ, UHW
AGENDA

PART 1 – SECTION 1: PRELIMINARIES - Chair (10 mins)			
1.		Welcome and Introductions	*Oral*
2.		Apologies for Absence	*Oral*
3.		Declarations on Interest	*Oral*
4.		Minutes of the Committee meeting held on 27 February 2018	*Chair*
5.		Action log following meeting held on 27 February 2018	*Chair*
6.		Any Other Urgent Business: To agree any additional items of urgent business that may need to be considered during the meeting.	*Oral*
SECTION 2: PATIENT SAFETY			
7.		Patient Safety	*Oral* *C Evans*
SECTION 3: AUDIT AND COUNTERFRAUD			
8.	*20 mins*	Internal Audit Position Report and Updates **Assignment** **Assurance Rating** 1. Deprivation of Liberties Safeguarding Follow-up Limited **Please see part 2 agenda item 17 for full copies of audit reports*	*J Johns*
9.		Wales Audit Office – Informatics Systems in NHS Wales	*WAO*
10.		Wales Office Audit – Audit Committee Agenda	*WAO*
11.		To receive Tracking Report on Wales Audit Office Recommendations	*P Welsh*

SECTION 4: POLICIES AND COMPLIANCE REPORTS			
12.		No items to report	
SECTION 5: CORPORATE GOVERNANCE			
13.		No items to report	
SECTION 6: ANNUAL FINANCIAL AND GOVERNANCE STATEMENTS			
14.		Audit Enquiries to Those Charged with Governance and Management	*R Chadwick*
SECTION 7: ITEMS FOR DECISION / APPROVAL			
15.		To approve the Internal Audit Annual Plan 2018/19	*J Johns*
PART 2 – ITEMS FOR INFORMATION			
16.		Handover of Care at Emergency Departments – Welsh Ambulance Service Trust Internal Audit Report	*P Welsh*
17.		Internal Audit reports for information **Assignment** — **Assurance Rating** 1. HTA Action Plan — Substantial 2. Deloitte Action Plan — Substantial 3. Model Ward — Reasonable 4. IT Server Virtualisation — Reasonable 5. Organisational Values — Reasonable 6. Wellbeing Future Generations — Reasonable	*J Johns*
REVIEW AND FINAL CLOSURE			
18.		Items to be deferred to Board / Committee	*Oral Chair*
19.		To note the date, time and venue of the next Committee meeting: • **Audit Workshop - Tuesday, 22 May 2018 9.00am** Corporate Meeting Room, Headquarters, University Hospital of Wales	

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

UNCONFIRMED MINUTES OF THE AUDIT COMMITTEE HELD ON 27 FEBRUARY 2018 IN THE CORPORATE MEETING ROOM, HEADQUARTERS, UHW

4

Present:

John Antoniazzi	Independent Member – Capital, Chair
Maria Battle	Chair - UHB
Dawn Ward	Independent Member – Trades Union

In Attendance:

Anne Beegan	Wales Audit Office
Carol Evans	Assistant Director of Patient Safety & Quality
Craig Greenstock	Counter Fraud Manager
Ian Virgil	Deputy Head of Internal Audit
John Herniman	Wales Audit Office
Peter Welsh	Director of Corporate Governance
Robert Chadwick	Director of Finance
Steve Curry	Chief Operating Officer
Glynis Mulford	**Secretariat**

Apologies:

John Union	Independent Member - Finance
James Johns	Head of Internal Audit

AC: 17/084 WELCOME AND INTRODUCTIONS

The Chair welcomed everyone present to the meeting.

AC: 17/085 APOLOGIES FOR ABSENCE

Apologies for absence were noted.

AC: 17/086 DECLARATIONS OF INTEREST

The Chair invited Members to declare any interests in the proceedings. A declaration was made in relation to agenda item 14 by Mr Peter Welsh, Director of Corporate Governance and informed the Committee his wife was an optician at RN Roberts Opticians and therefore would not be partaking in any discussion on this point.

AC: 17/087 UNCONFIRMED MINUTES OF THE MEETING HELD ON 5 DECEMBER 2017

The Committee **RECEIVED** and **APPROVED** the minutes of the meeting held on 5 December 2017.

AC: 17/088 ACTION LOG FROM MEETING OF 26 SEPTEMBER 2017

The Committee **RECEIVED** the Action Log from the meeting of 26 September 2017 and **NOTED** the following:

AC: 17/071 Wales Audit Office Review of Discharge Planning: Significant progress had been made since the audit and was being monitored by the Quality Safety and Experience Committee.

Items AC: 170/72 and 073 will be brought forward to April meeting.

AC: 17/089 INTERNAL AUDIT PROGRESS REPORT

Specialist Services Patientcare IT System – Limited Assurance: Mr Steve Curry, Chief Operating Officer explained the IT system implemented by a registrar was a very good system which tracked patients and their treatment. This was developed some years ago and is used in hospitals around the country. An audit was undertaken which highlighted areas of vulnerability. A Follow-up audit pointed to a number of issues and areas not fully actioned.

There was no formal contractual agreement for ongoing maintenance. This had been addressed and the department was working with procurement to put in place a comprehensive contract and ensure it was fit for purpose. The contract will be ready to be implemented from 1 April 2018.

The Committee was assured that in the future policies, procedures and guidance would be planned at a set date. There would be further discussion on how to bring guidance around this area with IT and procurement leads to ensure good governance was in place. It was stated that wider learning had been made through the system.

The Committee was assured that the primary information source was PMS which was the core system and safety net for the Health Board.

A range of limited controls had been taken forward and a user group had been set up and any further actions will be implemented by Group. The Business Continuity Plan was endorsed by the Emergency Preparedness Manager and there has been a system upgrade after going through this process. Advice had been taken from IT who had reviewed the system. Evidence had been received to inform that back ups were taking place in line with their systems.

As a result of these action points being progressed Members were informed the Risk Register would be upgraded as the position had advanced since the Internal Audit follow up.

The Committee:

- **CONSIDERED** and **NOTED** the Internal Audit Progress Report

4

AC: 17/090 INTERNAL AUDIT POSITION REPORT

Mr Ian Virgil, Deputy Head of Internal Audit outlined the key points of the report:

- There had been some audit delays in receiving information to complete reports which had been planned to be delivered in February. These reports would come through to next Committee in April.
- The delivery of Internal Audit Plan was on course to complete the annual plan to April Audit Committee. There were three reports which are potentially Limited Assurance in the system and clarified although looking at three Limited Reports was looking at a positive opinion at year end.
- In response to concerns on Cleaning with Limited Assurance the Committee was assured this was not in relation to cleaning of the wards. This was in relation to the Compliance of the Wales Cleaning Standards. Key reasons were weaknesses in some of the Health Boards own audit with paperwork and how these were being conducted and signed off. These issues were reported at Quality, Safety and Experience Committee. There were issues with estates staff and nursing staff working together to sign off reports but this was being addressed.

It was commented and noted:

- In response to Limited Assurance reports being revisited, it was stated Limited Assurance reports would be timetabled for follow-up. If it was borderline, further work could be undertaken and a further follow up take place to appreciate if this would change opinion.
- Concerns with consultant job planning was raised 12 months ago with Wales Audit Office and was still concerned as remained with a Limited Assurance rating. It was stated this has been escalated to the Medical Director as Executive Lead.
- There had been a request for two pieces of work to be postponed until next year as there were ongoing issues in department; being PCIC Incident reporting and Commercial Outlet Audit which was **APPROVED** by the Committee.

The Committee:

- **CONSIDERED** and **NOTED** the Progress Report Against Plan

AC: 17/091 WALES AUDIT OFFICE ANNUAL PLAN 2018

Mr John Herniman, Wales Audit Office highlighted the key issues of the report to ensure they met their statutory responsibilities and the plan set out the background and responsibility for WAO and the Health Board. The timing of work and broad timetable will be revised in the Committee Update report.

It was discussed and noted:

- In response to Wales Audit Office inter-relationship with Internal Audit in understanding each other's programmes, Members were informed things had progressed and although share work programmes to look for additional risks, do not rely on Internal Audit testing.
- The Committee was advised in response to there being any issues with the year-end audit that to date the timetable works although it is rigid. This was a joint effort between the WAO and finance team and did not anticipate any problems
- The Remuneration Report should be straight forward this year as there had been a number of changes during the year but would need a full Q & A review.
- It was described how the WAO reports are cascaded throughout the organisation that work is commencing, explaining the audit plan is circulated to the Lead Executive who will address recommendations with managers. The Director of Corporate Governance will take to Management Executive and provide a reminder of follow-up to be undertaken. The original audit will be done by manager and team who should be mindful of delivery commitments and actions and be aware of any follow-up. This will then go forward to the relevant committee. The Audit Committee maintains and tracks the WAO reports. For mandated work WAO produces a project brief which is issued to the Director of Finance, Director of Corporate Governance and Executive Leads.
- In regard to the Future Generations Act there will be a conference in May. The Auditor General is required to produce a report in 2020 around how all the bodies are responding to the Act. The work being undertaken in NHS Health Bodies and will form part of the 2019 plan.

The Committee:

- **NOTED** the report

AC: 17/092 WALES AUDIT OFFICE – COMMITTEE UPDATE

The Committee **NOTED** the above report from Wales Audit Office, who informed Members the report governed the audit plan in terms of the position on previous reports. Key points raised were:

- ***Thematic Review - Primary Care:*** Phase Two was up and running and a brief had been issued to the Executive Lead. Arrangements had been made to conduct a set-up meeting.

- ***The Integrated Care Fund:*** This is a cross cutting review looking at NHS Bodies, Local Authorities and Welsh Government. A brief will be available next week. This work will focus on the Regional Partnership Boards and how the ICF is being managed on a regional partnership basis.
- ***The Informatics Systems in NHS:*** A report will be brought to the next committee with the management response from Welsh Government.

It was commented and noted:

- In regard to the District Nursing Services in Wales it was queried how was this being processed internally for Health Board. The Assistant Director of Patient Safety and Quality will determine this request and feedback to next Committee.

ACTION: C Evans to feedback to Committee how District Nursing Services in Wales was being processed internally for Health Board

The Committee:

- **NOTED** the Wales Audit Office Committee Update

AC: 17/093 END OF YEAR UPDATE – STRUCTURED ASSESSMENT MANAGEMENT RESPONSE 2016

Mr Peter Welsh, Director of Corporate Governance presented the final update of the Management Response to the Committee. The year 2016 had been significant for the Health Board which was reflected in some of actions. This was in particular to changes in Board membership and this action is now complete as the Board is in full membership. Reference was also made to two new committees set up during 2017 had been stood down a few weeks ago and established a new Strategy and Delivery Committee. Major work was undertaken in reviewing the risk framework which has been completed. Regarding issues around financial management, it was stated the robustness of the Finance Committee was working extremely well, although there were some outstanding actions to be completed.

The Committee:

- **NOTED** the report

AC: 17/094 UPDATE ON WALES AUDIT OFFICE ACTION PLAN OF CONTRACTUAL RELATIONSHIP WITH RKC ASSOCIATES LIMITED AND ITS OWNER

Mr Peter Welsh, Director of Corporate Governance, informed Members that the above report was presented to the Public Accounts Committee (PAC) and progress was monitored through the Audit Committee and the Public Board Meeting. Work on the action plan had been completed with Internal Audit where an opinion rating of Substantial Assurance was obtained. Out of the 26 actions 17 were fully completed. The seven outstanding actions had been assigned with definite dates to be

completed this year. A report will be going to Board meeting at the end of March. Evidence and further information will be supplied for the Chair and CEO to return to PAC in May 2018. The outcome of this review highlighted the significant progress made, the lessons learnt and new systems, processes and controls that had been established as set out in action plan. There has been openness and transparency throughout process. The action plan had been shared with the All Wales Board Secretaries group and the CEO had informed the Local Partnership Forum.

The Committee:

- **NOTED** the report

AC: 17/095 TRACKING REPORT ON AUDIT RECOMMENDATIONS

The Committee **RECEIVED** and **NOTED** the Tracking Report and Mr Peter Welsh, Director of Corporate Governance stated he was working with Internal Audit to develop the report further as follow up reports were not as robust as they should be. The Tracking Report needed more work on making it "live" and to link with other systems as neither system worked. This was raised to be reviewed on an All Wales basis in order to gain a consistent approach across NHS Wales and an update will be brought to the next meeting.

AC: 17/096 POST PAYMENT VERIFICATION

Mr Scott Lavender outlined the key findings from the 6 monthly review of arrangements relating to Post Payment Verification in regard to the General Medical Services, General Ophthalmic Services and General Pharmaceutical Services.

Members were informed that at the last GMS visit a new initiative had been undertaken by processing visits from the office and logging into GP systems which was deemed safe, more helpful with resources and less intrusive. There had been a 50% uptake on this process from March 2017 taking up remote access and the next target for March 2018 will be 75% for practices to be engaged in this new method.

GOS was arranging training for practice staff which is now in motion across the seven Health Boards and was engaged with the Cardiff Primary Care team. Clarity was provided around protocols and training in a proactive manner. Optometry Wales were also engaged in reducing percentages and were looking to have one standard across Wales.

Meetings had been arranged with Pharmacy to ensure they have an understanding of what they are reviewing and to give assurance relevant in areas. Admin errors were still high and the team was heavily engaged in reducing the figures. All pharmacies had been visited once and hoped to see an improvement at the next visit. Counter Fraud worked closely with the department in bringing averages down in pharmacy. It was stated that anomalies are minimal compared to the number of claims and were looking at common themes to feed into the system.

It was discussed and noted:

- In response to training practice managers early, it was stated that a corporate induction is run with Shared Services and was happy to do 1:1s. FAQs documents were released regularly and there was an electronic point of contact. It was highlighted that practice managers are employed by the practice and not NHS.
- Training was a common problem with GP staff not being able to be released as any additional time closed incurred a cost which had an impact, posing a barrier to make it work.

AC: 17/097 SCHEME OF DELEGATION

Mr Robert Chadwick, Director of Finance, stated that processes had been put in place for off payroll working and would be incorporated in the Scheme of Delegation.

The Committee:

- **NOTED** the assessment made on the current Scheme of Delegation;
- **APPROVED** the proposed addition for off-payroll working;
- **REQUESTED** that the Scheme of Delegation is updated to include this addition;
- **ENDORSED** the completion and closure of this action within the UHB action plan on the Contractual Relationship with RKC Associates.

AC: 17/098 DIRECTOR OF CORPORATE GOVERNANCE REPORT

The Committee **RECEIVED** and **NOTED** the report where key elements were highlighted:

- The Accountability Report and timescale was set out and confirmed work was well in advance and on target. Included in the report will be the Annual Governance Statement and Annual Quality Statement. A special Audit Committee will be held on 31 May 2018 followed by a presentation to Board.
- The new Strategy and Delivery Committee will look at 10-year strategy plan and how this is delivered through the IMTP.
- The last Board Development session looked at the effectiveness and efficiencies of how we can work in a smarter way and Committees having a more robust role in looking at assurances and formal reporting. This will be formally reported to Board in May and highlighted in the Chairs report in the March Board Meeting.
- The car park tenders were on track and will be reported in the CEO Report at the March Board Meeting.

AC: 17/099 UPDATE ON THE CORPORATE RISK ASSURANCE FRAMEWORK

The Committee **RECEIVED** and **NOTED** the Audit Committee Corporate Risk and Assurance (CRAF) Update Report and it was stated the summary showed there had been no significant changes to the current risk register, but each committee was receiving their contribution to the CRAF on a regular basis. The written control document for high risk and further work has been undertaken. The new approach presented was with more meaningful information and tracking of risks made clearer.

AC: 17/100 ITEMS FOR INFORMATION

Items for Information were **NOTED.**

AC: 17/101 REVIEW OF MEETING

There were no items to be reviewed.

AC: 16/102 URGENT BUSINESS

There was no urgent business.

AC: 16/103 DATE OF NEXT MEETING

The next Audit Committee meeting is scheduled to take place at **2.30pm** on **Tuesday, 24 April 2018** in the Corporate Meeting Room, Headquarters, UHW

AUDIT COMMITTEE – ACTION LOG FOLLOWING FEBRUARY 2018 MEETING

MINUTE	DATE OF MEETING	SUBJECT	AGREED ACTION	ACTION TO	STATUS	
					OUTSTANDING	DATE FOR COMPLETION
AC 17/092	27.02.18	WAO – Committee Update	To inform Committee how District Nursing Services in Wales is being processed internally for Health Board	C Evans		
ITEMS TO BE BROUGHT FORWARD TO FUTURE MEETINGS						
AC 17/072	5.12.17	Wales Audit Office Review of GP Out of Hours Services	To forward report to QSE Committee for monitoring purposes	QSE Committee	To be discussed at QSE Committee	
AC 17/073	5.12.17	Wales Audit Office Review of Progress Update – Management of Follow-up Outpatients	To forward report to QSE Committee for monitoring purposes	QSE Committee	To be discussed at QSE Committee	
AC 15/008	26.09.17	Business Continuity Planning	To discuss with Lead Director the justification of pushing back the review. For the review to take place in the first quarter of 2018/19 and for assurances that improvements were being made.	J Johns and P Welsh	The rationale for the deferral of the BCP was to do with the progress made since previous audits were undertaken. The Executive Director has taken a paper to the Management Executives in October updating them on BCP actions. IA have subsequently raised	

5

					where it would be possible to undertake work in Q4 as originally planned.	
COMPLETED ACTIONS (TO BE REMOVED ONCE REPORTED TO MEETING AS COMPLETE)						
AC 15/008	24.02.15 & 8.12.15	Business Continuity Planning	Provide a follow up report in September 2015	J Johns	The follow up has been put back to the 17/18 plan at the request of the Executive Director.	**COMPLETE**
AC 17/071	5.12.17	Wales Audit Office Review of Discharge Planning	To forward report to QSE Committee for monitoring purposes	QSE Committee	Considered at QSE Committee on 13.02.18	**COMPLETE**

5

INTERNAL AUDIT	
Audit Committee	**April 2018**

Executive Lead : Director of Corporate Governance
Author : Head of Internal Audit, NWSSP Audit & Assurance Service, UHW 42724
Caring for People, Keeping People Well : n/a
Financial impact : n/a
Quality, Safety, Patient Experience impact : n/a
Health and Care Standard Number - ALL **CRAF Reference Number ALL**
Equality Impact Assessment Completed: n/a

8

RECOMMENDATION

The Audit Committee is asked to:

CONSIDER the Internal Audit Progress Report, including the findings and conclusions from the finalised individual audit reports.

SITUATION

The Internal Audit progress report provides specific information for the Audit Committee covering the following key areas:

- Detail relating to outcomes, key findings and conclusions from the finalised internal Audit assignments
- Specific detail relating to progress against the audit plan and any updates that have occurred within the plan.

BACKGROUND

The NHS Wales Shared Services Partnership (NWSSP) Audit and Assurance Service provides an Internal Audit service to the Cardiff and Vale University Health Board.

The work undertaken by Internal Audit is in accordance with its plan of work, which is prepared following a detailed planning process and subject to Audit Committee approval. The plan sets out the programme of work for the year ahead as well as describing how we deliver that work in accordance with professional standards and the process established with the UHB and is prepared following consultation the Executive Directors.

The progress report provides the Audit Committee with information regarding the progress of Internal Audit work in accordance with the agreed plan; including details and outcomes of reports finalised since the previous meeting of the committee, amendments to the plan and also assignment follow ups.

The report highlights some delays with the delivery of the audit plan during the current year and the reasons behind the delays.

The progress report highlights the conclusion and assurance ratings for audits finalised in that period. Seven reports have been finalised, two with Substantial Assurance, four with Reasonable Assurance and one report has been issued with a Limited Assurance rating.

Reports that are given substantial or reasonable assurance are summarised in the progress report with the reports given Limited Assurance included in full.

At this stage despite the Limited Assurance reports issued during 2017/18 the UHB is still on course to be issued with a Reasonable Assurance Annual opinion, subject to the finalisation of the remaining work.

Appendix A of the progress report sets out the Internal Audit plan as agreed by the committee, including details of postponed audits, commentary as to progress with the delivery of assignments and outcomes from completed audits.

ASSESSMENT AND ASSURANCE

The progress report provides the Committee with a level of assurance given to the management of a series of risks covered within the specific audit assignments delivered as part of the Internal Audit Plan, as well as an indication over the overall annual opinion.

The report also provides, information regarding the areas requiring improvement, assigned assurance ratings.

Cardiff and Vale University Health Board

Internal Audit Progress Report

Audit Committee April 2018

Private and Confidential

NHS Wales Shared Services Partnership

Audit and Assurance Service

CONTENTS

8

Please note:

This audit report has been prepared for internal use only. Audit & Assurance Services reports are prepared, in accordance with the Service Strategy and Terms of Reference, approved by the Audit Committee.

Audit reports are prepared by the staff of the NHS Wales Shared Services Partnership – Audit and Assurance Services, and addressed to Independent Members or officers including those designated as Accountable Officer. They are prepared for the sole use of the Cardiff and Vale University Local Health Board and no responsibility is taken by the Audit and Assurance Services Internal Auditors to any director or officer in their individual capacity, or to any third party.

1. INTRODUCTION

1.1. This progress report provides the Audit Committee with the current position regarding the work being undertaken by the Audit & Assurance Service as part of the delivery of the approved Internal Audit plan.

1.2. The report includes details of the progress made to date against individual assignments, outcomes and findings from the reviews, along with details regarding the delivery of the plan and any required updates.

1.3 The plan for 2017/18 was agreed by the Audit Committee in April 2017 and is delivered as part of the arrangements established for the NHS Wales Shared Service Partnership - Audit and Assurance Services.

2. ASSIGNMENTS WITH DELAYED DELIVERY

2.1 The full details of the current year's audit plan along with progress with delivery and commentary against individual assignments regarding their status is included at Appendix A. The assignments noted in the table below are those which had been planned to be reported to the April Audit Committee but have not met that deadline.

All other audits are currently planned to be reported May Audit Committee as set out in Appendix A.

Audits planned for Audit Committee but not finalised			
Continuing Health Care Follow up –	Draft report	Limited	Not signed off by Executive director as queries of findings in report, with another meeting required for further discussion.
EU -12 Hour target data quality	Draft report	Reasonable	Fieldwork took longer than planned & delay in receiving management responses
Consultants job planning	Draft report	Provisionally limited	Significant delays in receiving key information from one Directorate. Medical Director involved to provide resolution with draft report.

Mortality reviews	Work in progress		Fieldwork took longer than planned.
Costing	Work in progress		Delay with the delivery of work within audit.
Capital Scheme – Neo Natal	Work in progress	------	Position of capital scheme and reallocation of audit staff.
BCP Follow-up	Work in progress	------	Delay with the delivery of work within audit.
Strategic Planning / IMTP	Draft report	Reasonable	Fieldwork took longer than planned
RTT Performance Reporting	Work in progress	------	Delay with the delivery of work within audit.

3. OUTCOMES FROM COMPLETED AUDIT REVIEWS

3.1 A number of assignments have been finalised since the previous meeting of the committee and are highlighted in the table below along with the allocated assurance ratings.

3.2 A summary of the key points from the assignments with Reasonable and Substantial assurance are reported in Section five; the reports with a Limited Assurance rating are included as a full version of the report at Appendix B.

FINALISED AUDIT REPORT	ASSURANCE RATING	
HTA Action Plan	Substantial	
Deloitte Action Plan		
Model Ward	Reasonable	
IT Server Virtualisation		
Organisational Values		
Wellbeing Future Generations		
Deprivation of Liberties Safeguarding follow up	Limited	

8

4. DELIVERY OF INTERNAL AUDIT PLAN

4.1 Delivery of audit work - From the table in section three above it can be seen that seven audits have been finalised since the Committee met last.

In addition to that, there are a number audits that have reached draft report stage, with just a small number of reviews to be completed. The audit assignment schedule at Appendix A gives specific details as to the status of the planned work. There have however been a number of audits where progress has been slower than planned or delayed for several reasons.

4.2 Audit Outcomes – From the reviews finalised from this committee there is one report with a Limited Assurance rating. There were also three reports previously issued with Limited assurance. Further to that from the audits that are at and around draft report stage there are potentially another two Limited assurance reports.

4.3 Plan updates - The review if cost improvements programme has been deferred to 18/19 as it has been covered by external audit.

4.4 Head of Internal Audit and Opinion – The annual report and Opinion is currently being drafted. The draft opinion, which despite several limited assurance audits being issued during the year will be Reasonable Assurance. The opinion is subject to the finalisation of the remaining audits and a quality review by the Director of Audit and Assurance and will be presented to the Audit committee at its May Meeting.

4.5 Reporting to the Management Executive – The draft version of the Internal Audit Plan for 2018/19 was submitted to the Management Executive in March for discussion and comment.

4.6 Planning 18/19 – The Internal Audit Strategy, Charter and Plan for 2018/19 is submitted to the April meeting of the Audit Committee for approval.

8

5. FINAL REPORT SUMMARIES

5.1 Human Tissue Authority Action Plan

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with progress against the HTA findings is **Substantial assurance.**

RATING	INDICATOR	DEFINITION
Substantial Assurance		The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

The Health Board produced a Corrective and Preventative Action (CAPA) plan to address the findings from the HTA inspection and this was agreed with the HTA.

From the total 26 required actions, 13 were assessed as completed by the HTA on the 12 December 2017. At the time of the review the other 13 actions had been submitted to the HTA on the 12th February 2018 and the Health Board was awaiting confirmation as to whether they were assessed as complete. Review of a sample of these actions identified that in all cases appropriate documentation was available to confirm that the actions were complete.

Audit have assessed the review as substantial assurance as a considerable amount of work has been undertaken to ensure that the required actions have been effectively implemented. In addition, effective processes have been put in place for monitoring the action plan as a Human Tissue Authority Inspection "Gold Command" Management Group was established and the actions and any updates were reviewed within this forum. Furthermore, following these meetings, a paper was taken to the Management Executive to provide an update of progress against the action plan. In addition, an update was provided to the Board on the 30th November 2017 and it was agreed that the outcome would be reported to the Board at the meeting in April 2018 to undertake a lessons learned review.

A HTA Licence Compliance Group has been established to develop and maintain HTA compliance performance indicators and monitor on-going compliance issues and has met on three occasions to date. However it is noted that the terms of reference for the Group remain in draft.

5.2 Deloitte Action Plan

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with the Action plan on Deloitte Financial Governance Review is **Substantial Assurance**.

RATING	INDICATOR	DEFINITION
Substantial assurance		The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

The Health Board has made good progress towards implementing the agreed management actions following the 'Deloitte' Report on Financial Governance within the Health Board.

An Action Plan has been produced and this incorporates agreed actions to address all recommendations made. The action plan and associated management actions were agreed by the Board at its September 2017 meeting. Progress against this Action Plan is reported to the Finance Committee.

In general, we found reporting of progress against the 22 management actions to be appropriate. However, we did note that the current stated timescale for all actions to be fully implemented by the end of March 2018 may not be realistic.

5.3 Model Ward

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with the Pilot Model Ward is **Reasonable assurance**.

RATING	INDICATOR	DEFINITION
Reasonable assurance		The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with **low to moderate impact on residual risk** exposure until resolved.

The pilot model ward project was managed appropriately given the size and scope of the project, however potential improvements have been identified if the project was to be expanded.

The review has highlighted that there was effective leadership throughout the project. There was also positive engagement with clinical and operational staff to gain appropriate buy in for results to be realised. This was handled well, through inter departmental collaboration and ongoing communication throughout the pilot.

Constructive collaboration was also noted with external providers for the electronic system which was supplied on a trial basis and with Unison who provided monies to support the pilot.

During the review it was also pleasing to note the positive feedback that was received from both the clinical and Facilities staff who participated in the pilot and those affected by the change.

Positive outcomes for patients were noted through client satisfaction surveys; however one outcome with regards to patient flow could not be quantified due to the length of the pilot.

A costing exercise was undertaken to highlight the financial outcomes associated with reduced waste, increased staff costs etc. These costs have been extrapolated across 19 medical wards to identify the costs of expanding the pilot, however, these are yet to be formally agreed by the UHB.

A formal report on the outcomes of the pilot has been drafted, and the financial implications will need to be incorporated and a full report communicated to senior management.

5.4 IT Sever Virtualisation

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with server virtualisation is **Reasonable Assurance**.

RATING	INDICATOR	DEFINITION
Reasonable Assurance		The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

The UHB utilises virtualisation as a first choice for its servers. This increases the utilisation rate of the hardware and increases the organisations resilience. The virtual environment is well managed and kept secure with segregated network and good access controls.

The physical hardware is appropriately secure and protected and the UHB ensures that it is licence compliant.

The main weaknesses relate to the small size of the team with knowledge of the virtual environment which introduces a lack of resilience and an overreliance to a very limited number of staff. This is exacerbated as Standard Operating Procedures (SOPs) for patching and creating virtual machines (VMs) are not in place.

5.5 Organisational Values

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with the Organisational Values is **Reasonable assurance**.

Reasonable assurance		The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with **low to moderate impact on residual risk** exposure until resolved.

The review has identified that there was an appropriate process undertaken to develop the organisational values, with managers, staff, patients and carers contributing to their development.

There is a UHB wide Staff Engagement Strategic Framework in place and one of the key enablers is a "strong set of organisational values." There were Clinical Board Staff Engagement Plans in place detailing the planned actions to embed the organisational values within the Clinical Boards.

Staff are required to show evidence of how they have incorporated the original 6 values within their working practice when they carry out their PADRs. New starters are made aware of the values through the Corporate Induction Programme. Going forward it has been agreed that the values will be incorporated in the recruitment process as applicants will have to provide evidence of compliance with the values.

The Chief Executive has however only recently formally signed up to the organisational values. This means that whilst the Health Board and Clinical Boards have made some good initial progress with raising awareness of the values, they have not yet implemented plans to ensure that the values are fully embedded across the organisation.

5.6 Wellbeing Future Generations

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with the Wellbeing of Future Generations Act is **Reasonable assurance**.

RATING	INDICATOR	DEFINITION
Reasonable assurance		The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with **low to moderate impact on residual risk** exposure until resolved.

The level of assurance given takes account of where we would reasonably expect the Health Board to be at this early stage in the process of implementation.

The Health Board has made reasonable progress in preparing to meet its obligations under the Wellbeing of Future Generations Act (WFGA). This

has included the emerging WFG Act informing the development of the Health Board's strategic objectives set out in Shaping Our future Wellbeing, mapping the Health Board's strategic objectives against the WFGA wellbeing goals and agreeing these objectives as the organisation's wellbeing objectives, which have been published on the Health Board's internet site. These objectives are clearly highlighted within the Health Board's IMTP and the Health Board has also completed a headline mapping of delivery of its wellbeing objectives against the WFGA wellbeing goals.

A WFG Steering Group is in place with representatives from a cross section of the Health Board at a suitably senior level. However, the recently drafted Terms of Reference (ToR) for the group require approval. The Health Board has identified the recently appointed Vice Chair of the Board as the 'WFG Champion'. However, the roles and responsibilities of the champion had not been formalised and agreed at the time of the audit review.

The Health Board is appropriately represented and attends all meetings of the applicable Public Service Boards (PSB), namely the Cardiff PSB and the Vale of Glamorgan PSB.

However, further work is required to ensure that the requirements of the WFGA are fully embedded within the Health Board, including communicating the requirements/ obligations under the Act to all staff within the Health Board and developing an approach to demonstrate how the Health Board intends to embed the requirements of the Act through its IMTP.

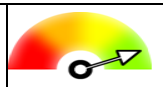
Assignment Status Schedule Appendix A

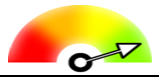
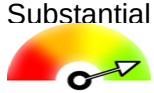
Planned output	Executive Lead	planned timing	Revised timing	Scope	Status/Comments	Assurance Rating	Audit Com.
Corporate governance, risk and regulatory compliance							
Health and Care Standards	Director Nursing	Q2-Q4	Q2-Q4	Updated approach from 17/18 to monitor on a more ongoing basis through the year.	Wip	ongoing	May
Claims Reimbursement	Director Nursing	Q3/4	Q3	Review re WRP claims standard.	FINAL	Substantial.	Dec
Annual Governance Statement	Corporate Governance	Q4	Q4	To review the content of the Statement.	Reported in annual report	n/a	Annual report
Governance, Leadership & Accountability Assessment	Corporate Governance	Q4	Q4	To review the process that has been adopted and evidence supporting the self-assessment.	Reported in annual report	n/a	Annual report
Board Working	Corporate Governance	Q2-3	n/a	n/a	Review deferred following discussions with DoF and CEO.	n/a	N/A
WAO Action plan	Corporate Governance		Q3/4	To provide assurance that the actions are progressing as planned with evidence available.	Final	Substantial 	Feb

8

Regulatory compliance- HTA action plan	COO		Q3/4	To provide assurance that the actions are progressing as planned with evidence available.	Final	Substantial 	Apr
Strategic planning performance management and reporting							
Business Continuity Planning Follow up	Director of Planning	Q4	Q2/3	Re Audit including follow up of agreed actions form previous Limited assurance report.	To be brought forward as per directive from Audit Committee Chairman. Mgt Exec Team requested for audit to be deferred to 1819. Pre Audit Committee –AC Chair requested doing in Q4. WIP	wip	May
Research & Development	Medical Director	Q1-2	Q2	Review controls in place to manage key risk areas within the process.	Fieldwork ongoing. Progress affected by delays on other reviews. Now draft report stage. Mgt responses 12/10. Issued as Final.	Reasonable 	Dec
Wellbeing Objectives	Director of Public Health	Q3/4	Q3	Review process for setting, delivering and monitoring objectives.	Planned to commence Q3. Met DPH. Way forward agreed. Being delivered Q4. FINAL	Reasonable 	Apr
Continuing Health Care	COO	Q3	Q3	Follow up from previous report.	To commence Q3. Draft issued. Executive	Limited at draft stage.	Apr/May

					Director has requested further discussion as a result of Limited rating.		
Strategic Planning/IMTP	Director of Planning	Q4	Q4	Review on going delivery and monitoring of the plans.	draft	Reasonable	May
Financial Governance and management							
UHB Core Financial Systems	Director of Finance	Q3/4		Review a selection controls in place to manage key risk areas across the range of the main financial systems.	Final		Feb
Charitable Funds	Director of Finance	Q1-2	Q1-2	Review governance arrangements, including the management of expenditure and donations.	Final Report. – 29/8.		Sept
Deloitte action plan	Corporate Governance		Q4	Review progress with the implementations of agreed actions.	Final	Substantial 	Apr
Cost Improvement Programme	Director of Finance	Q3	Q3	Review the development and delivery of the improvement plans.	Audit deferred as scope overlapped with WAO coverage.	n/a	-----
Costing	Director of Finance	Q3	Q3	Scope as per work agreed at all wales costing group.	Assignment Brief agreed. Work still to be completed.	WIP	may
Clinical governance quality & safety							

Annual Quality Statement	Director Nursing	Q1	Q1	Review content of AQS.	FINAL Aug.		Sept
DOLS	Medical director	Q3-4	Q3/4	Follow up of agreed actions form previous Limited assurance report	Draft issued. Executive Director has requested further discussion as a result of Limited rating. FINAL	Limited 	April
Serious Incidents Management	Nursing	Q2/3	Q2	Review Incident Closures	FINAL	Reasonable 	Dec
Mortality Reviews	Medical	Q1-2	Q3	Review Process and actions taken.	Planning – brief prepared. Start delayed. Medical Director requested end of October for fieldwork commencement. Field work currently underway.	WIP	may
Q&S Governance follow up	Nursing	Q1-2	Q1-2	Follow up of each of the eight report from 16/17.	Final Report. Individual ratings updated for each Clinical Board. Reasonable or Substantial.	As per report..	Sept.
Information Governance and Security							

IT Strategy	Director of Therapies	Q2	Q2/3	Strategic MTeD deployment	FINAL.	Substantial 	Dec
IT System	Director of Therapies	Q3/4	Q3	Welsh Patient Referral System	Final	Substantial 	Dec
Neuroscience IT system follow up	COO	Q2-3		Follow up on 16/17 report.	FINAL	Limited 	Dec
Virtulisation	Director of Therapies	Q3	Q3	Review the security and resilience of the updated virtualised environment.	Final.	Reasonable 	April
Cyber Security	Director of Therapies	Q2/3	n/a		Review deferred at request of UHB.	n/a	n/a.
DATA quality – EU 12 hour	Public Health			To be added As per CEO request.	Field work substantially complete. Exit meeting to take place. DRAFT report	Reasonable	May
Data Quality - RTT	COO			Data Quality	Initial draft	Reasonable	May
Data Quality Cancers targets	COO			Data Quality	Initial draft	reasonable	May

8

Operational service and functional management							
Clinical Board - Medicine	COO	Q1-2	Q2/3	PADRS and Mandatory training	Delay in brief sign off. COO wanted further discussion regarding sign off of brief and appropriateness of exec lead. Work commenced late august. Draft report 25/10 – Limited. Final 21/11,	*Limited* 	Dec
Clinical Board - Surgery	COO	Q1-2		Anaesthetists Rotas (initially to include staff management as well)	Delays in progress. Change of scope, work will now only cover anaesthetists' rotas as per discussions with COO. Delays in obtaining key information and agreement of report. . Finalised February		Feb.
Clinical Board – Mental Health	COO	Q1-2		PADRS and Rotas.	Draft report reasonable assurance. Report still Awaiting mgt. responses and sign off. FINAL		Sept
Clinical Board - C&W	COO	Q2		Medical Staff Study Leave.	Delays with field work and scope reduced as unable to obtain information. Work has now been completed. Draft report prepared for discussion. Now		Dec

8

					Finalised		
Accommodation/ Residences		Q1-2	Q3	Review arrangements in place for the management of residences.	Final		Feb
WLI follow up	COO	Q2-3	Q3	Follow up on 16/17 report.	FINAL		Feb
Stock control in localities follow up	COO	Q1	Q2/3	Follow up on 16/17 report.	Fieldwork in progress. Delay with IA. FW complete draft to be prepared. Draft report reasonable 8/11. FINAL		Dec / Now Feb
CD&T Additional Payments follow up	COO	Q2	Q2/3	Follow up on 16/17 work and briefing	WIP w/c 9/10. Draft report and ok from MT on 13/11. Now FINAL	n/a	Dec
PCIC incident management (rolled forward at request by PCIC)	COO	Q3/4	Q3/4	Review process for managing incident that cut across other areas.	Request to defer until 18/19.	-------	n/a
Workforce management							
Consultant Job Planning	Medical Director.	Q2-3	Q2-3	Review controls in place to manage key risk areas within the process**.**	Delays in obtaining key information, potentially limited assurance.	Draft report Limited	May
Nurse Revalidation	*Nursing*	*Q2-3*	*Q2-3*	*Review controls in place to manage key risk areas within the process.*	*Draft report – responses received 8/11* *Now Final*		*Decem ber*

Organisational Values	Director of Workforce & OD.	Q3/4	Q3/4	Review controls in place to manage key risk areas within the process.	FINAL	reasonable 	April
Capital and Estates							
Sustainability Reporting	Director of Planning	Q1-2	Q1-2	To provide an opinion that robust systems are in place to record and report minimum requirements as required by WG.	Final report Reasonable assurance. .		Septem ber
Model Ward	Director of Planning	Q1-2	Q3	Review arrangements following trial three month period	Key part of fieldwork delayed as information not available for audit. FINAL		Februar y
Cleaning Standards	*Director of Planning*	*Q1-2*	*Q2*	*Review current Service Provision.*	*Now Final. Field work completed. Sept. Awaiting management comments. Comments from GW 13/11 and Exec sign off.*	*Limited* 	*Decem ber*
Commercial Outlets	*Director of Planning*	*Q1-2*	*Q4*	Review arrangements for commercial outlets (inc. Aroma and spar UHL)	*Requested that work delayed until 18/19.*	-----	*n/a*
Carbon Reduction Commitment	Director of Planning	Q2/3		To ensure the Health Board complies with the requirements of the Order and that the information held is accurate, complete and the	Draft report issued 7/9/17. Final 12/10		Decem ber

8

				purchase of the credits is based upon actual usage or informed estimates.			
Neo Natal	Director of Planning	Q2/3		To review key aspects of the schemes	Audit still in progress		May
Rookwood Relocation	Director of Planning	Q2/3		To review key aspects of the schemes	Wip		May
Shaping Future Wellbeing Schemes	Director of Planning	Q2/3		To review key aspects of the early part of a scheme.	wip		May

Cardiff and Vale University Health Board

Audit Committee April 2018

8

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Deprivation of Liberties Safeguards Follow-Up

FINAL INTERNAL AUDIT REPORT
2017 /2018

Cardiff and Vale University Health Board

8.1

Private and Confidential

NHS Wales Shared Services Partnership

Audit and Assurance Service

CONTENTS

Review reference:	CUHB_1718_15
Report status:	Final
Fieldwork commencement:	January 2018
Fieldwork completion:	January 2018
Draft report issued	12th February 2018
Management response received:	10th April 2018
Final report issued:	11th April 2018
Auditor/s:	Ian Virgill (Deputy Head Internal Audit), Lucy Jugessur (Principal Internal Auditor)

8.1

Executive sign off :	Graham Shortland, Medical Director
Distribution:	Julia Barrell, Mental Capacity Act Manager Susan Broad, MCA / DoLS Co-ordinator
Committee:	Audit Committee

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

Please note:

This audit report has been prepared for internal use only. Audit & Assurance Services reports are prepared, in accordance with the Service Strategy and Terms of Reference, approved by the Audit Committee.

Audit reports are prepared by the staff of the NHS Wales Shared Services Partnership – Audit and Assurance Services, and addressed to Independent Members or officers including those designated as Accountable Officer. They are prepared for the sole use of the Cardiff and Vale University Health Board and no responsibility is taken by the Audit and Assurance Services Internal Auditors to any director or officer in their individual capacity, or to any third party.

1. EXECUTIVE SUMMARY

This follow-up review of Deprivation of Liberties Safeguards (DoLS) has been completed in line with the Internal Audit Plan.

The original DoLS Internal Audit report was finalised in March 2016 and highlighted a total of four issues which resulted in an overall assurance rating of Limited Assurance.

The relevant lead Executive for the assignment is the Medical Director.

The risks considered in the previous review were as follows:

- Non-compliance with DoLS due to lack of processes / awareness;
- Patients may be unlawfully deprived of their liberties; and
- The Health Board is unaware of issues relating to DoLS compliance.

Follow up work was undertaken to determine whether progress / full implementation had been made relating to the following recommendations (R) and respective agreed management responses (MR):

- R: The Health Board should ensure that accurate reports are produced confirming the total number of staff members that have undertaken the required DOLs training. This information should be submitted to the appropriate Committee meetings. Resource should then be made available to target those areas with low compliance that are high risk and provide classroom refresher training or other appropriate intervention in order to maximise compliance with DoLS training requirements (Finding 1, High Priority)

  MR: A training plan will be developed which prioritises training for those staff who are in charge of wards, deputies and Registered Nurses. These are the staff who, in practice, exercise the Managing Authority role.

  Staff training information will be accessed from LED and included in the DoLS reports to Mental Health and Capacity Legislation Committee (MHCLC);

- R: DoLS team should ensure that "Identifying a Deprivation of Liberty" guidance is added to the DoLSs section of the UHB Intranet. In addition, Clinical Boards and wards should be emailed to confirm that the guidance "Identifying a Deprivation of Liberty" is on the UHB Intranet. Wards must be instructed of the importance of ensuring that a DoLS request is undertaken for all relevant cases. (Finding 2, High Priority)

  MR: The Law Society guidance will be made available on the intranet.

  Clinical Boards and wards will be emailed to highlight that the guidance is available, along with the DoLS assessment pro forma;

- R: Ward staff should maintain all copies of documentation relating to DoLS requests and authorisation. (Finding 3, High Priority)

8.1

MR: Clinical Boards will be reminded that all relevant documentation must be kept in the patient record;

- R: Staff should attempt to ensure that all Standard and Further assessments are undertaken within the stipulated 21 days as set out in The Mental Capacity (Deprivation of Liberty: Assessments, Standard Authorisations and Disputes about Residence) (Wales) Regulations 2009. (Finding 4, High Priority)

  MR: DoLS Co-ordinator will establish a system to ensure that all applications for DoLS authorisations are dealt with within the statutory timescales, or before any existing authorisation expires, wherever possible;

2. CONCLUSION AND FINDINGS

In summary, progress against the four actions contained in the management responses that required implementation was as follows;

Priority Rating	No of Management Responses to be implemented	Fully Actioned	Partially Actioned	Not Actioned	*New Issue Identified*
HIGH	4	2	1	1	*1*
MEDIUM	0	-	-	-	-
LOW	0	-	-	-	-
TOTAL	**4**	**2**	**1**	**1**	***1***

The follow-up review concluded that based upon discussions with relevant management and review of the evidence provided, some progress has been made on actions on the DoLS review, with two actions completed.

However, there are two actions that haven't been fully completed and the required improvements have therefore not been made since the original report in 2016, with the position on one of the original findings having deteriorated. Further to this an additional finding has been identified, relating to the authorisation of completed assessments which also represents a deterioration since the original review.

There is still a low uptake with the number of staff having DoLS training. 139 staff have undertaken DoLS training between January 2017 and January 2018. Whilst Learning, Education and Development are recording details of DoLS training figures, at the time of the follow-up review these were not being reported to the MHCLC. Management have confirmed that this was an administrative oversight and reporting would commence to the next meeting. (Finding 1 – Partially Actioned).

The number of DoLS requests have increased but there has been no corresponding increase in the level of resources available to complete assessments. During the period April – December 2017 there were 731 DoLS requests with only 464 assessments completed. 95 of the completed assessments related to standard and further requests. Review of a sample of 10 standard and 5 further assessments identified that only 2 of each had been undertaken within the required 21 days. The longest time to undertake the assessment from the date of receipt was 298 days and it took an average of 80 days to undertake the standard and further DoLS assessments from the date that the DoLS request was received. This represents a significant deterioration from the results of the testing carried out for the original review. (Finding 4 – Not Actioned).

The follow-up review has also highlighted an additional issue around the timely authorisation of the completed DoLS assessments. This was not present at the time of the original review. Currently all DoLS assessments are authorised by either the Medical Director, Director of Therapies or Nurse Director. At the time of the review there were 42 DoLS requests waiting authorisation with some dating back to October 2017.

On the basis of this follow-up, the level of assurance that could be given as to the effectiveness of the system of internal control in place to manage the risks associated with DoLS has remained as **Limited Assurance**.

The management actions completed to date can be summarised as follows:

- "Identifying a Deprivation of Liberty" Law Society guidance has been added to the DoLS section on Cardiff and Vale UHB intranet. The Medical Directors PA sent an email to all leads to confirm that guidance is available, along with the DoLS assessment pro forma. (Finding 2 – Fully Actioned);
- The PA to the Medical Director sent an email to the Clinical Boards to advise that all relevant documentation in relation to DoLS should be maintained on the patient's records. In addition, when the MCA/ DoLS Coordinator visits or contacts the wards she emphasises that the DolS documentation should be kept on the patients records. (Finding 3 – Fully Actioned).

3. ADDITIONAL MANAGEMENT RESPONSE

The Medical Director has provided the following additional information about some additional steps that have been taken in recognition of the previous limited assurance audit:

- I think it is important to recognise that the LED team do have the figures for staff training and that this appears to have been an administrative problem in including those within the Mental Health and Capacity

legislation committee. I think the fact that these figures are readily available and can be immediately incorporated means that this is a significant completion of management action. It is clear that, although the figure may not have been incorporated formally into Mental Health and Capacity legislative committee there was qualitative data/comments being raised in those meetings.

- There are regular three monthly business meeting attended by the UHB and both the Cardiff and Vale Councils where plans for training are considered.
- Although our performance needs to improve in terms of the authorisation and delivery of DOLS forms, the relative performance of Cardiff and Vale is far better than our Local Council colleagues and the service and tripartite working arrangement does allow for focus on the delivery of urgent DOLS forms for the Health Board. Therefore, on a local basis our performance is far better than our partners.
- Further management action has been taken, over the last few months to reduce the backlog of time for the authorisation of forms and discussion of the standard authorisation process with Executive colleagues. Current negotiations include the uptake of DOLS authorisation signing by Senior Clinical Board officials. This will mean that the Clinical Boards function as independent organisations in their own right and, for example it would be appropriate for the Nursing Director of Medicine to complete the standard authorisation for a DOLS application in Mental Health. Also since the time of the assessment we now have had regular administrative time included as part of the Corporate office to do the initial administrative completion of the forms which allows for a quicker turnaround by the Executives currently performing that function.

Audit Assurance Ratings

 **Substantial assurance** - The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

 **Reasonable assurance** - The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

 **Limited assurance -** The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.

 **No Assurance** - The Board has **no assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Action is required to address the whole control framework in this area with **high impact on residual risk** exposure until resolved

Prioritisation of Recommendations

In order to assist management in using our reports, we categorise our recommendations according to their level of priority as follows.

Priority Level	Explanation	Management action
High	Poor key control design OR widespread non-compliance with key controls. PLUS Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in control design OR limited non-compliance with established controls. PLUS Some risk to achievement of a system objective.	Within One Month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. These are generally issues of good practice for management consideration.	Within Three Months*

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

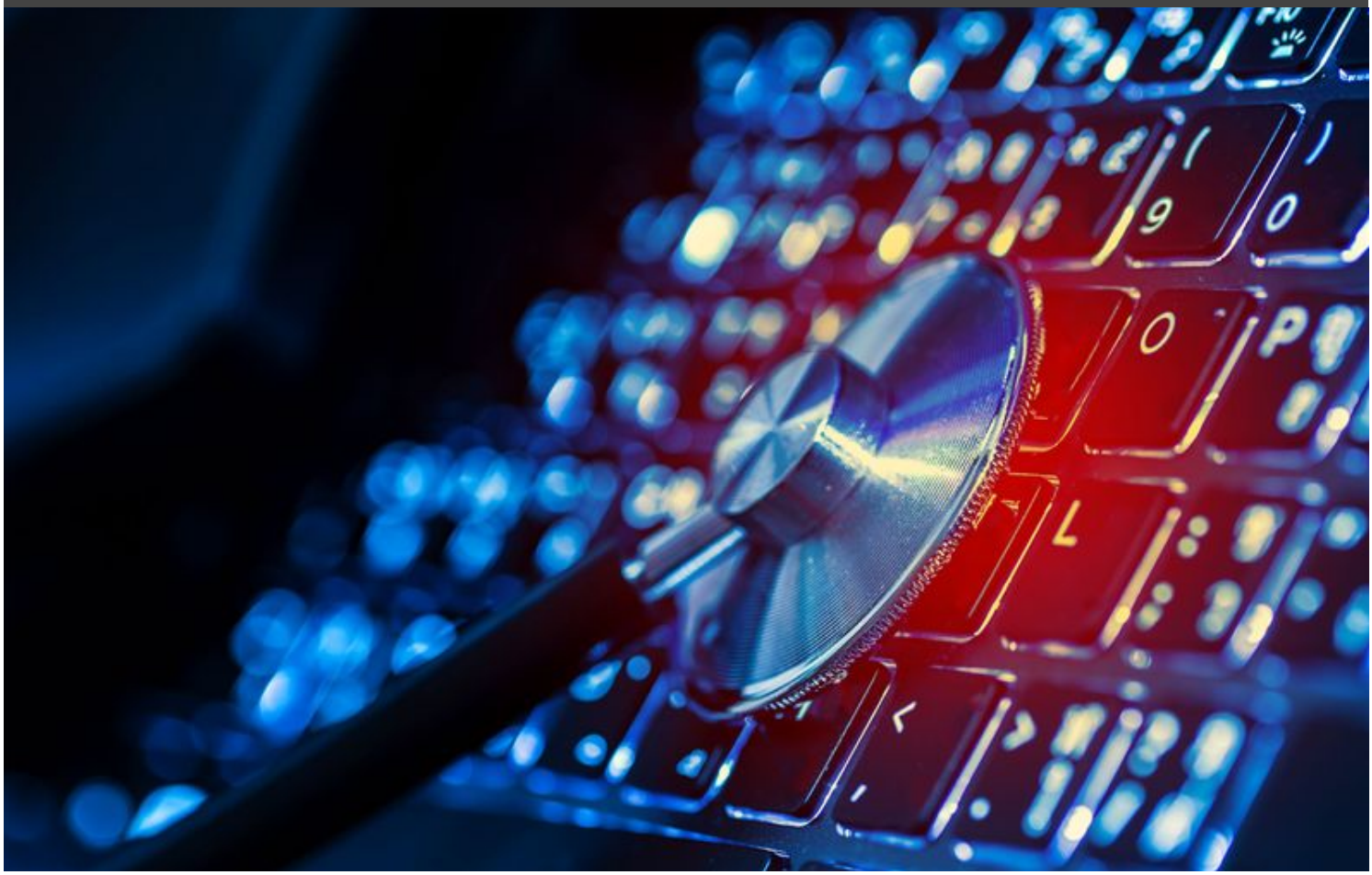
11 January 2018

Archwilydd Cyffredinol Cymru
Auditor General for Wales

Informatics systems in NHS Wales

WALES AUDIT OFFICE
SWYDDFA ARCHWILIO CYMRU

9



I have prepared and published this report in accordance with the Government of Wales Acts 1998 and 2006.

The Wales Audit Office study team comprised Mark Jeffs, Rachel Harries, Seth Newman, Emma Giles and Verity Winn under the direction of Matthew Mortlock.

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9

Contents

9

Summary report

Summary

1 Informatics (Box 1) can help the NHS to deliver better outcomes for patients and to make more efficient and effective use of scarce financial and human resources. The importance of informatics to the future sustainability of NHS Wales has been recognised most recently by the Parliamentary Review of Health and Care in Wales[1] and the Health Foundation[2].

Box 1: about health informatics

Every day in the health sector, information is collected, managed, used and shared. Good patient care depends on this fast and accurate flow of information.

Health informatics is about getting this information to the right person at the right time. Information delivery is crucial to health professionals and patients for the delivery of care. It is also about using information to manage and improve services. For example, collating data on patterns of demand and activity to forecast trends or better organise service delivery.

Source: Wales Audit Office/Health Education England

2 International evidence shows that healthcare systems with high-quality informatics systems that feed into an electronic patient record ultimately achieve better outcomes for patients. There are significant risks in continuing to rely on handwritten paper records and referral notes that are not always readily accessible to clinicians. Comprehensive electronic prescribing systems can prevent patients being given drugs they are allergic to or which have adverse reactions with other medicines they are taking. Giving clinicians in secondary care access to patients' GP records can enable them to make better diagnoses and decisions about treatment and, again, helps to reduce adverse incidents.

3 Good informatics systems can also help make the NHS more efficient, reducing the amount of time clinicians spend on administrative tasks. Also, comprehensive data about patients' conditions and treatment is key to better understanding demand and planning for service improvement across the NHS.

1 Parliamentary Review of Health and Care in Wales, **Interim report**, July 2017
2 Health Foundation, **The Path To Sustainability, Funding projection for the NHS in Wales to 2019-20 and 2030-31**, October 2016

4 Rolling out and maintaining informatics systems across the NHS is inherently challenging. NHS Wales is a large complex system, spread across multiple organisations, with staff operating out of hospitals, GP practices and in the community. To provide a sense of scale: NHS Wales has some 90,000 individual users working off 60,000 devices. There are 7 million emails sent into and out of NHS Wales each month and a further 70 million internal emails. The Welsh Laboratory Information Management System (WLIMS), which manages test results such as blood tests, generates 2.4 million results each month.

5 The NHS in Wales has had a long-standing vision of delivering an electronic patient record. This vision was initially described in the 2003 **Informing Healthcare** strategy[3]. There has been some refinement of the vision since 2003. The new 2015 strategy for digital health and social care (the 2015 strategy)[4] makes clear that the NHS in Wales is still working towards the goal of delivering a comprehensive electronic patient record. The vision does not involve the creation of a single digital system holding all of the information about a patient. Instead, the vision involves creating an electronic patient record by bringing together information that is held on multiple different systems. Clinicians and, where appropriate, patients, will be able to access the information through 'patient record applications' that are able to communicate with each other and the underpinning specialist applications and supporting services[5].

6 Box 2 and Figure 1 show how the vision is intended work in practice. Box 2 describes the four key patient record applications through which information can be accessed in primary, community and secondary care. Figure 1 shows the four patient record applications and the underpinning applications and services that are intended to enable the creation of an overall patient record. There are impacts for almost all parts of NHS Wales, with changes to administrative and clinical systems that require new and better ways of working to diagnose and treat patients. The development of a community-care information system is also intended to enable changes to the way health and social care services work together.

9

3 Welsh Government, **Informing Healthcare**, December 2003
4 Welsh Government, **Informed Health and Care – A Digital Health and Social Care Strategy for Wales**, December 2015
5 Throughout the report we refer to the various national applications and services collectively as 'systems'

Box 2: patient record applications through which information on multiple systems will be viewed

Welsh Clinical Portal (WCP)

When fully implemented the portal will display patient information from a number of computer systems and databases in use throughout Wales, allowing healthcare staff in hospitals to access a personalised workspace with their own patient lists, and allow them to order tests and view results. More features are being added to the portal over time with many hospitals now upgraded to include medicine transcribing, e-Discharge and access to the Welsh General Practice Record.

GP Practice Systems

There are currently two providers of GP practice systems across Wales. These systems give GPs access to their local records as well as to results from hospital tests and other information, such as discharge notes.

Communication between primary care and hospitals is facilitated through the Welsh GP Record. (WGPR). It provides a summary of important information taken from a patient's full GP medical record that will be accessible via the Welsh Clinical Portal. When fully implemented, the record will be able to be accessed by health professionals caring for a patient wherever the patient is in Wales. A patient will give consent for the healthcare professional to access their record every time it is needed, and every access to a WGPR is automatically monitored.

Welsh Community Care Information System (WCCIS)

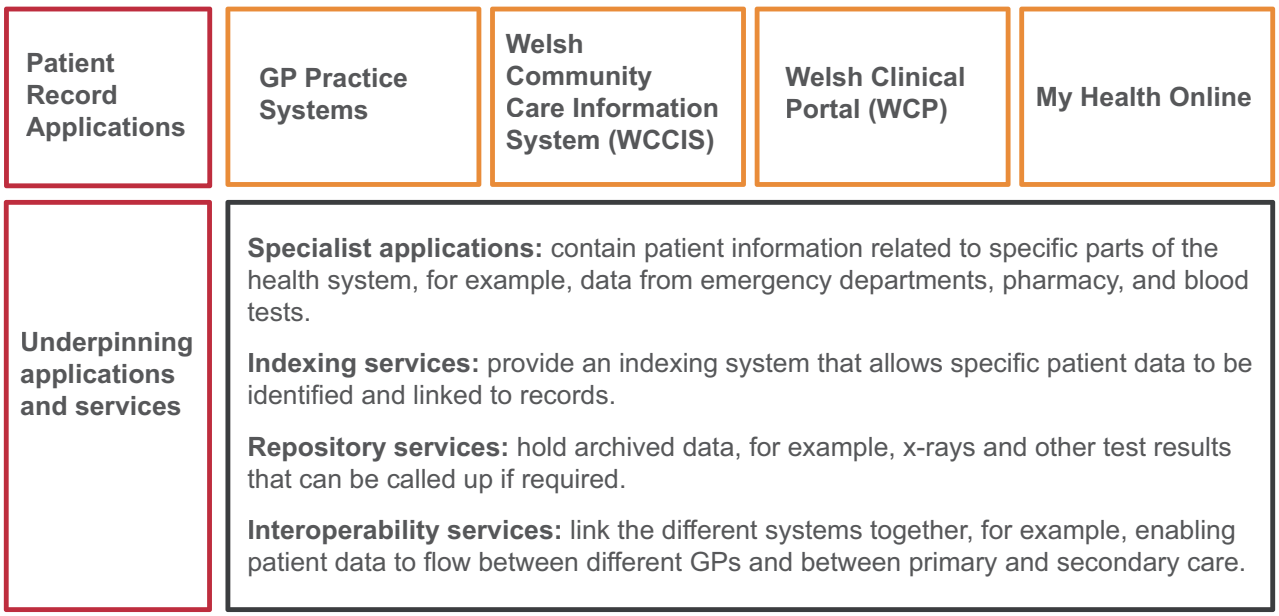
Will allow the sharing of vital information between health and social services in Wales through a single system. It will give frontline carers, therapists, mental health workers and community nurses the ability to co-ordinate patient cases through a shared electronic record of care with the aim of improving treatment. It removes the need for two databases held separately by health boards and local authorities. The extent to which WCCIS will act as a portal to other records is not yet clear and there are issues of what degree of access, for example, social care workers should have to patient's clinical records in primary and secondary care. The WCCIS programme has established an Information Governance Delivery Group and is working with the NHS Wales Information Governance Board and the Information Commissioner's Office on the sharing of information.

My Health Online

Currently, My Health Online provides GP patients with the ability to order prescriptions or repeat prescriptions and to book GP appointments online. However, the next phase of My Health Online is intended to give patients direct access to some of their GP records.

Source: Wales Audit Office

Figure 1: Key component parts of the electronic patient record



Note: this does not include the infrastructure provided by NWIS and NHS bodies and the corporate applications, such as Microsoft Office and Finance/HR systems that do not directly form part of the patient record.

Source: Wales Audit Office

7 The Welsh Government, NHS Wales Informatics Service (NWIS) and NHS bodies work together to deliver informatics systems for the NHS. The Welsh Government provides strategic direction, oversight and funding. Alongside other functions, NWIS develops and delivers specific national systems as well as certain aspects of the national ICT infrastructure, such as email and telephony services (Box 3). NHS bodies provide the hardware and infrastructure necessary to deliver services to staff and patients as well as some bespoke local systems. NHS bodies have a responsibility to support the development of new systems and to ensure that they are ready to receive and roll out national systems locally. They are also responsible for making the wider service and process changes that are needed to get the best out of new informatics systems.

Box 3: the NHS Wales Informatics Service (NWIS)

The Welsh Government established NWIS in 2010 to develop and support information and technology services for healthcare in Wales. NWIS is hosted by Velindre NHS Trust. NWIS brought together several organisations previously responsible for delivering the national information management and technology service in Wales. NWIS provides services across four main areas:

- Software: NWIS develops, supports and maintains application systems such as radiology (RadIS2), patient administration (Myrddin), cancer (CaNISC), and hospital pharmacy systems, the Welsh Clinical Portal, Individual Health Record and Child Health 2000.
- Procurement: NWIS procures national applications, systems and services on behalf of NHS Wales and supports their national deployment and hosting (for example, My Health Online and LIMS).
- Information: NWIS provides data warehousing and business intelligence services supported by the provision of national clinical classification, data standards and data quality standards.
- Infrastructure: NWIS provides 24-hour support for email and telephone, network communications, servers, databases, communication systems and access to the internet.

8 Several of our reports over recent years have identified problems with NHS informatics systems. For example, our reports on elective waiting times, follow-up outpatient appointments and maternity services have identified concerns about the main patient administration system (Myrddin). We identified concerns about e-prescribing in our 2016 report on medicines management[6]. Our local audit work during 2016 also picked up concerns about systems to support radiology services.

9 On behalf of the Auditor General, we reviewed the arrangements for delivering national informatics services. We focused on whether NHS Wales is well placed to achieve the intended benefits from investment in updated clinical informatics systems. For the purposes of this study, we include the Welsh Government's Department of Health and Social Services as part of NHS Wales. We focussed in particular on the arrangements within NWIS to deliver national systems. We looked at six specific systems in more detail as indicators of the wider approach to informatics (Box 4). This work included looking at health boards' engagement with the delivery of national systems.

6 Appendix 1 provides full references for these previous reports.

Box 4: informatics systems we looked at in depth

- Radiology systems (RADIS and the Picture Archiving Services – PACS)
- Laboratory system (Welsh Laboratory Information Management System – WLIMS)
- Myrddin – the main patient administration system
- Community systems – My Health Online (GP system for appointments and repeat prescriptions) and Choose Pharmacy

Appendix 2 provides more detail on these systems. Appendix 3 sets out all of the 'live' projects that NWIS is currently managing.

10 During the period of our review, the NHS Wales Internal Audit Services carried out a review of aspects of NWIS's, governance and delivery. Where appropriate, we draw on the findings of that work to inform our conclusions. We are also aware that the Parliamentary Review of Health and Social Care is likely to make recommendations on the future of informatics in NHS Wales.

11 **Overall, we found that although the vision for an electronic patient record is clear and key elements are being put in place, there have been significant delays in delivery. While there have been some important developments during the period of our review, there are still some key weaknesses in arrangements to support and oversee delivery and to ensure the systems deliver the intended benefits. The NHS has recently identified that significant additional funding will be required to deliver the vision, but further work is required on the detailed plans and to confirm the funding arrangements.**

9

Strategy: The high-level vision for NHS informatics is clear but, despite some recent developments, there remains a need for greater direction on 'Once for Wales', priorities and addressing known barriers to progress

12 The overall vision for an electronic patient record made up from multiple component parts is clear and was based on a sound rationale. NHS Wales learnt lessons from problems in England, which had sought to develop a system containing all of a patient's data on one single system. Nonetheless, in the decade or so since NHS Wales first adopted its approach, the global informatics market has changed significantly. There has been a growth in open source technology, which is available to use and develop for free, and also greater joint working between different providers of applications to ensure they can communicate with each other. It is therefore important that NHS Wales keeps its vision under review in light of changes in the market.

13 The Welsh Government's 2015 Strategy and underpinning implementation planning work have added a degree of clarity on costs and timescales for delivering the vision. However, in our view there remain some key gaps. In particular, we found that:

- the NHS has not been clear on the strategic priorities for informatics, adding more priorities while taking none away, although there have been recent developments to improve priority setting;
- there have been disagreements between some NHS bodies and NWIS about what the strategy of developing or procuring systems 'Once for Wales' means, although the NHS is now making progress in clarifying this issue[7];
- there is not yet an agreed and fully funded plan for delivering the vision; and
- many of the barriers to progress have been identified in previous reviews of informatics.

14 The NHS is taking steps to address many of the gaps through four new work-streams that have been set up to take forwards the delivery of the 2015 Strategy. The four work-streams should lead to clearer priorities and more effective delivery if they meet their objectives. It is too early to assess, at this stage, the likelihood that they will achieve the intended impact.

7 The key issues revolve around whether Once for Wales means NHS bodies must have the same national system in all places or different systems that are interoperable – capable of communicating with each other – through adopting common standards across NHS Wales. Paragraphs 1.7 to 1.15 set out the issues in more detail.

Leadership: Despite some positive progress, there remains scope to strengthen leadership of informatics across the NHS

15 There has been a strengthening of leadership at a national level in particular. Following a review in 2013, the NHS set up the NHS Wales Informatics Board (NIMB), which provides high-profile leadership and is currently chaired by the Chief Executive of NHS Wales having previously been chaired by the Minister for Health and Social Services. There have also been positive steps to establish national clinical leadership of informatics, through the Welsh Clinical Informatics Council (WCIC), which is supported by NWIS. However, we found that both forums could operate more effectively: NIMB by taking tough collective decisions on priorities for delivery, although recent changes to NIMB are intended to support clearer prioritisation; and WCIC by focusing less on detailed technical issues related to system changes.

16 Locally, there is considerable scope to strengthen leadership. NHS Wales lags the private sector in having informatics and ICT expertise represented at Board level. There is also a need to develop local clinical leadership of informatics. Clinicians struggle to find the time away from the day job to support and lead local delivery, which is hampering the design, testing and delivery of systems across Wales. The Wachter[8] review of informatics in NHS England identified similar issues and called for the development of a cadre of 'clinician-informaticists' with knowledge of both clinical and IT issues to lead the development and delivery of change.

Governance and oversight: There are significant weaknesses in NWIS' governance arrangements including a lack of independent scrutiny and unbalanced reporting of progress

17 We consider that the arrangements in place to oversee NWIS are, despite some improvements, weak. NWIS has an ambiguous formal status. It is hosted by Velindre NHS Trust. Velindre NHS Trust is accountable for aspects of NWIS' governance, such as finances and complying with standing orders, but not for its strategy and performance. In those key areas, NWIS is accountable to the Welsh Government. In our view, these arrangements are unsatisfactory and there is a need to clarify and strengthen lines of accountability between NWIS and the Chief Executive of NHS Wales and the Cabinet Secretary for Health, Well-being and Sport.

8 Report of the National Advisory Group on Health Information Technology in England, **Making IT work: harnessing the power of health information technology to improve care in England**, September 2016. Professor Robert Wachter chaired the National Advisory Group.

18 We also found that the reporting of NWIS' progress and performance to the Welsh Government and the public has tended to be partial and overly positive. Examples include selectively reporting information on performance and progress without context and key caveats. We note that there have been some recent improvements to reporting to the NIMB. Nevertheless, we consider that NWIS would benefit from having greater independent challenge and scrutiny and putting more of its internal decision making and progress reporting in the public domain.

Finances: The Welsh Government needs to decide whether and how to provide significant extra funding needed to deliver the vision and work with the NHS to strengthen collective financial planning for informatics

19 We estimate that the NHS spends less than 2% of its funding on ICT. That is significantly below the figure of 4% recommended many years ago by Sir Derek Wanless. In 2016, for the first time, NHS Wales has set out indicative costs and timescales of delivering its strategy. The cost over five years is tentatively estimated at £484 million on top of existing budgets. In our view the cost estimates could be optimistic and further work is needed to confirm them.

20 The Welsh Government now faces some tough choices in deciding whether and how it can afford the additional costs. Health boards also face a challenge to prioritise funding for informatics. Historically, they have not clearly prioritised this area, with most health boards cutting their spending on ICT in real terms between 2010-11 and 2013-14. In our view, it is important that the Welsh Government and NHS bodies make these financial choices giving due regard to value for money but relatively swiftly in order to enable the NHS to plan effectively for the actions necessary to deliver the new and updated systems in the time period.

21 The move to integrated three-year planning across the NHS offers the potential for a more coherent approach to financial planning for informatics. There are some practical challenges in aligning the timing of plans, so that NWIS and NHS bodies can have clear and consistent plans for funding informatics. Also, there is scope for the Welsh Government to provide greater certainty on future spending plans for informatics, over at least a three-year period.

Programme management: Many of the building blocks of the electronic patient record have been, or are being, rolled out but there remains a way to go until it is fully in place and NWIS lacks a clear method for prioritising its work

22 NWIS' programme contains the building blocks of the electronic patient record, many of which are being rolled out or are expected to be rolled out over the next five years if the funding is made available. Since the vision of an electronic patient record was first developed in 2003, there has been progress in putting in place electronic systems for GPs. Several national systems are now well advanced in the rollout process, including the national laboratory system and a national radiology system. The Wales Clinical Portal, which will enable hospital staff to access GP records and other data, is partly in place. There are also a wide range of supporting services and infrastructure that are either in place or partially in place, to support the ultimate delivery of an electronic patient record[9]. Nonetheless, there remain some significant gaps where paper records are still used and many informatics systems across the NHS still do not communicate with each other or the national systems.

23 Around 10% of NWIS' resources are used for new 'projects' with the rest dedicated to maintaining existing national systems and its other core functions (Box 3). As of May 2017, NWIS has 30 live projects in its programme (Appendix 3). NWIS does not have a clear strategic approach to prioritising which new systems to include in its programme or for prioritising resources to those already in the programme. In part, NWIS' plans reflect the priorities identified by NHS bodies in their three-year planning process. In practice, with limited capacity, NWIS prioritises its resources on the basis of operational needs and towards progressing projects and tasks in order to avoid delays in other areas.

9

9 Examples include the Wales Clinical Communication Gateway, which enables information to be sent between primary and secondary care and the National Intelligent Integrated Audit Solution which tracks exactly who is accessing patient data.

Project management: for various reasons, many national systems have been significantly delayed which causes widespread frustration

24 For a variety of reasons, many of the national systems are significantly delayed and probably cost more than expected. The exact scale and cost of the delay are difficult to quantify. Of the 30 projects that NWIS is currently rolling out, just seven are on target for timing milestones. Some of the seven are showing as on track against revised timescales, but are significantly delayed against the original timeframes. We are aware that some projects have been delayed by many years. There is also some frustration that some projects, such as electronic prescribing, have not yet reached the stage of being reported on because there is not an approved business case, despite the idea being discussed for almost a decade. The reason for the delays include:

- the lack of prioritisation at a national and local level meaning NWIS stretches its resources across too many projects.
- staff capacity issues, with NWIS carrying vacancies. While it has a lot of initiatives to attract new recruits, restrictions of national pay levels and high demand for developer skills in the private sector can make it difficult to recruit and retain senior software developers and business analyst staff to work with NHS bodies.
- difficulties within the NHS bodies themselves, including ICT infrastructure that needs upgrading to take national systems or underlying technical issues within NHS bodies' own systems.
- difficulties engaging and getting a clear direction from clinicians to develop and test systems and upgrades, which results in delays and also can cause rework where the systems developed do not match what the end-users expect.

Benefits management: There are concerns about the quality of some key national systems and a lack of monitoring data means it is unclear whether they are delivering the intended benefits

25 We found that there are some concerns about the quality and functionality of many of the national systems and that a lack of monitoring means it is unclear whether the intended benefits are being achieved. Health board staff expressed some concern about the functionality of all of the systems we looked at, with some deeply frustrated that they were not meeting their needs. There are particular concerns that the systems are not providing the important management information that is needed to plan services. NWIS runs Change Advisory Boards for most of its systems, with a view to involving NHS staff in improving systems, but we think these are too bureaucratic and not generally operating as effectively as they should. One health board had found that where NHS staff are not having their needs met by the national systems, they are developing workarounds, such as having their own personal databases, which present information security and governance risks.

26 For each of the six systems we looked at, we found that the intended benefits were clearly set out in the business case. However, it is not clear who is responsible for delivering and monitoring the benefits, with NWIS and NHS bodies both telling us that the responsibility lay with the other. A lack of monitoring meant that we found it difficult to track the intended benefits from the beginning of a project through to delivery. Where there is reporting on benefits, this tends to be partial and geared towards telling a positive story, rather than objectively reporting progress against the original intended benefits. The notable exception was the Choose Pharmacy project, which has been subject to a detailed review of actual and potential benefits.

Recommendations

27 We are aware that work is ongoing, to review aspects of the approach towards achieving the goal of an electronic patient record, including 'Once for Wales', the governance of NWIS and the level of funding for informatics. The recommendations below are intended to help support the NHS in Wales in reviewing its approach and, ultimately, reaching the goals set out in the 2015 strategy.

28 We make some specific recommendations based on the current vision of incremental development of new systems and a national infrastructure delivered by NWIS. We recognise that any changes to those arrangements may make these recommendations less relevant in some cases.

Recommendations

Strategy

R1 The vision for informatics of incrementally creating an electronic patient record is clear and had a clear rationale when it was first set following the 2003 strategy. However, the informatics market and community have moved on significantly since then. **The Welsh Government, working with NWIS and NHS bodies, should review the informatics market to test whether it offers new opportunities to achieve the aims of the Strategy.**

R2 NHS Wales has set up a task and finish group to seek to clarify the meaning of the 'Once for Wales' approach to developing and rolling out informatics systems. **The Welsh Government, working with NWIS and NHS bodies, should:**

- a **clearly define the balance and respective responsibilities between national systems led by NWIS and locally led systems;**
- b **ensure that national and local implementation plans are updated to reflect any implications for the funding, development and roll-out of informatics systems of the clarified approach to Once for Wales; and**
- c **prioritise the development of a set of common standards to ensure that systems procured or developed locally are compatible with other local systems and the national systems.**

R3 We found that the NHS has not set clear priorities for informatics. **The Welsh Government, NWIS and NHS bodies should agree a clear and achievable set of priorities for national informatics and resist adding new priorities without either deprioritising something else or adding new resources.**

R4 Many of the issues and concerns about barriers to progress that we found during our fieldwork have long been recognised. **The Welsh Government, NHS bodies and NWIS should produce an open and honest assessment of what has worked and what has not so far and produce a clear and jointly owned plan for overcoming the known barriers to progress. These documents should be in the public domain so that NHS staff can see that their concerns have been recognised and are being addressed.**

Recommendations

Leadership

R5 We found that there is considerable scope to strengthen national and local leadership on informatics across the NHS. **The Welsh Government should:**

- a **work with NHS bodies to develop options for strengthening representation of informatics at board level, including reviewing the merits of a board level Chief Clinical Information Officer (or equivalent) role;**
- b **work with NHS bodies to develop a clear action plan for the development of a cadre of senior clinician-informatics staff, in line with the recommendations of the Wachter review in England; and**
- c **identify opportunities to strengthen the informatics voice at the most senior level in the Department for Health and Social Services, including reviewing whether and if so, how to strengthen the roles of the NHS Wales Chief Information Officer and Chief Clinical Informatics Officer in NHS Wales' strategic decision-making process.**

Governance

R6 We found that the governance arrangements for overseeing and challenging NWIS are weak. **While the Welsh Government has written to Velindre NHS Trust requiring it to strengthen governance arrangements for NWIS, we consider that the Welsh Government should carry out a wider appraisal of options to strengthen governance and oversight of NWIS. The final arrangements should ensure that:**

- a **there is independent scrutiny of performance and progress;**
- b **there is greater transparency, with papers and minutes of discussions placed in the public domain; and**
- c **there are clear lines of accountability between NWIS and the Chief Executive of NHS Wales and the Cabinet Secretary.**

R7 We found that the progress reports that NWIS produces for the Welsh Government and the public do not provide a complete or balanced picture. **The Welsh Government should work with NWIS to improve the reporting of performance to tell a more balanced story of what is going well, where there are difficulties and why. Performance reporting should include information about progress against initial project plans, user satisfaction and concerns with existing national services as well as those new systems being rolled out.**

9

Recommendations

Finances

R8 The Welsh Government needs to decide whether and how to provide the additional funding that NHS bodies and NWIS have estimated is required to deliver the vision for an electronic patient record. **The Welsh Government should carry out a full cost-benefit analysis of the proposed investment, including the extent to which financial savings from new systems may enable funding to be redirected from existing services to invest in new informatics systems.**

R9 Despite some recent progress, there remains scope for better integration of medium-term financial planning of informatics across the NHS. **The Welsh Government, working with NHS bodies and NWIS, should set out clear and agreed medium-term funding plans for local and national ICT programmes. This should involve NHS bodies and NWIS working together before NHS bodies complete the first draft of their rolling three-year plans. It should also take account of any future decision on funding required to deliver the strategy.**

Project management

R10 NWIS is increasingly using the Agile approach to software development. There are potential benefits to this approach in terms of timeliness and quality, but the approach relies on deep engagement with clinicians and other end users, which has often been difficult to secure. **NWIS and NHS bodies should work together to:**

a **strengthen the relationship between developers and clinicians, particularly in designing and testing new systems and functions, so that there is a better collective understanding of what is wanted and what is possible; and**

b **engage with managers to identify their information needs as well as the needs of clinicians.**

R11 NWIS is developing but does not yet have a full workforce plan, and reports that it struggles to recruit and retain senior developer staff due to competition from the private sector **The Welsh Government, NWIS and NHS bodies should work together to explore options to secure the experienced ICT staff and developers that NWIS needs within the context of a comprehensive workforce plan for NWIS and taking account of the ICT staff available to NHS bodies.**

9

Recommendations

Benefits management

R12 We found that there is a lack of clarity as to responsibility for delivering the intended benefits of national informatics systems and a lack of monitoring. **The Welsh Government, NHS bodies and NWIS should work together to ensure that:**

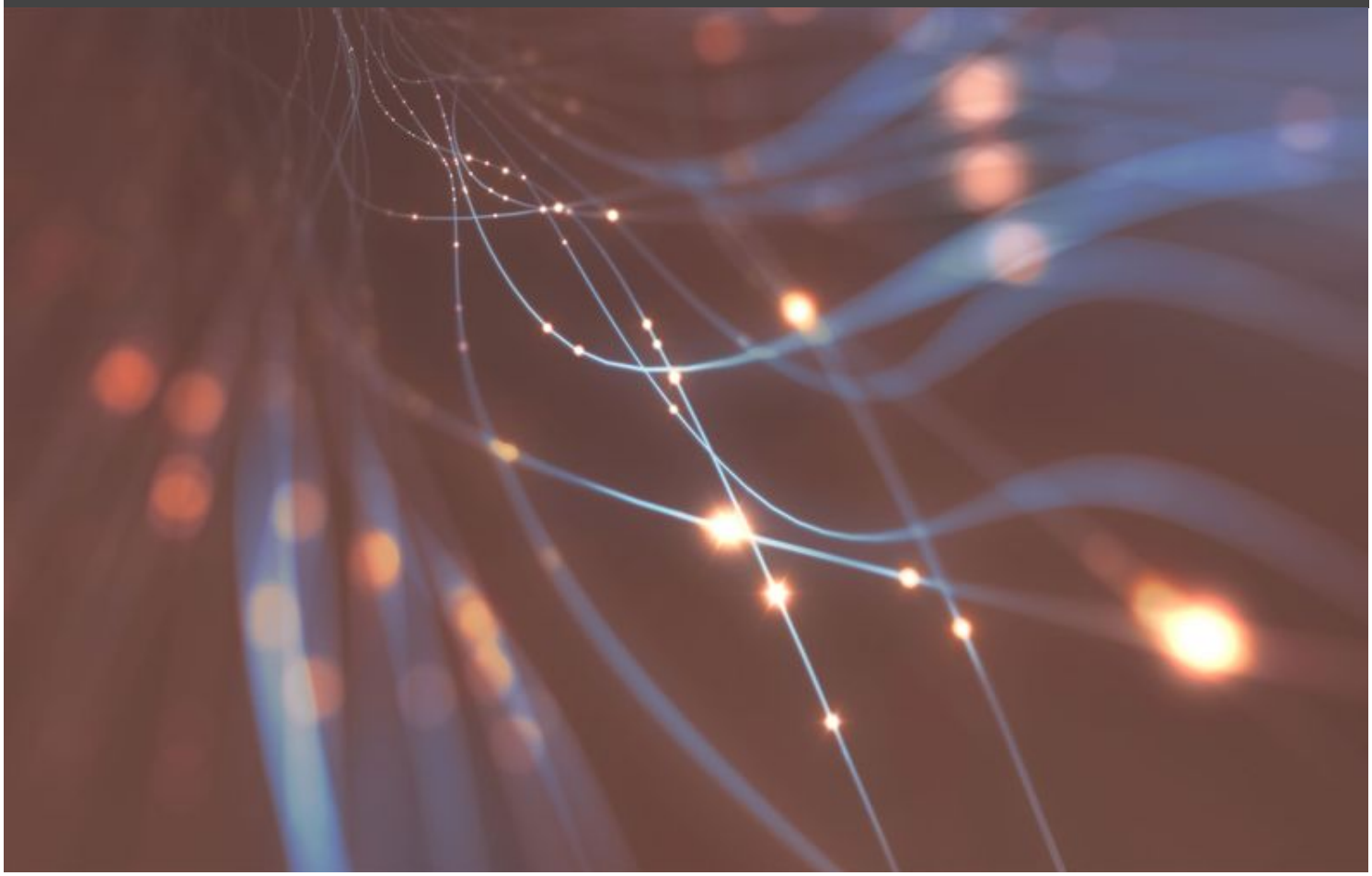
- a **there is a clear allocation of responsibility for achieving the benefits; and**
- b **there are clear responsibilities and processes in place for monitoring and reporting progress in delivering those benefits.**

R13 We found that many staff in the NHS are frustrated with some of the functionality and quality of national informatics systems. NWIS has a process for updating national systems, but there are concerns about the slow pace and lack of feedback and the Change Advisory Boards themselves could function more effectively. **NWIS should review its process for managing change requests and where necessary make changes to:**

- a **provide clearer feedback to the service about how their requests have been dealt with and whether and when any changes can be expected;**
- b **remain open to minor changes that could have a significant impact in improving end users' use and perception of the systems; and**
- c **provide clearer agendas and work programmes for the Change Advisory Boards to make them more focussed on enabling impactful improvements to systems.**

Part 1

The NHS has a clear vision for an electronic patient record but there are some key weaknesses in the arrangements to support and oversee delivery



1.1 This part of the report looks at the strategic direction for NHS informatics and the arrangements put in place to support and oversee delivery of that strategy.

Key issues we looked at

Issue	What good looks like
Strategy	A clear vision of what the strategy is aiming to achieve and how available resources will be prioritised to move from the current state to the desired position.
Leadership	High-profile and visible championing of the strategy across the whole system.
Governance and oversight	Clear systems in place to scrutinise and challenge delivery, including transparent reporting of progress and independent review.
Finances	A clear understanding of the costs of achieving the strategy and a plan for how those costs will be met over the period covered by the strategy.

The high-level vision for NHS informatics is clear but, despite some recent developments, there remains a need for greater direction on 'Once for Wales', priorities and addressing known barriers to progress

The NHS has set out a clear vision in 'Informed Health and Care' for an incremental approach to developing an electronic patient record using portals

1.2 In 2003, the Welsh Government published its **Informing Healthcare** strategy (the 2003 strategy) setting out its vision to transform healthcare through information technology. The 2003 strategy explained that in many cases, fragments of information were held by many professionals in many settings but none had access to the whole record, while patients rarely had access even to the fragments. The 2003 strategy concluded that this was having a damaging impact on patient outcomes as well as hampering the achievement of integrated health and social care. The 2003 strategy made it clear that a 'single record' was designed to overcome these problems of fragmentation although it did not specify what form the single record would take.

1.3 In December 2015, the Welsh Government published **Informed Health and Care: A Digital Health and Social Care Strategy for Wales** (the 2015 strategy). The 2015 strategy restated the commitment to the vision developed through the 2003 strategy. It recognised that the NHS had not yet achieved the ambition of creating a single patient record, and outlined the intention to build on existing work to continue to pursue this overall vision.

1.4 The 2015 strategy highlighted that in Wales, the adoption of new technology has been incremental and has aimed at being consensual. The NHS in Wales has sought to learn lessons from England, where there had been problems involved in developing a single integrated record held on one system[10]. The vision for Wales was different. Rather than a single system, information would be held on multiple systems, for example, systems for x-rays or blood tests, which could be accessed and brought together through 'portals' which clinicians can access anywhere, any time. GPs can access information through their systems, clinicians in hospitals will be able to access the information through the Welsh Clinical Portal. The extent to which the joint social care and community care system will act as a portal to enable access to all of a patient's information is not yet clear.

1.5 We consider that the overall vision of a single record, made up of multiple parts which clinicians and potentially patients can access, is clear. In our survey, Assistant Directors of Informatics overwhelmingly agreed with the statement that the Welsh Government had set a clear and consistent direction for clinical ICT systems across Wales. We also think that the vision of a cautious approach was based on a sound rationale. The healthcare informatics market was less mature at the time and there were multiple examples of new systems that were not working as intended. In particular, the NHS in Wales was right to learn lessons from approaches elsewhere, notably England's approach to a single system that held all of a patient's information.

1.6 Nonetheless, it is important that NHS Wales remains open to updating the vision in light of progress and changes in the informatics market. It has been more than a decade since NHS Wales adopted its vision. In that time, the global informatics market has changed significantly. In the USA, in particular, there has been rapid progress in rolling out electronic health records, albeit in a very different healthcare system. More generally, there has been a growth in open source technology, which is available to use and develop for free, and also greater joint working between different providers of applications to ensure they can communicate with each other.

10 See for example, National Audit Office, **The National Programme for IT in the NHS: an update on the delivery of detailed care records systems**, May 2011

The NHS is now making progress in clarifying what 'Once for Wales' means but still needs to agree what some of the key details mean in practice

1.7 The 2015 strategy uses the concept of 'Once for Wales' as a way of bringing together and deploying local and national resources. The importance of the Once for Wales concept has been emphasised by Ministers with responsibility for NHS Wales. The 2015 strategy states that a Once for Wales approach 'will create a solid platform for common standards and interoperability between systems and access to structured, electronic records in all care settings to join up and co-ordinate care for service users, patients and carers'. The strategy notes the Welsh Government's intention to 'build a more 'open' technical platform to allow greater flexibility in the development of new applications based on clear national standards, system interoperability and maintaining the partnership approach which has been a driving feature of our success so far'.

1.8 While there is general support for the principle of Once for Wales, there is disagreement within the NHS about what it means in practice. The description of Once for Wales and interoperability in the 2015 strategy are ambiguous and there are competing interpretations across the NHS. On the one hand, there is a view that Once for Wales means that all organisations must accept national systems developed or procured by NWIS. However, there is also a view that the emphasis on interoperability means individual organisations can develop or procure their own systems, provided they are compatible with national systems and those in other organisations.

1.9 There are valid arguments on both sides. For example, NWIS argues that having one system in all health boards is the better approach as interoperability is inherently more complicated and expensive to achieve, and becomes more so over time as systems diverge. There are potential cost savings from purchasing a system once for the whole NHS, rather than individual procurement at each NHS body. NWIS also argues that having one system is clinically safer as all clinicians will be familiar with it. In particular, it highlights that many clinicians, especially locums, will work in different hospitals and that having to be familiar with different systems introduces complexity and risk.

1.10 Others point to the greater flexibility, local ownership and faster pace that can be achieved by having different but compatible systems. They also point to changes in the market for digital healthcare systems, where suppliers are increasingly working in an open way and sharing their code in order to enable systems to communicate with each other. There are also concerns that the Once for Wales approach restricts NWIS and NHS bodies' flexibility and ability to utilise the latest technology. Several health board staff and board members were concerned that the pace of technological change compared to the pace of delivery of all-Wales systems, meant that NHS Wales was committed to a programme of work that was becoming increasingly out of date.

1.11 The debate over local autonomy versus central direction is not unique to Wales. In England, the Wachter review concluded that the NHS should learn, but not overlearn, the lessons of the previous centralised approach. It found that there are some circumstances where centralisation can be beneficial, such as efforts to improve the usability of systems, developing business cases, contracting and guaranteeing interoperability.

1.12 In mid-2017, NHS Wales set up a task and finish group in order to agree and communicate a clear definition of Once for Wales. The group will also agree which systems will be part of the core national system that organisations will be obliged to adopt, and will initiate work to establish a set of common standards to enable integration and interoperability. The task and finish group has agreed a broad definition of what Once for Wales means for patients, clinicians and service development, which has been approved by the NIMB. The group defined Once for Wales as 'being about all parties involved in health and care in Wales working collaboratively to add value and deliver the strategy of a single electronic patient record, ensuring that information is entered once and is made available to all those who need it, at the time and place they need it'.

1.13 The task and finish group recognises that further work is required to agree exactly which applications should be delivered on a national basis and also to define common standards. Also, further work is required to set out criteria for deciding which future systems should be developed or procured Once for Wales. The group agreed that there are benefits from having a single system in place across Wales, especially for those that work across organisational boundaries. However, it notes that other factors such as the pace of delivery, useful lifespan of the systems and pricing also need to be considered. As such, the tension between local versus national systems is not fully resolved but there is now a clearer framework for the debate.

1.14 Going forwards, it is important that the agreed position on Once for Wales is translated through into the strategic direction and detailed planning of system delivery, finances and staffing capacity. It is possible that decisions on Once for Wales will have an impact on the role and future resourcing of NWIS, especially if these decisions involve a shift away from a national approach to applications.

1.15 A more flexible approach will also require a rapid acceleration of efforts to set common standards across NHS bodies (Box 5). Despite the emphasis on interoperability for over a decade, at present, there are not common standards to ensure that the systems NHS bodies develop or procure are able to communicate with the other key systems, especially the national systems. In line with the recommendations of the task and finish group, the Welsh Government intends to set up a national board to take forwards work on developing common standards to enable the development of the electronic patient record.

Box 5: how common standards enable systems to be interoperable

In order for different informatics systems to be able to communicate with each other, there needs to be a common set of standards in place. Standards enable two important types of interoperability:

Technical interoperability – is the process of moving data between two systems. It is not dependent on the type of the information being moved or the distance between systems; it is concerned with the reliable delivery of information between systems.

Semantic interoperability – is the process of ensuring that one system can understand the information received from another. It must ensure that information can be used and interpreted without ambiguity. Critical to this is the need for aligning both data models as well as terminology.

The NHS is starting to fill in some gaps in the 2015 strategy but there remains a need for clearer strategic direction on applying lessons learned from past problems and priorities

1.16 The development of the 2015 strategy was informed by a Welsh Government stocktake of the Informing Healthcare Programme. The stocktake identified that it would take around four to five years to deliver the plans for an electronic health record and also identified a number of weaknesses that needed to be addressed.

1.17 In developing the 2015 strategy, the Welsh Government also engaged extensively across the NHS. Welsh Government officials gathered views from Chief Executives, Executive Leads and Assistant Directors of Informatics about progress to date and the key issues going forwards. Collectively, the stocktake and the combined views of senior executives across the NHS provided an insight into the problems that were hampering progress and a relatively clear picture of what needed to be done going forwards. Some of the key messages were as follows:

a there was support for the national approach but there were tensions over what needed to be delivered nationally and retaining the scope for local innovation;

b frustration with the pace of delivery;

c NWIS had over promised and under delivered; their resources were limited so they needed clear priorities to focus on delivering fewer things more quickly and be more transparent in their reporting of timescales and delivery plans;

d a loss of clear focus on the single patient record;

e no flexibility to make minor changes that would make clinicians' work easier; and

f concern about the lack of clarity regarding decision making about national systems, leading to the risk that those who shout loudest had a disproportionate influence.

1.18 However, the final 2015 strategy does not itself reflect on the barriers identified by NHS Executives or the issues identified by the stocktake and does not set out how the NHS can address them. There are also some key gaps in the strategy, notably around priorities, timescales and resources. As part of the process of developing the strategy, many senior NHS executives identified that NWIS had too many priorities which it was struggling to deliver. However, rather than clearly prioritise already stretched resources, the strategy added new priorities without taking any away.

1.19 Other than short-term commitments on a small number of areas, the strategy does not set out a timetable for delivery in any detail. The strategy notes that it is not a delivery plan, but greater clarity on timescales was one of the intended benefits of the refreshed strategy. While the comments from NHS executives highlighted the resource constraints that NWIS was under, there was no detailed financial analysis underpinning the strategy and it does not refer to finances.

1.20 The NHS is now moving towards greater clarity on some of these areas through more detailed implementation planning. Each NHS body has produced a Strategic Outline Plan, showing what further work is required to deliver the vision of an electronic patient record locally. In summer 2016, the NHS produced an implementation report which aggregated the local plans alongside NWIS' plans for national systems that support the local plans.

1.21 The implementation report provides some information on finances and timescales (paragraph 1.49), setting out indicative costs of delivery over five years. The cost estimates are not fully finalised as the Welsh Government has not committed to providing the necessary funding and further work to refine the plan is ongoing. This ongoing work will inform the production of a new NHS Wales national plan for informatics, covering 2018 to 2021.

1.22 While the implementation report was a step forward, it did not address the issues that have hindered progress to date. While there appears to have been some prioritisation, there is no supporting information about how and why some actions have been prioritised over others, so it is not clear whether the plan is based on operational practicalities or a more strategic approach. In our view, there is not yet a sufficiently clear direction on getting from the current position to the desired end goal.

1.23 Over recent months, the NHS has set up four delivery work-streams based around the themes set out in the 2015 Strategy (Figure 2). The four work-streams have developed draft roadmaps and should lead to clearer priorities and more effective delivery if they meet their objectives. It is too early to assess, at this stage, the likelihood that they will achieve the intended impact. In our view, in addition to detailed plans and roadmaps, there needs to be a full, open and transparent recognition of the lessons to be learnt as regards barriers to progress and a clear and agreed plan for overcoming them. Many of the issues known to have impeded progress in the past were still being reported to us as part of our review.

Figure 2: Work-streams taking forwards the delivery of the 2015 Strategy

Workstream 1: Information for You

Objective: focus on reducing duplication across projects/organisations and ensuring patients have a simple, clear 'electronic' way to move through health and care services.

Workstream 2: Supporting the Professional

Objective: to focus on mechanisms to help informed local and national clinical engagement about ICT, collaboration of development of national systems and promote an increase in usage of these systems.

Workstream 3: Improvement and Innovation

Objective: deliver Information Task Force aims, supported by infrastructure and innovation initiatives:

- a framework to share and use information, developing new digital solutions, ensuring we have skilled resources, and improvements in data quality;
- infrastructure to enable information to be shared and stored safely, eg cloud computing and cyber security; and
- an Ecosystem set up to promote innovation and provide flexibility in procuring/ developing new digital applications.

Workstream 4: A Planned Future

Focus on mechanisms to improve informatics planning, partnership working and stakeholder engagement at a local, regional and national level to help ensure that the opportunities in the strategy are prioritised and their delivery planned effectively. The workstream's purpose is therefore to accelerate the pace of delivery of agreed service/ business goals by accelerating the effective delivery of informatics improvements to enable and support the agreed service/business goals.

Note: the Information Task Force referred to under work-stream 3 was set up to develop guidance on making better use of health and care data. In October 2017 it issued a Statement of Intent 'Better use of health and care data for safe, effective care and efficient services'.

Source: National Informatics Management Board papers

Despite some positive progress, there remains scope to strengthen leadership of informatics across the NHS

The National Informatics Management Board is enabling stronger collective leadership but there is scope for it to become more directive and challenging on priorities

1.24 Following a review of NHS informatics in 2013[11], which identified a lack of collective leadership, the Welsh Government set up the NHS Wales Informatics Board (NIMB) in 2015. Initially, the then Minister of Health and Social Services chaired the Board but it is now chaired by the Chief Executive of NHS Wales. NIMB membership includes the executive leads with responsibility for informatics from NHS bodies, and senior officials from NWIS and the Welsh Government. The Board oversees Information Management and Technology in NHS Wales and drives the strategic agenda for a data-driven system, which can support improved access to information and the introduction of new ways of delivering care with digital technologies. The NIMB has played an important role in providing leadership in informatics. In particular, it has been a key driving force behind the development of the detailed planning to support implementation of the strategy (paragraph 1.20).

1.25 Several of the staff we met with during our health board visits reported that the NIMB meetings were getting more effective. They reflected that during the period the meetings were chaired by the Minister it helped them to get a clearer steer on some priorities and also helped the Minister to understand the practical issues. However, there were concerns about whether NHS bodies felt fully able to be candid about problems in front of the Minister. They felt that, with the Chief Executive of the NHS now acting as chair, there is a move towards a greater willingness to discuss difficult issues. NWIS considers that it is positive that NIMB now discusses priorities more but had found it frustrating that these discussions generally result in NWIS having more, not fewer, priorities.

11 Mel Evans, **Review of NHS Informatics in Wales**, November 2013 unpublished

1.26 We observed a meeting of the NIMB in September 2016. We observed many positive aspects of the meeting, including the wide range of issues covered and the opportunity to look at progress across the whole NHS. However, in our view there is scope for a tougher focus on collectively resolving difficult issues. Our observations suggest that there was, at the time, validity in NWIS' concerns that NIMB tends to add more priorities rather than identify what should be deprioritised. However, since we observed the meeting in 2016, the arrangements for NIMB have been amended, with new terms of reference and a focus on overseeing the four work-streams that are taking forwards delivery of the Strategy (paragraph 1.20). NIMB intends this work to provide greater clarity on priorities.

There has been a strengthening of national clinical leadership of informatics but there may be scope for greater representation of clinical informatics within the Welsh Government's Department of Health and Social Services

1.27 Clinical leadership is critical to the successful delivery of an electronic patient record. Good informatics systems enable clinicians to embed new ways of working and communicating with their colleagues. Often clinicians in the same field have different ways of working, both within and between different health boards. Clinical leadership is therefore required in standardising processes so that the ICT systems are developed to meet clinicians' needs, rather than requiring clinicians to change their practice to fit with the ICT. NWIS reports that clinicians complain about, and resist using, systems that have been developed without a high degree of clinical engagement and for which they feel little ownership.

1.28 In recognition of these challenges, NWIS has supported the development of stronger clinical leadership on informatics. In 2015, NWIS appointed a new Medical Director, who also became NHS Wales' Clinical Chief Information Officer, to lead on clinical engagement. NHS bodies commented positively on the role and the increased engagement of clinicians as a result. The equivalent role of Clinical Chief Information Officer is different in England and Scotland. In England, the Chief Clinical Information Officer has a clear place in NHS England's senior management structure, whereas in Wales the role sits in NWIS, albeit that there is a direct line of accountability to the Chief Medical Officer[12]. The Scottish Government is in the process of appointing its first Chief Clinical Information Officer, who will be a senior civil servant. In our view, there is scope for the Welsh Government to consider whether there are lessons to learn from the other parts of the UK.

12 Direct comparison with England is complicated by the very different governance arrangements, with the senior managers of NHS England being part of an independent management structure compared to Wales where they are part of the Welsh Government's Department for Health and Social Services.

1.29 The NWIS Medical Director/Chief Clinical Information Officer set up the Wales Clinical Informatics Council (WCIC) in 2015. The WCIC brings together senior clinicians with some responsibility for informatics in their organisations. Its aims include providing NWIS with advice and guidance on issues that practitioners will be more knowledgeable about; for example, professional standards and information requirements, as well as communicating with others in their organisations about what to expect at each stage of developing and implementing a new system.

1.30 While there is much support for the WCIC in principle, there are concerns that it is not fulfilling its potential to provide strategic clinical leadership. In part, this is because the WCIC also acts as a Change Advisory Board[13] to the Wales Clinical Portal. Some WCIC members consider that it spends too much of its time managing technical requests for changes to systems rather than focusing on the big challenges and difficult issues around clinical input to system design, development and delivery.

1.31 There is also scope to clarify how the Director of NWIS, who is also NHS Wales' Chief Information Officer, fits into the leadership structure of NHS Wales. The role is not represented at the NHS Wales Executive Leadership Board, which comprises all NHS Chief Executives. Instead, informatics is represented by the Chief Executive of Velindre NHS Trust as the Chief Executive with lead responsibility for informatics. Under previous arrangements, set up in 2010 after the health boards were first formed, the then Chief Information Officer sat on the equivalent of the NHS Wales Executive Leadership Board to input informatics expertise and leadership into key strategic discussions and decisions.

Within NHS bodies, informatics is not well represented at Board level and there is a need to strengthen local clinical leadership on informatics

1.32 The Welsh Government requires health boards to have nine Board-level Executive Directors covering defined areas[14]. These nine areas do not include informatics. As a result, no NHS body in Wales has a dedicated IT Executive Director post. Responsibility for informatics is always in addition to other aspects of a director's portfolio, so the priority given to informatics can vary as can the backgrounds of those responsible. While each health board has a non-executive Board Member with responsibility for IT, the specific role and responsibilities vary. It usually forms a small part of the relevant Board non-executive's remit and they do not necessarily have particular expertise in this area.

13 Paragraph 2.30 discusses the role of the Change Advisory Boards in greater detail
14 For NHS trusts, there are five mandated Executive Director roles.

1.33 Across NHS Wales, the IT lead sits with different Executive Directors including the Medical Director, Director of Primary Care and Mental Health, Chief Operating Officer, Finance Director. Executive and non-Executive leads are supported and briefed by the Assistant Directors for Informatics. However, this is not a substitute for having the expertise available during the board's discussions. In the private sector, an increasing number of companies have Chief Information Officers, or equivalent, that are members of the Board.

1.34 There is frustration both within NHS bodies and NWIS that clinicians are too busy with the day job to engage fully with the process of designing, testing and rolling out systems. While NWIS can financially compensate health boards for the use of clinicians' time to support national systems, the payments do not fully cover the actual costs of backfilling that post. There are a small number of very engaged clinicians across Wales, which is positive, but there is a risk that the informatics agenda then gets driven by the particular interests or priorities of a narrow group.

1.35 This challenge of clinical leadership is not unique to Wales. In England, the 2016 'Wachter' review called for the development of a cadre of 'clinician-informaticists' with knowledge of both clinical and IT issues to lead the development and delivery of change. The review notes that without the right people and skills, digital healthcare is likely to fail, or not realise its full potential. In our view, the lessons from the Wachter review apply equally to Wales. There is a considerable amount of work to do to enable the emergence of a group of clinicians that have both the time and the informatics training to lead locally and support the delivery of national systems.

There are some significant weaknesses in NWIS' governance arrangements including a lack of independent scrutiny and unbalanced reporting of progress

NWIS has an ambiguous formal status and there is a lack of independent scrutiny

1.36 NWIS has its own identity and management structure but has no formal independent status. It is not a standalone organisation with its own board and governance structures. In 2011, the Welsh Government and Velindre NHS Trust agreed that NWIS would be a 'hosted' body within Velindre. NWIS must comply with the Trust's standing orders and HR policies and reports to the Trust's audit committee. The Trust receives funding from the Welsh Government to carry out this role. However, the Trust's role does not involve holding NWIS to account for its strategy, performance or delivery. Day-to-day responsibility for this oversight role rests with the Welsh Government's Deputy Director, Digital Health and Care. NWIS is also held to account through twice-yearly review meetings chaired by the Welsh Government's Director of Primary Care and Innovation. While NIMB looks at progress across the NHS, it is not its role to hold NWIS to account. In late 2016, the Welsh Government concluded that NWIS' position as part of Velindre NHS Trust meant it had an ambiguous formal status in relation to key governance developments, such as the Putting Things Right agenda to manage serious incidents and concerns[15].

1.37 In our view, NWIS' ambiguous status is unsatisfactory and risks creating confusion about accountabilities. NWIS does not have some of the key elements of good governance that come with a more formal status. It does not benefit from the open challenge that comes from having independent board members scrutinise its performance and strategy. NWIS chooses what papers to put in the public domain, and there is very limited public reporting of its progress and performance (paragraphs 1.40 to 1.42). Also, in other NHS bodies the chair of the organisation is accountable to the Cabinet Secretary for Health and Social Services. Without an independent chair, the link between NWIS and the Cabinet Secretary is unclear.

15 The NHS in Wales follows the management of concerns process known as Putting Things Right. This process aims to: make it easier for people to raise concerns and for the NHS to better investigate, respond to and learn from those concerns.

1.38 The Welsh Government has taken some steps to strengthen its oversight of NWIS. In 2015, the Welsh Government asked its own internal audit function to look at the oversight of NWIS, focusing in particular on the monitoring of NWIS' performance. In addition, and at the request of the Welsh Government, NWIS commissioned NHS Wales internal audit services to review its funding and arrangements to secure value for money. The NHS Wales internal audit report reflects our own findings in key areas, including the need for strengthened oversight arrangements. Velindre NHS Trust and NWIS are in the process of agreeing an action plan to address the recommendations of the review. In July 2017, following a Joint Executive Team meeting, the Welsh Government wrote to Velindre NHS Trust stating that 'clearer arrangements for governance of NWIS' were required.

NWIS' reporting of performance and progress is not balanced and has tended to paint an overly positive picture

1.39 NWIS produces a monthly report to Welsh Government officials and the Cabinet Secretary, which summarises progress for each project. In response to the reviews by the Welsh Government and NHS Wales internal audit services, NWIS has amended its progress reports. It has included some additional data on finances, risks and its response to incidents and suggestions from NHS staff.

1.40 In our view there is scope to further strengthen progress reports to provide a more balanced picture of progress. The reports use a RAG (red, amber, green) system. However, the statuses are not always clearly explained. In some cases, projects are marked as 'green' for timing milestones despite being years behind schedule. This apparent anomaly is because NWIS has amended its timescales to reflect actual progress and set out a more realistic timeframe. These updates go through a proper change control process. However, this process and these changes are not fully explained in the reports. Although the reports include some data on operational performance, they focus primarily on projects that are currently being rolled out, which only account for around 10% of NWIS' resources. They therefore do not reflect some of the concerns and issues with existing national systems that are being reported to NWIS.

1.41 Performance reports in the public domain tend to depict a positive and optimistic picture. For example, NWIS's three-year plan for 2016-2019 reports on the progress made on delivering the 2015-16 plan but it lists positive outcomes only. It does not report the extent to which the previous plan has been delivered or whether actions remain outstanding. Where detailed figures are given, the context required to understand the data is missing. For example, the plan reports that patient registrations to My Health Online are in excess of 170,000, but does not reflect that this represents only 5.6% of the Welsh population and is significantly below the original aim of 872,000 patients[16]. NWIS' annual review also focuses only on the positive view. The review describes each of the main projects that NWIS is developing and delivering, but does not provide any information or context that would allow the reader to evaluate how well projects are progressing.

1.42 In our view, NWIS would benefit from taking a more balanced approach to reporting its performance. We do not think the information gives those responsible for overseeing NWIS and the public sufficient balanced information to understand progress. The lack of balanced information also contributes to reputational risks. NHS staff using NWIS' systems are acutely aware of instances when a system has taken longer to deliver, or has not delivered all the benefits it originally intended. That these issues are not reflected in NWIS's assessment of its own performance contributes to frustration and a perception that NWIS does not listen. A more balanced reporting style would allow NWIS, the Welsh Government and the wider NHS to have a more constructive conversation about where the issues affecting performance and delivery lie and how they can be resolved. We note that the most recent (October 2017) progress reports to the NIMB have been improved to give a more balanced picture of progress and actual use of systems.

16 Paragraph 2.39 provides further, more up-to-date, detail on the reporting of My Health Online benefits.

The Welsh Government has strengthened its oversight of business cases for new national informatics systems

1.43 NWIS follows the Five Case[17] approach to developing business cases for national systems. This approach is commonly used in the public sector and we have commented on its use in other reports[18]. We reviewed NWIS' business cases for several systems and found that they were generally clear and in line with guidance on estimating costs, allowing for optimism, setting out intended benefits and comparing different options. In some cases, the options included the relative costs and benefits of procuring a service or developing it in house.

1.44 While the capital funding elements of the business cases are generally clear, we consider that NWIS could be clearer on the revenue implications. In particular, the business cases we reviewed in relation to the six products were generally unclear as to the scale, and cost, of NWIS staff time in developing and supporting the new systems. They were also unclear as to the amount of staff time required in the health boards to support local roll-out of the systems. Staff at health boards told us that the amount of time they had to spend supporting the roll-out of a new system was far in excess of their expectations.

1.45 Historically, the processes for approving NWIS' business cases have varied. Because of the timescales involved, most of the systems we focused on were prepared many years ago. Some were developed iteratively, using NWIS' own discretionary capital funding, so did not require any approval from the Welsh Government. Also, some projects were funded through different initiatives, including Invest to Save, with different scrutiny processes.

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17 The five 'cases' are: strategic, financial, economic, commercial, management.
18 See Auditor General for Wales reports on **Welsh Government Acquisition and Ownership of Cardiff Airport**, January 2016, and **21st Century Schools and Education Programme**, May 2017

1.46 We looked in detail at the My Health Online business case scrutiny as a relatively recent project. We found that Welsh Government officials made detailed comments on the My Health Online Outline business case in 2010. These included some critical comments on the detail in the options appraisal. The intended next stage was for the Department of Health and Social Service's Infrastructure Investment Board to see a final amended business case and make a decision on whether to recommend funding. However, NWIS subsequently amended the business case and, in 2013, decided to fund My Health Online from its own discretionary capital. As NWIS needed no additional Welsh Government funding, the business case did not require formal Welsh Government sign-off. We found no evidence that the final amended business case was signed off by anybody outside of NWIS.

1.47 The Welsh Government has strengthened the approach to reviewing business cases. Since 2015, NIMB has had a role in approving all business cases for national systems. The Welsh Government has emphasised that it expects NHS bodies to have a stronger collective role in developing business cases for national applications. In 2016-17, the Welsh Government introduced a new distinct capital funding stream for ICT projects and new approval processes. Business cases will be reviewed by the Digital Health and Care Team within the Department. The business cases will be subject to further review by the Informatics Planning and Delivery sub-group of the NIMB. The Business Case will subsequently be reviewed by NIMB which will decide whether to endorse funding. The final decision will be taken by the Cabinet Secretary, on the basis of advice from officials.

The Welsh Government needs to decide whether and how to provide significant extra funding needed to deliver the vision and work with the NHS to strengthen collective financial planning for informatics

NWIS' core funding from the Welsh Government has fallen by 22% in real terms since 2010-11 and it appears that spending on ICT across the NHS is some way below recommended levels

1.48 An independent review of NHS informatics in 2013 found that in 2010-11, total spending on ICT across the NHS (including by NWIS) was around 2% of total expenditure. The review noted that this figure was some way lower than the 4% that Sir Derek Wanless had recommended that the NHS across the UK should be spending on ICT in 2003[19]. NWIS' 2016-17 budget is around 0.8% of health spending (excluding depreciation).

1.49 Our local diagnostic reviews of NHS bodies' ICT capacity and resources found that NHS bodies reported spending an average of 0.8% of their budget on ICT in 2013-14. That figure varied from 0.61% to 0.9%. Between 2010-11 and 2013-14, all health boards, apart from Cardiff and Vale University Health Board[20], had reduced their spending on ICT in real terms. The reduction varied from 3% to 31%. Assuming that spending position has risen in line with overall NHS budgets in the period since 2013-14, we estimate spending on ICT to be in the order of 1.6% of total spending. This is a broad estimate and meeting a spending target is no guarantee of effective delivery.

1.50 In 2016-17, NWIS' total revenue budget, excluding depreciation, was around £54 million. It had £4.9 million in discretionary capital and also secured £1.9 million in capital from the Welsh Government for specific projects and systems. The largest component of NWIS' budget is the £27.9 million of programme funding from the Welsh Government, which covers most of NWIS' core functions, including developing and supporting national informatics systems (Figure 3)

19 The Report of the Project Team advised by Derek Wanless, **The Review of Health and Social Care in Wales**, June 2003

20 Cardiff and Vale University Health Board noted that the increase over the period was due to one-off capital spending on ICT fixtures at the National Children's Hospital and two new buildings. It reports that without these one-off items, spending would have fallen over the period.

Figure 3: Sources of NWIS income, 2016-17 budget

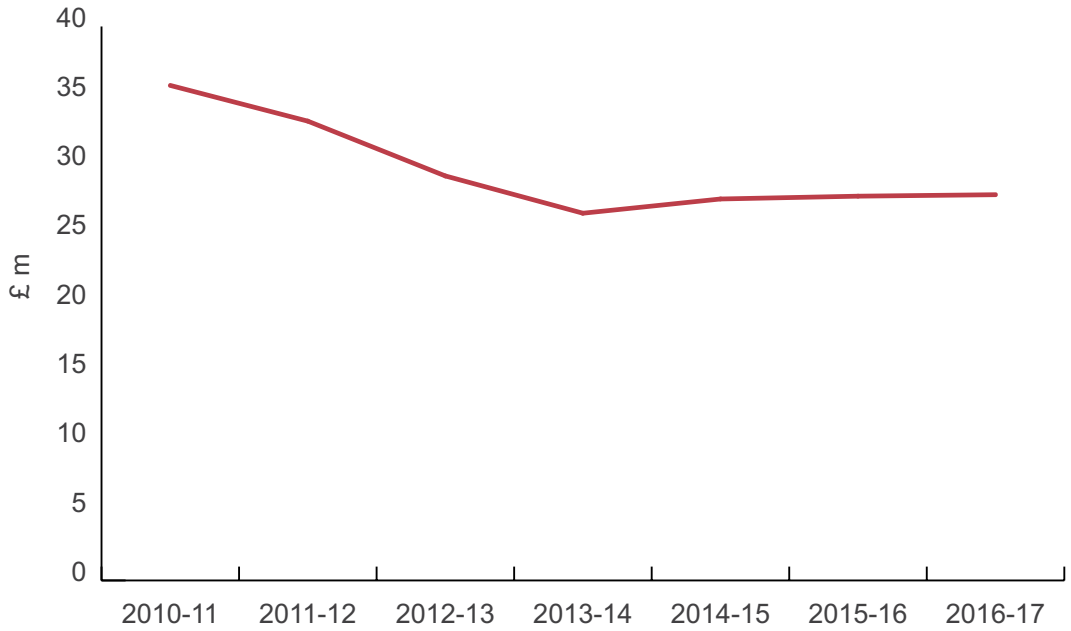
Type and source	Income (£ million)
Revenue	
Programme funding from the Welsh Government	27.9
Primary care services for supporting national systems	13.3
NHS bodies' services for supporting national systems	9.7
Other, includes funding from the Welsh Government for specific initiatives and income from services to the NHS in England, Northern Ireland and the private sector	3.3
Total revenue	54.2

Capital funding (all from the Welsh Government)	
Discretionary capital	4.9
Specific project funding	3.4
Total capital	8.3

Source: NWIS and Welsh Government data

1.51 Figure 4 shows that, in real terms, the programme funding from the Welsh Government was considerably lower (22%) in 2016-17 than in 2010-11. There has been a small real-terms increase each year since 2014-15 but these increases have not brought the funding back to levels seen at the start of the decade.

Figure 4: NWIS programme funding from the Welsh Government in real terms, 2010-11 to 2016-17 (at 2016-17 prices)



Source: Wales Audit Office analysis of data supplied by NWIS

1.52 The July 2017 **Interim Report** of the Parliamentary Review of Health and Care set out that it had heard concerns about the lack of resources for ICT. While it did not reach any conclusions as to whether those concerns were indeed founded, it pointed to concerns that NWIS had insufficient capacity to develop new systems. In particular, it identified that most of NWIS' staff were required to support existing infrastructure and systems and had little time to dedicate to new systems. NWIS made a similar point to us in terms of its budget. It reports that around 90% of its budget is largely ring-fenced for pre-existing or contracted services. Its figures show that just 10% of its budget is allocated to what it calls 'projects'. However, 'projects' only includes national systems that are in the process of being rolled out. Some of the 15% of its funding that is allocated to application development and support will be used for improving and adding new functionality to existing systems to make them work more effectively.

For the first time, the NHS has an estimate of the cost of achieving the vision, currently an extra £0.5 billion, although the Welsh Government and NHS bodies have not yet committed to providing the funding

1.53 During 2016, NHS bodies and NWIS developed the strategy implementation report which, for the first time, sets out indicative costs and a timeframe for delivery of the strategy. The report brings together the collective costs of all of the Strategic Outline Plans for delivering the vision in each NHS body and NWIS' contribution to national systems. The total cost over the five-year period 2016-17 to 2020-21 is tentatively estimated at £484 million on top of existing budgets, with £195 million capital and £288 million revenue (Figure 5). Of the £484 million, £196 million (40%) is identified as needed by NWIS, with the rest required by health boards and NHS trusts. The Welsh Government has not yet committed to providing this funding.

Figure 5: Additional investment required to deliver the strategy between 2015-16 and 2020-21

	Required funding (£ million)		
	Capital	Revenue	Total
NWIS	40.0	155.8	195.9
Health boards and NHS trusts	155.3	132.5	287.8
Total NHS Wales	195.3	288.4	483.7

Source: NHS Wales strategy implementation report

1.54 In our view, some of the timing assumptions in the draft plan seem highly optimistic in light of recent experience. Given that there are fixed costs involved in delays by NWIS, it seems reasonable to plan for costs to be higher than anticipated if there are any significant delays, along the lines of those experienced in the programme to date. There is further work to be done to develop the cost estimates into clear business plans and it will be important for those plans to be realistic about timings and costs in light of progress to date.

1.55 The Welsh Government and NHS bodies will need to make some tough decisions as to whether they can prioritise investment in the delivery of the vision. This is a particular challenge in an environment where public funding is tight due to austerity, there are significant cost demand pressures on services and there is uncertainty about future revenue budgets.

1.56 In the draft budget for 2018-19, the Welsh Government set out that it is reducing spending on the Efficiency Through Technology Fund[21] from £10 million to £6 million. The Welsh Government expects NHS bodies to increasingly fund ICT improvements from their core funding. Given the wider pressure on the Welsh Government and NHS bodies' core budgets, we consider that the Welsh Government should, as a matter of priority, set out clearly whether and if so, how, the delivery of the plan will be funded over the five years.

Three-year integrated planning and local three-year digital health and social care plans are a step forwards but there is a need to strengthen arrangements for collective financial planning

1.57 NWIS is trying to work in line with the three-year planning framework for other NHS bodies set out in the NHS Finances (Wales) Act 2014. Under that Act, each year NHS bodies are required to produce a rolling three-year integrated plan covering finances, service delivery and workforce. To meet the duty under the Act, NHS bodies need to produce a plan that is signed off by the Welsh Ministers. Although NWIS is not required to produce a three-year plan, it does so in order to provide consistency and as part of good medium-term financial planning.

9

21 Efficiency Through Technology was set up in 2015 to accelerate the demonstration, evaluation and adoption of new products and services into practice, increasing efficiency and providing patients with better outcomes in accordance with the principles of prudent healthcare.

1.58 There are some practical challenges to joining up planning across NHS bodies and NWIS. NWIS uses the first iterations of NHS bodies' three-year plans to identify where they imply commitments from NWIS, including financial or staff commitments. However, it can be difficult for NWIS to keep track of, and respond to, changes as the plans evolve. Also, just three out of the seven health boards have approved three-year plans, with four working to one-year plans[22]. The different statuses of the plans add further complexity for NWIS in trying to plan over a three-year period. NWIS officials report that they have had difficulties getting timely feedback from the Welsh Government on NWIS' three-year plan. The Welsh Government tends to provide feedback during the middle of the financial year which focuses primarily on the budget rather than the operational detail of the plan.

1.59 Going forwards, the development of local Strategic Outline Plans and the development of a national informatics plan should provide greater certainty on expectations over the medium term that NWIS can factor into its plans. Nonetheless, we consider that there is scope for NWIS, the Welsh Government and NHS bodies to work together better to better integrate the three-year planning process.

1.60 The Welsh Government is making some good progress in strengthening its approach to capital funding for ICT. For 2016-17 onwards, the Welsh Government has introduced a specific capital funding stream and approval process for ICT projects (paragraph 1.47). Previously, there was a tendency for ICT capital to be allocated late in the year to ensure that funding allocated to other projects but not spent was used up in the year. For example, there was a round £10 million of such funding across the NHS in 2014-15. The introduction of a distinct capital funding stream should help to encourage a more strategic approach although there will always be a need for NHS bodies to have contingency plans to make use of capital funding where it becomes available at short notice.

22 See our report, **Implementation of the NHS Finances (Wales) Act 2014**, July 2017

Part 2

Key elements of an electronic patient record are being put in place but significant delays and issues with functionality cause frustration and it is unclear whether intended benefits are being achieved

2.1 This part of the report looks at progress in rolling out the various applications and securing the benefits they are intended to bring. We look in particular at the overarching programme of systems that will ultimately go into producing an electronic patient record. We then consider the management of individual projects to time and cost, focusing in particular on the sample of six systems that we focused on (Appendix 2). Finally, we look at the issue of the quality of the systems and the extent to which the NHS can demonstrate that they are delivering the intended benefits.

Key issues we looked at

Issue	What good looks like
Programme management	A clear process for selecting the right projects to deliver the over-arching goals and for prioritising projects and actions.
Project management	Planning and delivery of projects so that they are on time and budget.
Benefits management	There is clear ownership by the right people of the intended benefits and a clear approach to ensuring those benefits are achieved and measured.

Many of the building blocks of the electronic patient record have been, or are being, rolled out but there remains a way to go until it is fully in place and NWIS lacks a clear method for prioritising its work

NWIS' programme contains the building blocks of an electronic patient record and many of the key features are being rolled out but there is still a long way to go until a full electronic record is in place

2.2 There is a widespread recognition that progress towards the patient record has been slower than expected. The NHS has never set a formal deadline by which time it expected a full record to be in place. However, there is widespread disappointment across the NHS that the vision has not yet been realised, nearly 14 years after the NHS committed itself to developing an electronic patient record.

2.3 Although slow, there has been progress over the past 14 years. Many of the NHS staff we met with highlighted that progress has been quicker in developing systems for primary care. The GP portal has been in place for several years, although it is not fully linked up to other systems. Several national systems are now well advanced in the rollout process, including the national laboratory system and a national radiology system. The Welsh Clinical Portal is live in every health board, although not on all wards within the health boards and with limited functionality. There are also a wide range of supporting services and infrastructure that are either in place or partially in place, to support the ultimate delivery of an electronic patient record. Examples include the Wales Clinical Communication Gateway, which enables information to be sent between primary and secondary care and the National Intelligent Integrated Audit Solution which tracks exactly who is accessing patient data.

2.4 The 30 live projects within NWIS' current programme of work will start to fill in some of the remaining gaps in functionality. There are gaps where services are still managed through handwritten notes and forms. For example, there is not a system for electronic prescribing, although NWIS has recently developed a business case which will aim to fill this gap by 2023 (paragraph 2.12). Also, there are still informatics systems within NHS bodies that do not communicate with each other or the national systems so the patient data cannot be shared and viewed electronically.

2.5 The strategy implementation report and the four workstreams set out a pathway to a largely complete electronic patient record by 2021. However, the resources are not yet in place to achieve that goal and there is considerable further work to be done to verify the timings and costs of the various systems (paragraph 1.54).

NWIS' prioritisation within its programme is weak and there is no clear process for determining which projects to prioritise during times of capacity constraint

2.6 As at May 2017, NWIS was involved in managing the delivery of 30 different projects which in some way contribute to the achievement of an electronic patient record (Appendix 3). These 30 live projects form a small part of NWIS' total work, accounting for just 10% of NWIS' resources (paragraph 1.52).

2.7 In paragraphs 1.17 and 1.26, we noted that the NHS has struggled to provide a clear set of priorities for informatics and for NWIS and that in practice the list of national priorities keeps growing. These difficulties of prioritisation are also translated through to NWIS' work programme. We found that NWIS itself, does not have a clear process for prioritising projects. NWIS sent us a document which sets out its priorities. However, the document is largely a list of everything NWIS does or is planning to do. In effect, everything is a priority.

2.8 Senior NHS executives identified that NWIS was struggling to deliver its existing priorities when the strategy was developed during 2014 (paragraph 1.17). We heard the same concerns during our fieldwork. If anything, the situation has got more challenging as more projects and priorities have been added to its programme. The number of systems that NWIS is involved in implementing and developing is large and its capacity to deliver them is finite. There is a widespread frustration among NHS bodies that NWIS is juggling too many projects and developing new systems without fully implementing existing ones.

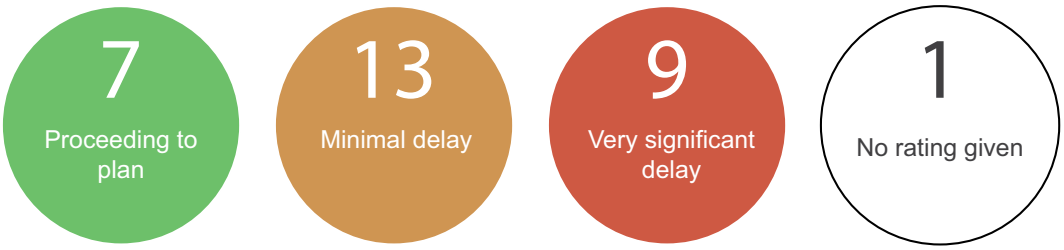
2.9 In practice, NWIS prioritises staff resources to projects where there are operational 'dependencies'. For example, it will prioritise resources towards a project or task that is needed because other systems or projects are reliant on making progress with that task. That seems a reasonable approach from an operational perspective, as it prevents knock-on delays. However, the approach means NWIS is often in a fire-fighting mode to try to limit knock-on consequences. In our view, a more strategic approach to prioritising, including not taking on more projects and stopping those of lower priority until the top priority systems are completed, may be more sensible.

For various reasons, many national systems have been significantly delayed which causes widespread frustration

Many systems are very delayed against the original timescales

2.10 NWIS' monthly report to the Welsh Government from May 2017 shows that, out of 30 current projects currently being implemented only seven are rated as green on milestones being achieved (Figure 6). As noted in paragraph 1.40, some of those ratings reflect progress against milestones that have been amended, following NWIS' internal change control process. For example, the project to merge instances[23] of RADIS 2 at three health boards is rated as green. In fact, this project has been significantly delayed against the original planned timescales by problems with the radiology coding at Cwm Taf University Health Board (paragraph 2.21).

Figure 6: NWIS project status against milestones, as at May 2017



Source: NWIS

23 An 'instance' refers to a separate database that is specific to a particular location. It is used in order to differentiate from 'versions', which refer to updates and upgrades. For example, two hospitals could have the same version of RADIS, ie they are both equally up to date, but they would still have separate instances because staff in one hospital would not be able to access the records held in the other. Separate instances mean that clinicians cannot access patient information across administrative boundaries.

2.11 For many systems, the delays have been substantial. For example, WLIMS was intended to be delivered by January 2013 but still has modules outstanding more than four and a half years later. Health board staff identified concerns about another system called GP2GP, which was being discussed six to eight years ago but is still not scheduled to be fully implemented until 2020. Similarly, NHS staff reported that the implementation of GP test requesting was being discussed over 10 years ago. Nonetheless, these two systems are rated as 'green' in NWIS' progress report. NHS bodies also pointed to slow progress with newer systems such as the Welsh Community Care Information system, which is intended to bring together information between health and social care.

2.12 The delays to systems referred to in Figure 6 relate to projects that have already commenced. Additional ICT initiatives have also been delayed in the early planning phase and do not therefore feature in NWIS's monitoring. For example, our 2016 report on medicines management highlighted that the NHS has had an intention to implement an electronic prescribing system since 2007. Progress has been slower than anticipated, partly because other pharmacy-related IT projects in NWIS have taken precedence. Although a business case for a national electronic prescribing system has been drafted by NWIS, the rollout of the system is not due until 2023. Progress in developing this system has only been included in the most recent update reports, despite the longstanding commitment.

There is widespread frustration at the delays to delivery of systems and, while a lack of information makes it difficult to quantify, some systems are over-budget

2.13 We found that NHS bodies are deeply frustrated over the slow speed of delivery of national systems. NWIS staff also reported some frustration at what they saw as a lack of direction and engagement from health boards, particularly clinicians, in designing and rolling out new systems (paragraph 2.17). These frustrations are, in our view, having a significant negative impact on the relationships between NWIS and NHS bodies.

2.14 The delays to systems are also having an impact on the costs of delivering the systems. For those systems that NWIS develops in-house, the main cost is staff time. NWIS has not consistently identified expected staff time and costs in business plans (paragraph 1.44) and does not measure the amount of staff time allocated to each project. It is therefore not possible to verify whether costs have exceeded the original plans. However, the scale of delays across the programme suggest that systems have generally required more staff input than expected and therefore have cost more.

2.15 There are also additional costs for those delayed projects where NWIS has led on a national procurement on behalf of the NHS. For example, until WLIMS is fully implemented, NWIS and NHS bodies have had to bear the dual running cost of legacy systems which host the outstanding modules. However, the terms of the contract mean that the costs of the additional system development and re-development associated with WLIMS will fall to the supplier.

NWIS has strengthened its methods for developing and improving systems but a lack of end-user engagement in design and testing contributes to delays

2.16 NWIS follows a range of recognised international standards for developing and supporting informatics systems. It has accreditation from the International Standards Organisation and adopts the industry standard ITIL[24] framework for service management. NWIS has recently started moving towards using the 'Agile' method for developing new systems (Box 6). The UK Government's Digital Service Standard[25] requires use of Agile methods for its online digital services. One of the key benefits of Agile is that it should lead to systems that better meet the expectations of the end user. Effective use of the Agile method should help NWIS to ensure that there is greater clinical ownership of systems and, as a result, less resistance to their use.

9

24 ITIL stands for Information Technology Infrastructure Library and is a set of processes for aligning ICT services with organisational strategy and needs.
25 UK Government Digital Service Standard webpage

Box 6: agile methods for software development

Agile is an approach to software development. It emerged to counteract what were seen as weaknesses in the more traditional 'waterfall' approach. Waterfall involves spending a lot of time up front to determine the specifications for a system in detail and then building the system. The criticism of this approach was that the systems delivered often matched the specification but did not do what the end user actually wanted. They therefore required complex and expensive re-engineering.

Agile involves working closely with the end user to develop the system. It is an iterative process that places an emphasis on early development of prototypes that can be tested and refined in intensive bursts of activity. The key is the involvement of end users with the development team at all stages.

There are a host of specific techniques associated with Agile, but the general principles identified in the UK Government's Digital Service Standard are:

- Focus on user needs
- Deliver iteratively
- Keep improving how your team works
- Fail fast and learn quickly
- Keep planning

2.17 While the move to Agile is sensible and could deliver more cost-effective systems, the whole approach depends on getting greater clinical engagement. NWIS' system developers expressed frustration that they have very little contact with end users of their systems. Within NWIS, business analysts act as a conduit between the end users and the system developers. However, NWIS' business analyst resource is limited, with several vacancies at the time we carried out our fieldwork. And clinicians struggle to find the time away from their day jobs to contribute. As a result, NWIS staff are frustrated that once they have developed a system or new functionality in the absence of a clear steer from the end-user, clinicians come back wanting changes and refinements that require considerable re-work that adds to costs and delays.

2.18 Alongside the engagement of clinicians, there are also lessons for NWIS to learn about choosing the right clinical environment for testing new systems. For example, WLIMS was piloted in Hywel Dda University Health Board. We understand that the pilot was considered a success. However, on rolling out the system nationally, it became apparent that what worked in the pilot area did not work nationally as it did not cover the broader range of more complex tests undertaken in some other health boards. As a result a considerable amount of additional work was required, which has added to delays.

Difficulties locally within NHS bodies during the implementation of systems have contributed to delays

2.19 The roll-out of national systems can also be delayed by factors within the NHS bodies themselves. As of May 2017, out of 30 projects currently being implemented, 14 were rated as green in terms of dependencies. Dependencies cover issues that are outside of the direct control of NWIS.

2.20 NWIS reports that some delays have occurred due to incompatibility of existing ICT infrastructure in health boards. NWIS explained to us that ICT systems and functionality can be developed, system tested and quality assured internally by them. However, they have found on some occasions that the health board's local ICT infrastructure can prevent the new system or functionality from working properly, which can cause unexpected delays.

2.21 We were also informed that on some occasions, delays were down to technical issues in the NHS bodies. An example is the delay to rolling out a single instance of RADIS at Cwm Taf University Health Board. The health board had inherited two different instances of RADIS from the time of predecessor NHS Trusts. As well as two different instances, the two main hospital sites had not historically been using consistent codes when entering radiology activity to those systems. As a result, NWIS and the health board spent considerable time and effort working together to standardise and merge the databases that underpin RADIS following restructuring of the NHS in 2009. The bulk of the activity to merge the databases took place after 2013-14. The health board moved onto a new single instance of RADIS in June 2017.

2.22 The delays at Cwm Taf had a knock-on effect in that the NWIS team could not be released until the implementation of RADIS was complete at Cwm Taf. The planned merging of different instances of RADIS at Hywel Dda is now significantly behind time. However, Hywel Dda University Health Board has been doing preparatory work, learning the lessons from the experience of Cwm Taf and is working with NWIS on a plan to start implementation of the project in April 2018.

2.23 Our local reports on ICT capacity pointed to other local constraints that could hinder roll-out locally. There is variation in the number of ICT staff employed by health boards. Our local reviews found that in 2013-14 the number of ICT staff at the Health Board varied from 6.8 to 9.8 per 1,000 total staff members. Some health boards had more staff at lower grades while some have fewer staff but at a higher grade. There are also challenges with ICT equipment. We found that in March 2014, that there was a backlog of £68 million of ICT equipment classed as 'out of life', with that figure expected to rise in later years. We also found in 2015 that 33% of doctors and 48% of nurses reported that access to computers is problematic on a daily or weekly basis[26].

Staff capacity is a constraint and while NWIS is being creative in attracting junior technical staff it struggles to retain senior IT developers and does not have a clear workforce plan

2.24 NWIS faces some specific challenges with its workforce. NWIS' performance reports to the Welsh Government consistently state that it is carrying significant vacancies and that staff capacity is a cause of delays. NWIS' reports to the Welsh Government suggest that it plans on the basis of having a workforce of around 670 but actually has around 550 employees. We were unable to confirm the basis for NWIS' workforce assumptions as, despite our requests, NWIS did not provide us with a workforce plan[27]. The NHS Wales Internal Audit review (paragraph 1.38) was also unable to confirm NWIS' baseline assumptions. However, our assessment suggests that NWIS' delivery plans are based on a much larger workforce than it can actually afford to employ.

26 As part of our Diagnostic Review of ICT Capacity and Resources we surveyed NHS staff in spring 2015 and the findings are set out in the individual reports for each NHS body.
27 NWIS has very recently started work on a workforce plan. It provided us with information showing that it has identified the key workforce risks and options going forwards. NWIS intends to develop detailed plans and actions during 2018.

2.25 There are potential signs that some NWIS staff may be struggling with the amount of work they have to deliver. In NWIS' most recent staff survey, over a third of respondents (37%) agreed or strongly agreed with the statement 'I find it difficult to meet all the conflicting demands on my time at work'. A similar percentage of respondents (34%) disagreed or strongly disagreed, while 29% of respondents neither agreed nor disagreed.

2.26 NWIS faces a challenge in recruiting and retraining highly skilled technical staff due to competition, especially from the private sector. NWIS staff salaries are set in line with national pay scales for NHS clinical and administrative staff. ICT skills are highly prized in the private sector and NWIS finds that competitors are able to offer higher salaries. In an effort to address the recognised staff capacity constraints NWIS have developed a range of activities and initiatives (Box 7).

Box 7: NWIS activity to recruit and retain new developers

NWIS focuses the majority of its recruitment activity on recent graduates. It has worked with University of Wales Trinity Saint David (UWTSD) to create the Wales Informatics Institute (TWII) which seeks to co-ordinate NWIS's work and the work of the university, for example, by offering internships and work placements to students, as well as influencing the curriculum to ensure graduates will have the skills NWIS is looking for. NWIS has been shortlisted for a 2017 Times Higher Education award for this work.

NWIS also runs its own graduate programme, which includes a short placement within a health board, for example, in medical records or a GP surgery.

The TWII provides staff with continuing professional development. In addition, NWIS provides a number of further opportunities for professional development, such as a talent management programme and training for managers. NWIS is accredited by Investors in People and also runs the British Computer Society NWIS Development Programme.

2.27 The NWIS software developers we met with believed that NWIS offers good opportunities to graduates and new starters. However, they felt that NWIS struggles to attract and retain more experienced staff. This leads to an increased use of contractors, which can be frustrating as they are unlikely to have the depth of knowledge that a long-serving staff member would have developed, and what knowledge they have leaves with them at the end of their contract. NWIS staff felt that, compared to other employers, NWIS offers good terms and conditions and a good work life balance but will always be beaten on salary.

There are concerns about the quality of some key national systems and a lack of monitoring data means it is unclear whether they are delivering the intended benefits

There are concerns that some systems do not fully meet NHS bodies' needs and some staff are developing their own workarounds

2.28 NHS bodies are concerned that a number of national systems do not fully meet their needs. Staff at health boards raised concerns with the functionality of all the national systems that we focused on in our review (Appendix 2). Other reviews have also flagged concerns with the quality of systems we looked at:

- NWIS carried out a survey of registered users on the WLIMS between September 2016 and January 2017. Based on 344 responses, 73% said that they strongly disagreed or disagreed that the WLIMS provides the functionality they need.
- NWIS's internal review of the services offered by My Health Online has identified that the system's functionality must be improved in order to achieve its intended benefits.
- in our recent local audit work on radiology services across all health boards in Wales, we found that many frontline staff are dissatisfied with the functionality of RADIS in particular. Our reports concluded that, generally, radiology ICT systems do not serve health boards' needs.

2.29 Some of the concerns about functionality related to a widely held view that NWIS considers projects as completed at too early a point. The point at which NWIS considers a system to be delivered or available is not necessarily the same as when a health board considers a system delivered or available. A system might largely be in place, but is not necessarily being used properly (or at all). For example, NWIS considers the Welsh Clinical Portal to be 'live', including the functionality that allows GPs to make electronic referrals. However, health boards reported that doctors find the referral process difficult and time consuming to use, so many are instead continuing with paper referrals.

2.30 NWIS provides updates to improve the functionality of existing systems regularly. These changes are managed through Change Advisory Boards (CABs) which are in place for most of its systems. The CABs are made up of representatives from NWIS and NHS bodies and their purpose is to oversee and prioritise requests for changes to the system. They are therefore the main mechanism by which NHS staff can attempt to adapt systems to their needs, providing that such adaptations do not cause problems for other health boards.

2.31 We found that the change management process and CAB meetings are not as effective as they could be. Some NHS staff report that they receive no information about whether their request has been agreed or not, nor about how long they might expect to wait before a change is implemented. At the CAB meetings we observed, the health boards taking part offered little guidance to NWIS about prioritisation and it was not clear at the end of the meetings what the decisions and outcomes of the meeting were. However, the CABs we observed spent quite a significant amount of time discussing changes that were described as 'minor'. Some NWIS staff expressed frustration about the approach to 'minor' changes, noting that they had been prevented from making changes that would have taken little time but which they recognised would make the work of NHS staff easier.

2.32 In some instances where systems do not, ultimately, meet their needs, NHS staff are developing their own workarounds to compensate. Hywel Dda University Health Board carried out a detailed review and found that staff had created their own separate databases because they did not feel they could rely on the national systems. This situation results in duplication of effort and also poses information governance risks.

Many senior executives and clinicians reported that a number of the national systems we considered do not provide them with the information they need to plan and manage services

2.33 NHS bodies are generally struggling to get good management information out of the national systems to enable them to monitor performance, understand demand and plan services for the future. Senior NHS officials who had experience of working in England were keen to emphasise that there they had access to much better information, generally in the form of a 'dashboard', than was available in Wales.

2.34 NHS bodies raised specific concerns about 'DeepSee' – the business intelligence function of WLIMS – which staff told us was not working as they expected and was not meeting their needs (Figure 12, Appendix 2). There are concerns that staff have to make lots of manual adjustments to be able to get management information from the RADIS system. Some health boards also expressed frustration at not being able to get good management information from Myrddin. While Cwm Taf University Health Board reported that it could get the information it needed from Myrddin, the time spent generating the information is, essentially, equivalent to a full-time post.

The intended benefits of investment were clearly set out in the early stages of the projects we examined but it is not clear who is responsible for achieving them

2.35 As noted in paragraph 1.43, NWIS generally develops business cases using a commonly used approach. The business cases for each of the systems that we looked at for this review clearly set out the expected benefits that the investment should deliver (Figure 7). Although there is some difference of language, they follow some common themes of improved patient safety, improved clinical practices and reduced costs.

Figure 7: intended benefits expected to be achieved from the six systems we reviewed

System	Intended benefits
My Health Online	Patient safety increased Increased positive health outcomes Patient confidence increased Increased convenience of care Health system efficiency increased
Choose Pharmacy	Improved patient safety Patient confidentiality/security improved Cost savings Efficiency
Welsh Laboratory Information System	Compliance with clinical evidence-based practice increased Comparable results created across NHS Wales Clinical risk decreased Unit production costs decreased Single pathology record for each patient created System management costs decreased Analyser interface costs decreased
Welsh Patient Administration System	Patient safety increased Positive patient outcomes increased Convenience of care increased Patient confidence increased Legal/policy compliance maintained Health system efficiency increased Overall health system costs decreased

System	Intended benefits
Welsh Radiology Information System	Improved clinical governance Improved operational efficiency, flexibility and adaptability Improved demand management and forward planning Saved current and future costs Improved working environment and facilities for staff
Welsh Picture Archiving and Communication System	Cost of media, postage and packing decreased PACS Manager administration time on providing CDs decreased Patient waiting time decreased Time to diagnosis and treatment decreased Decreased risk of patient confidentiality being breached Decreased clinical risk because of availability of diagnostic information Reduced cost of repeat imaging

Source: Original business cases supplied by NWIS

2.36 While business cases have been clear on what benefits the systems should deliver, there is confusion about who is responsible for ensuring those benefits are indeed achieved. Evidence from a gateway review of WLIMS and feedback from NHS staff clearly demonstrate that there is a lack of clarity on whose responsibility it is to achieve and monitor the benefits. NWIS considers that it has clearly set out that responsibility for monitoring and achieving benefits rests with the NHS bodies. NHS staff we spoke to either felt that the responsibility for measuring the achievement of benefits was never set out clearly or was NWIS' responsibility.

Weaknesses in monitoring mean that is not clear whether the overall investment in digital healthcare is delivering the intended benefits

2.37 In 2013, NWIS produced a report on the anticipated economic return on investment that NHS Wales should expect to derive from NWIS's programme of work. However, that report intentionally did not consider qualitative benefits such as increased patient safety. NWIS's analysis concluded that due to the time saved by using more efficient IT solutions, for every £1 invested, NHS Wales could expect an economic return of £2.36. We did not undertake detailed analysis of these figures but note that they were based on theoretical savings and benefits rather than being built up from actual savings delivered in Wales.

2.38 In our survey of NHS Assistant Directors of Informatics, six out of ten respondents disagreed with the statement 'my organisation and NWIS are making progress in achieving the intended benefits from investment in clinical ICT services'. Only one of the ten Assistant Directors agreed with the statement while three neither agreed nor disagreed. These views show a combination of concerns about the lack of impacts and a potential lack of clarity as to whether the intended benefits from investment in clinical ICT services are being achieved.

2.39 NWIS produces evaluation reports at the end of projects (project closure) and also commissions reviews of systems. We would expect these documents to provide some detail on whether the intended benefits were achieved. However, the examples of reports that NWIS sent us did not make clear links between the benefits set out in the business case and what the system had achieved. Rather, they focused more on the project management and technical lessons for NWIS. NIWS produces some ad hoc reporting of achievements and benefits, for example, through annual reports. But as noted in paragraph 1.41, these tend to be partial, lack context and are more about presenting a positive picture rather than a hard analysis. An example of the partial approach to reporting benefits is My Health Online (Box 8).

Box 8: reporting the benefits of My Health Online

NWIS reports emphasise that the system has been rolled out to 100% of GP practices and that 222,000 patients have registered. Taken in isolation those numbers seem impressive but the underlying story is more mixed.

- **Not all practices actually offer all parts of the system.**

  100% of practices have the system. As of July 2017, just over half of practices (51%) offer online appointments and 90% were offering online repeat prescriptions. Some 9% of practices were not offering any part of the system to their patients.

- **While growing, the number of patients registered is significantly below expectations.**

  The number of patients registered on the system is growing and increased from 179,000 to 222,000 between March 2016 and July 2017. Having 222,000 registered patients is significantly below the figure of 872,000 set out in the 2009 business case and represents just 7% of the Welsh population. It is not possible to assess how many of the 222,000 registered individuals have actually used the system since it was set up.

- **A limited amount of primary care activity is carried out through My Health Online**

  NWIS reports that an average of 44,000 prescriptions are ordered each month through the system. That accounts for less than 1% of prescriptions across Wales each month[28]. We also estimate that the 12,000 appointments booked each month on the system represent less than 1% of GP appointments booked across Wales[29].

2.40 The exception on benefits monitoring, among the systems we examined, appears to be Choose Pharmacy. The project had a detailed evaluation by the Welsh Government's Knowledge and Analytical Services following the pilot phase. The review identified specific benefits of fully rolling out the project, which would likely outweigh the costs.

28 This is based on a total of 79.5 million prescriptions each year, as set out in our report on Medicines Management.

29 There are no official statistics on the number of GP appointments in Wales. NHS England estimates that there were around 340 million GP appointments in England in 2012-13. Extrapolating that figure to Wales, would give around 19 million appointments a year. We are looking in more depth at the evidence around demand for GP services as part of our review of primary care services, which we intend to publish next year.

2.41 The NHS Wales Internal Audit review of NWIS identified that there is a need to strengthen the monitoring of benefits. NIMB recognises that the approach to benefits realisation needs improvement and has set up a task and finish group to develop a new benefits realisation framework. More robust benefits monitoring would help NWIS and NHS bodies better understand the impact of their collective investment, and enable them to better plan and prioritise delivery of systems for the future.

Appendices

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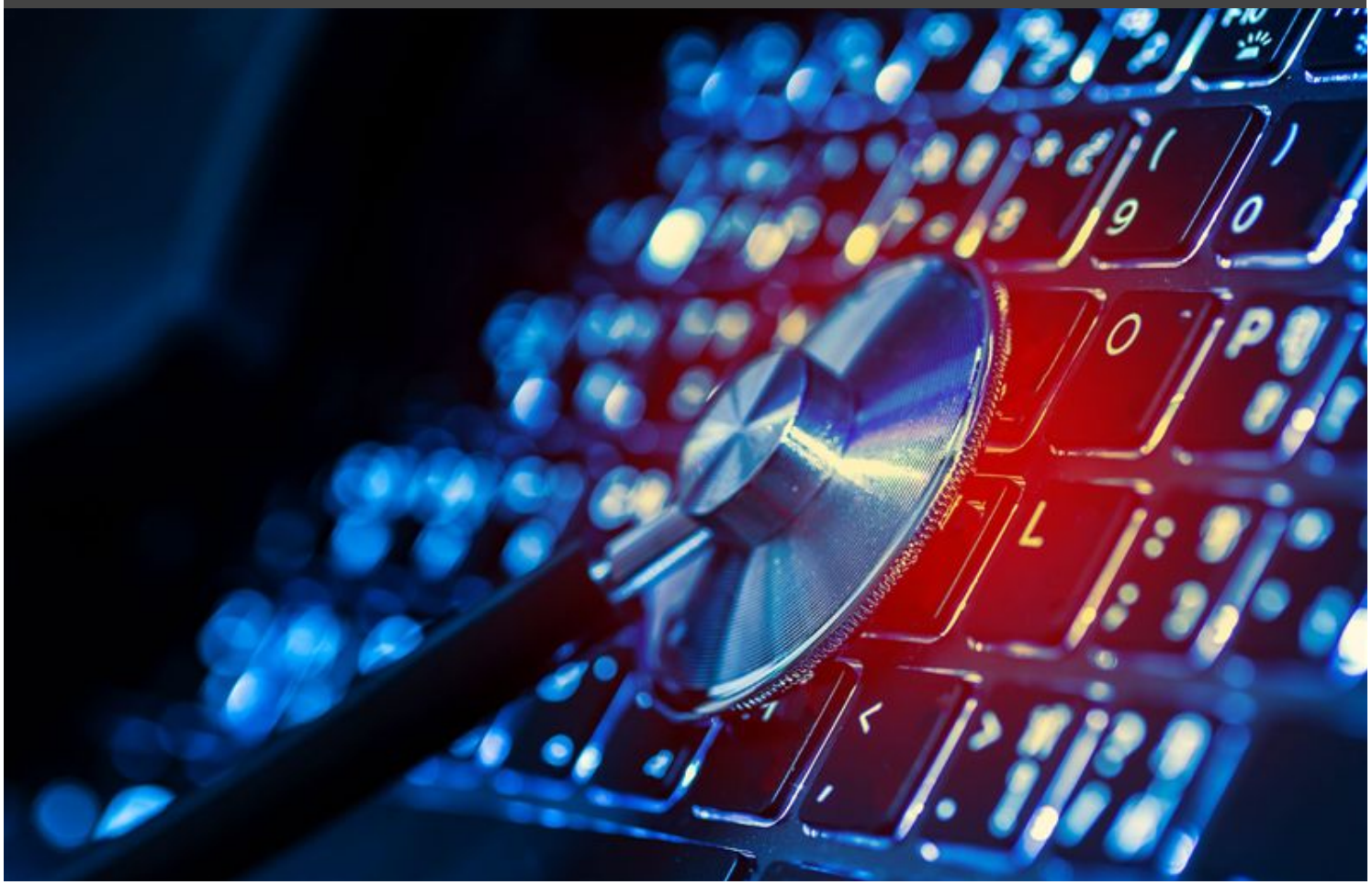

Appendix 1

Audit methods

We reviewed a range of documents such as:

- Business cases, project briefs, project initiation documents, project closure reports and assurance quality plans in relation to various NWIS projects and systems
- NWIS performance reports to the Welsh Government
- Papers, minutes and terms of reference for a range of NWIS boards such as NIMB, the Delivery and Implementation Group and various Strategic Management Boards and Change Management Boards
- Velindre NHS Trust audit committee papers
- Welsh Government strategy documents
- Correspondence setting out accountability and financial arrangements between NWIS and the Welsh Government
- Reports by the Welsh Government and NHS Wales Internal Audit Services

We took account of our own recent work that covered issues related to informatics, including the following reports:

- **Managing Medicines in Primary and Secondary Care,** December 2016
- **A Review of Orthopaedic Services**, June 2015
- **NHS Waiting Times for Elective Care in Wales**, January 2015

We also drew from our local audit work which provided a diagnostic review of ICT capacity and resources at each NHS body. This work was carried out in 2014-15 and published following consideration by each body's audit committees during 2015-16. It drew on financial, workforce and other data for the financial year 2013-14 as well as other sources, including a Wales Audit Office survey of NHS staff carried out in 2015.

We considered the National Audit Office's series of reports on the National Programme for IT in the NHS in England. We spoke to Audit Scotland about Scotland's approach to managing large IT projects.

We interviewed a range of people including:

- Welsh Government officials
- NWIS staff including:
  - Senior managers
  - Software developers
  - Staff involved in the development, implementation and ongoing maintenance of specific systems

We visited Hywel Dda, Cwm Taf and Cardiff and Vale health boards and met with a range of officers, including:

- Senior managers, including Chief Executives, lead directors for informatics and Assistant Directors of Informatics
- Board members
- Representatives of primary care
- Clinicians and administrators using specific systems

We conducted a survey of NHS Assistant Directors of Informatics to seek their views on whether investment in clinical ICT services is on course to achieve the anticipated benefits to the NHS in Wales. The survey was sent to all seven health boards and the three NHS trusts, all of whom responded.

We observed meetings of Change Advisory Boards (these are made up of representatives from NWIS and NHS bodies and their purpose is to oversee and prioritise requests for changes to individual systems) and a September 2016 meeting of the National Informatics Management Board.

Appendix 2

The six systems we examined in more detail

NWIS develops and supports a large number of complex ICT systems. We decided that we would select six systems to look at in greater detail and use as examples to illustrate our findings.

We chose the following systems:

- RADIS (also called Welsh Radiology Imaging System (WRIS))
- PACS
- MHOL
- Choose Pharmacy
- WLIMS
- Myrddin

The selection included products of varying ages and stages of development, from Myrddin which was first developed 25 years ago, to Choose Pharmacy, which at the time of writing was still in the pilot phase. The section also included examples that had been developed by NWIS, such as RADIS, as well as systems that were wholly or partly developed and delivered by a third party (WLIMS and PACS).

Figure 8: System: RADIS 2

System: RADIS 2	
Key functions	RADIS is the Radiology Information System used in all health boards. It is sometimes referred to as WRIS or the Welsh Radiology Information System. RADIS is the IT system that practitioners use to manage the service and keep track of which patients have received which scans.
History	NWIS developed the RADIS system 'in-house'. It rolls out updates and upgrades across the NHS. NWIS did not have a clear timetable or budget at the outset and has not monitored how much delivery of RADIS has cost so far. NWIS started rolling out the RADIS 2 system in 2005. There has been a challenge to ensure that all health boards have a single instance of RADIS. An 'instance' refers to a separate database that is specific to a particular location. It is used in order to differentiate from 'versions', which refer to updates and upgrades. For example, two hospitals could have the same version of RADIS, ie, they are both equally up to date, but they would still have separate instances because staff in one hospital would not be able to access the records held in the other. Having numerous instances of RADIS is a consequence of NHS reorganisation during the latter half of the 2000s. Hospitals that were part of separate organisations are now part of the same health board, but the separate infrastructure remains in place in some areas. Currently, two health boards still have more than one instance of RADIS. They are: • Hywel Dda University Health Board • Betsi Cadwaladr University Health Board Work to ensure that all health boards have a single instance of RADIS had been delayed due to issues in Cwm Taf University Health Board (paragraph 2.21). NWIS intends to start merging the three instances of RADIS at Hywel Dda University Health Board in April 2018, but no date has yet been set for the work at Betsi Cadwaladr University Health Board.
Time	Clear timescales were not established at the outset. From the start of rollout in 2005, it took 11 years to get all health boards onto the RADIS 2 system. However, two health boards still have multiple 'instances' of RADIS 2, which do not communicate with each other.

System: RADIS 2	
Cost	We did not find any clear assessment of the expected costs at the outset and NWIS has not measured the total costs of delivery. NWIS reports that since 2010, there has been an investment of £230,000 in capital, related to upgrades to hardware. NWIS reports the annual running costs of RADIS are currently £1.2 million.
Quality and functionality	There are particular concerns amongst those health boards that have multiple instances of RADIS 2. They report that it is time consuming for clinicians and makes it difficult to plan and deliver services across the whole health board. For example, if a patient has a scan in one hospital, another hospital in the same health board will not have a record of it. Having multiple instances of RADIS also makes it difficult to retrieve management information as this has to be done separately for each instance and then consolidated into one report manually. Even without multiple instances, other health boards told us that it is difficult and time consuming to extract management and business planning information from RADIS. There are concerns that RADIS does not link to other systems. In particular, it does not link to data on patient waiting times, which makes it more difficult to ensure patients get their tests in the right order. Some health boards also had concerns about the accuracy of the information extracted from RADIS.

Figure 9: System: PACS

System: PACS	
Key functions	PACS is a picture archive and communication system where all the images for MRI scans, CT scans, x-rays and ultrasound scans are stored electronically. The system is provided by a third party, Fujifilm, with NWIS providing contract and relationship management support. Fujifilm supplies hardware and software to health boards for provision of PACS services, including voice recognition and full disaster-recovery solutions. Each health board provides the necessary infrastructure to run those services, including networks and server space. Fujifilm also provides software and hardware within NWIS data centres for provision of a centralised archiving solution for data sharing between each health board. NWIS provides the necessary infrastructure in the data centres along with network links to each health board.
History	Prior to PACS, there were 10 separate systems in operation across Wales. Existing contracts were due to expire from 2012 so the National Imaging Programme Board decided to procure one national system, with NWIS as the procurement lead to take this forward. The installation of PACS was project managed locally by each health board. The system is now in place across six of the seven health boards in Wales. Cardiff and Vale University Health Board is the last to take on the system, having been instructed by the Welsh Government to accept it. The health board had previously intended to develop its own approach to an integrated end-to-end system for imaging, rather than adopt the national PAC system which provides one element. The health board is now working with Fujifilm to develop some of the additional functionality it considers necessary.
Time	It was planned that the system would be rolled out across different sites between June 2012 and November 2016. NWIS told us that implementation had taken longer than anticipated. In part this was because some of the assumptions NWIS made regarding the readiness of the existing infrastructure to merge with PACS proved to be overly optimistic. The overall timetable was also impacted by the issues at Cardiff and Vale University Health Board (see above).

System: PACS	
Cost	The full business case identified the cost of implementing PACS at £25 million over seven years. The terms of the framework contract mean that Fujifilm bore the cost of any delays. In practice, some NHS bodies have agreements lasting longer than the seven years and have also included additional functionality and hardware at extra cost. In total, the value of the PACS contracts around Wales is £29.4 million.
Quality and functionality	During 2016, NHS Wales commissioned ImprovIT Consulting Ltd to perform a benchmark study to ascertain whether the service was offering value for money. Their conclusion was that Fujifilm delivered a service with high availability and low levels of incidents and changes at below market cost, representing good value for money. However, no formal evaluation has taken place in regard to intended benefits set out in the original business case: • Cost of media, postage and packing decreased • PACS Manager administration time on providing CDs decreased • Patient waiting time decreased • Time to diagnosis and treatment decreased • Decreased risk of patient confidentiality being breached • Decreased clinical risk because of availability of diagnostic information • Reduced cost of repeat imaging NHS staff told us that they had experienced some relatively minor issues with PACS, for example, the use of voice recognition, around the time of implementation, but these had largely been resolved. The system is provided by a large and established company and is used across the world.

Figure 10: System: Myrddin

System: Myrddin	
Key functions	Myrddin is a patient administration system (PAS), also known as the Welsh PAS. It is a core part of a hospital's IT infrastructure. It holds patient contact details, records inpatient and outpatient appointments and generates letters for patients about their appointments
History	Myrddin was originally developed in 1991 for Carmarthenshire NHS Trust. In time, it became the only system in use in Carmarthenshire (later Hywel Dda University Health Board) and was rolled out in other health boards. NWIS took over management responsibility for the team of staff responsible for Myrddin in 2013. In July 2006, a review of in-house systems in use in the NHS in Wales found that both Myrddin and PMS (Cardiff and Vale University Health Board's system) could be used elsewhere and compared favourably with the commercial systems available. At that time, Myrddin had already been rolled out to three other health boards. Cardiff and Vale University Health Board had proved that their system, PMS, could be rolled out elsewhere as it had introduced it to Llandough hospital following re-organisation. NHS Wales therefore has two home grown patient administration systems, both of which are able to be rolled out more widely, if required. However, it appears that Myrddin's readiness to provide a solution to outdated commercial systems has led to it becoming the de facto PAS for most of Wales, although NWIS and the Welsh Government were not able to provide evidence of a strategic decision to that effect. NWIS is currently rolling out the system across Betsi Cadwaladr University Health Board, with an estimated completion date of October 2017 for Betsi Cadwaladr University Health Board East and October 2018 for the West. This will leave only Velindre NHS Trust and Cardiff and Vale University Health Board who do not use Myrddin. Cardiff and Vale University Health Board still use PMS, which they developed in house. They currently have no plans to adopt Myrddin in its place as they are happy that the PMS system meets their needs.
Time	Myrddin has evolved over many years. There were no clear timeframes for roll-out identified in advance. The system is currently a live project as it is being rolled out in Betsi Cadwaladr University Health Board.

System: Myrddin	
Cost	NWIS was not able to identify the total costs of rolling out Myrddin as a national system. NWIS reports that since 2010, there has been a capital investment of £4.1 million in Myrddin, related to licences, hardware and some additional staff costs. NWIS reports the annual running costs of Myrddin are currently £1.4 million.
Quality and functionality	Evidence suggests that the process for making changes and improvements to Myrddin is time consuming and not always well understood by health boards. Some health boards told us that they found the system difficult to use while others did not report this. For example, Cwm Taf Health Board told us that Myrddin was meeting their needs, but they had made a significant investment in their in-house capacity to train staff and deal with queries. From this review and others we have identified that several staff would like to see minor changes made to the system in order to make it more user-friendly or efficient. These changes are either not made or take a very long time to be delivered. In either circumstance, health board staff told us that they were not kept up to date with the progress of their requests or informed when and why they were not taken forward.

Figure 11: System: My Health Online

System: My Health Online	
Key functions	My Health Online (MHOL) is a bilingual NHS Wales website, which allows patients to undertake various health-related tasks and access their personal health information securely via the internet. Currently the system allows patients to book GP appointments and order repeat prescriptions, if both they and their GP practice have registered to do so.
History	The introduction of MHOL was intended to pave the way for the creation of a platform for greater convenience for patients, encouraging empowerment and self-care. It was anticipated it would free up time for both the patient and the NHS and increase patient safety. Originally, it was proposed that patients would be able to access their health records and manage a health diary online, as well as book appointments and order repeat prescriptions. Access to medical records was not developed due to concerns about governance issues. The health diary option was not progressed due to concerns around the risk to patients that they would record information in the diary that required an urgent response, but the GP or practice would not immediately be aware of this and would not therefore respond. NWIS plans to develop the system and increase uptake by making it possible for patients to register online (currently patients have to go to the GP surgery to get a reference number) and developing a smartphone app, although no timetable or budget for delivery has been set out.
Time	The majority of the detailed milestones for rolling out the system were met by 2013. However, the key milestone for rolling out to all GPs took some time but was achieved during 2016.
Cost	The Outline Business Case from 2009 estimated total costs over five years of £8.3 million. However, the scope of the project was reduced in 2011 and costs revised down to £1.7 million over seven years. Actual costs were £2.5 million over eight years.

System: My Health Online	
Quality and functionality	A review of MHOL found that GPs were cautious about offering MHOL services for a number of reasons, such as: • it may disadvantage vulnerable patients who do not have access to the internet; • it may result in additional workload, for example supporting patients to register and use the system, or increased online ordering of prescriptions; • potential misuse of the appointments system for example, booking multiple appointments; and • MHOL does not reflect the way some practices work – for example, not all practices offer advance booking of appointments. We found similar issues, particularly around incompatibility with existing working practices. For example, many practices operate a triage system to try and control demand, and it was not clear how online appointment booking could run alongside this. GPs we spoke to were concerned that in many areas, the demand for appointments outstrips availability; increasing access to booking systems does not address this issue and may exacerbate it.

Figure 12: System: WLIMS

System: WLIMS	
Key functions	The Welsh Laboratory Information System (WLIMS) is a national application for Pathology Laboratories. The system records patient tests and test results across a number of disciplines: Clinical Haematology; Blood Transfusion; Clinical Biochemistry; Histopathology; Cytopathology; Medical Microbiology; Immunology; Mortuary.
History	The then Minister for Health and Social Services agreed the procurement of a national LIMS in June 2010, to replace 13 separate, outdated systems. Following a procurement process, an independent supplier, InterSystems Corporation, was contracted by NHS Wales to develop and deliver a software product. NWIS oversaw the procurement process and manages the contract. The development and implementation of WLIMS has been difficult. A number of issues were raised with us, including: • The amount of work required to standardise procedures nationally was significantly underestimated by NHS Wales. More of this work should have been done in advance of procurement. • There were capacity constraints. Health boards agreed that they would provide resources to help configure the system. Over the course of the procurement, the laboratory services across NHS Wales were restructured which meant that there was much less capacity available. Eventually, NWIS recruited individuals to fulfil this role as the health boards were no longer in a position to do so. Also, NWIS told us that after winning the contract, it took InterSystems longer than anticipated to recruit and train the staff they needed. • Pathology budgets have been under pressure and departments no longer have the additional capacity that they thought they would have to assist in implementation, so health boards have not been able to provide the resources that they originally agreed to. • •The national requirements for some modules have changed and become more rigorous over the course of the contract, with the result that systems have required further development to maintain compliance with regulations. • There was a national lead officer for pathology at the time of the procurement but not during much of the implementation phase as the role was not filled when the post holder moved to another job. • Modules were piloted in a smaller health board, but it would have been better to pilot in a larger health board, as they are now discovering that what worked in the pilot area does not cover the broader range of more complex tests undertaken in a larger department.

System: WLIMS	
Time	Seven years after the agreement to procure a national system, it is not yet fully rolled-out. The transplantation and immunogenetics, and blood transfusion modules are not in place. The histology module has been rolled out at three health boards and the mortuary module is in place at one health board. The contract expired in July 2017 but NWIS has taken up the option to extend it for three years.
Cost	In 2009, the estimated cost of investment over 10 years was £27.6 million. This includes some maintenance costs as the intention was to implement the system by 2013. NIWS reports that to the end of 2016-17, the costs have been £29.4 million. Delays in implementation have resulted in extra costs. For example, NWIS has covered the costs, totalling £1.4 million, of double running WLIMS and legacy systems until March 2017. Since March 2017, health boards have covered the additional costs of double running.
Quality and functionality	During our fieldwork, health board staff told us that they were not using Deep See, the business intelligence tool, because they felt it did not meet their needs. NWIS told us that from a contractual point of view the functionality had been delivered as per the terms of the contract. Health boards reported to us that the digital dictation system that has been delivered is so difficult to use it has largely been abandoned. Health boards have now agreed to submit a bid to the Welsh Government's Innovation and Technology Fund in order to purchase an off-the-shelf dictation system.

Figure 13: System: Choose Pharmacy

System: Choose Pharmacy	
Key functions	Choose Pharmacy consists of a range of software modules which aim to improve communication between community pharmacies and other areas of NHS Wales. The modules are provided via an electronic platform securely hosted by NWIS. Current live modules are: • Common Ailments Service (CAS). A facility for patients to go to a chemist rather than a GP to get advice on minor ailments and still get access to free medicine. • Discharge Medicine Review (DMR). Allows electronic sharing of discharge information from hospitals to pharmacies rather than paper sharing so improved checks can be carried out to ensure patients are being given the correct medicines. • Emergency Medicines Service (EMS). The provision of repeat prescriptions through a pharmacy rather than having to use Accident and Emergency (A&E) or Out of Hours (OOH) services.
History	The project commenced in October 2013 in pilot sites in Cwm Taf and Betsi Cadwaladr University Health Boards, focused on the CAS module. National rollout of the programme (including the additional modules) is now underway with an intention to implement within 50% of pharmacies in Wales by March 2019. The project is intended to free up GP time to deal with patients with the greatest need, reduce the number of medication discrepancies that occur when patients transfer from primary to secondary care and ensure repeat medicine requests are dealt with by pharmacies rather than OOH or A&E services. The EMS module is currently live but without access to the Welsh GP record, so it is not clear how pharmacists will be able to authorise repeat prescriptions. The delay in accessing the GP record is due to concerns over the potential for misuse and viewing records inappropriately. The National Intelligent Integrated Auditing Solution (NIIAS) will be used to regulate and monitor this.
Time	The aim is for 370 sites to be live by March 2018.

System: Choose Pharmacy	
Cost	NWIS were provided with £300,000 to develop an IT system to record pharmacist consultations for the CAS module initially in the pilot sites. Funding for £956,000 was secured via the Welsh Government Efficiency Through Technology Fund (ETTF) to support the national roll out which incorporates the additional modules.
Quality and functionality	The Welsh Government published an evaluation of the Choose Pharmacy CAS module in July 2015. It recommended that the Welsh Government, health boards and NWIS needed to work to improve the usability of the IT system developed by NWIS to record details of consultations by pharmacists. A number of pharmacists consistently reported that refinements to the ICT system were required to improve service delivery. Many expressed frustration that despite providing feedback about how to make the system more user-friendly, no amendments had been made and the system remained unnecessarily complex. NWIS reports that many of these concerns have now been addressed.

Appendix 3

NWIS' overall programme of projects

Figure 14: NWIS' overall programme of projects

Project	NWIS description
All Wales Accelerating Cardiac Informatics (AWACI)	This project supports the strategic delivery of 'The Heart Disease Delivery Plan', which sets out actions to improve health outcomes to meet population demands, whilst tackling variation in service accessibility and reducing inequalities in health outcomes.
Betsi Cadwaladr University Health Board Welsh Patient Administration System (BCU WPAS)	WPAS (also known as Myrddin) is one of the six systems we looked at in detail (Appendix 2).
Cancer Informatics Programme	The Cancer Network Information System Cymru (CANISC) is used to support the management and treatment of cancer patients in NHS Wales. The CANISC system has been in use for many years and is now 'end of life'. This Programme will deliver an infrastructure refresh for the current system and also a new Cancer Informatics solution using national systems and architecture.
Child Health	CYPrIS (Children and Young Persons Integrated System) is the redevelopment project of the national child health system. This system will be implemented in Cwm Taf University Health Board first. Implementation to all Welsh sites will follow.
Choose Pharmacy	Choose Pharmacy is one of the six systems we looked at in detail (Appendix 2).
Dental E-Referrals	This project is designed to deliver a proof of concept as outlined within the scope of the dental connectivity project to enable electronic referrals to be processed via the Welsh Clinical Communication Gateway system for oral surgery extraction referrals only. The project will deliver the pilot for the dental e-referrals process within five dental practices in one hospital site within Cwm Taf University Health Board. Oral maxillofacial electronic prioritisation will be processed through the Welsh Administration Portal.

Project	NWIS description
Electronic Transmission of Prescription Claims (ETC)	Electronic Transmission of Claims (ETC) will automate the existing prescription pricing system between community pharmacies in Wales and the Prescribing Services Unit) within NHS Wales Shared Services Partnership.
GMS Systems and Services Procurement	The existing GP IT systems framework agreement, from which the current systems and service are procured, has recently expired. Whilst support will continue until July 2020 there is a requirement to start a new procurement, to enable continuity and further development of General Medical Services (GMS) IT systems.
GP Links Implementation	With the introduction of the new single, national All Wales Pathology Laboratory Information Management System there is a requirement to consolidate the messaging solution to General Practices; this will also include the transmission of radiology reports and other ad hoc information. IUVO Limited and their Clin-eConnect solution is the supplier. The project is in the implementation phase.
GP2GP	GP2GP enables patients' electronic health records to be transferred directly and securely between GP practices.
GP Test Requesting	GP Test Requesting is an NWIS application whereby GPs can electronically request and view test results. The project is in two stages: stage one GP results reporting only, stage two GP reporting and requesting.
Master Patient Index (MPI)	This project provides an enterprise master patient index that links patient identity records across a range of information systems. The result is a single 'gold standard' identity record to be used by new national systems, which will help minimise the number of duplicate records and support health board system mergers.
My Health Online (MHOL) Phase 2	MHOL is one of the six systems we looked at in detail (Appendix 2). Phase 2 involves new functionality being built around online registration, mobile versions and access to medical records.
My Health Text National Implementation	My Health Text is a new service being offered across Wales where all GP practices will be provided with the ability to send SMS messages to patients to remind them about their upcoming appointments and invite them to contact the surgery for seasonal flu vaccinations or regular clinic appointments.
PACS Framework Implementation	PACS is part of the radiology systems we looked at in detail (Appendix 2).

Project	NWIS description
PROMS and PREMS – Phase 1	PROMs (Patient Reported Outcome Measures) and PREMs (Patient Reported experience Measures) is a programme of work take forward patient reported measures within NHS Wales, which includes the development of a technical means to capture PROMs data, utilising existing national NWIS architecture, available to practicing clinicians and for secondary information.
Welsh Care Records Service (WCRS)	This project will build upon existing functionality within the Welsh Clinical Portal to provide a national clinical document repository that can be accessed by WCP users in any health board to view existing documents and to create new documents using eForms. This project will also build and configure the national infrastructure to support roll-out across Wales. The project will progress in conjunction with the Welsh Results Reporting Service (WRRS) for diagnostic reports and the Image Sharing project for images.
Welsh Clinical Communications Gateway (WCCG)	The main objective of the WCCG is to introduce efficiencies and safer working practices around sending electronic clinical communication between healthcare settings across all of Wales. **Phase 1** completed the rollout of e-referrals to all health boards from primary care GP practices to secondary care medical records using one generic referral template. **Phase 2** will include additional message types (for example clinical and administrative letters and cross border referrals).
Welsh Clinical Communication Gateway Optometry Referrals	The purpose of this project is to improve communication between optometry practices and secondary care by sending electronic referrals.
Welsh Clinical Portal (WCP)	The WCP is a secure health space, uniting key patient information from the different computer systems and databases used in NHS Wales, to support clinical decisions and key tasks. The Portal's current functionality includes patient lists, electronic pathology test requesting and results viewing, radiology reports and image viewing, creation of discharge letters and medicine transcribing, prioritisation of GP referrals, document viewing plus the viewing of the GP summary record in WCP.
Welsh Community Care Information System (WCCIS)	A joint health and social care procurement process has concluded resulting in a call off framework, which all health boards and local authorities in Wales can use for delivering a community information solution for community health staff and social workers. Implementation planning is underway.

Project	NWIS description
Welsh Demographic Service Phase 2	WDS Phase 2 will deliver a Welsh Birth Notification System (WBNS) to replace the English NHS Numbers for Babies (NN4B) service that closed in January 2015.
Welsh Emergency Department System (WEDS)	WEDS is a national emergency department (A&E) system. It is a nationally agreed master services agreement with EMIS Health (formerly Ascribe) which can be called for by health boards as required. NWIS is responsible for hosting the infrastructure, integration with other national systems, co-ordinating implementation projects and managing the national contract.
Welsh Hospital E-Prescribing Pharmacy and Medicines Administration (WHEPPMA)	This project will enable the computerisation of the processes of prescribing, processing, stock control and recording the administration of medicines in secondary care hospitals. It will replace the current paper prescription and administration record chart normally completed for every in-patient as well as discharge and outpatient prescription forms used by clinicians. The project will deliver both an e-prescribing system as well as an integrated replacement pharmacy system.
Welsh Imaging Archive Service (WIAS)	This project is linked to the Welsh PACS Framework roll-out of the Fujifilm PACS system (above). Part of the Fujifilm service is the provision of a central archive called a Welsh Imaging Archive Service (WIAS). The image sharing project is to take forward all aspects of image sharing including the various mechanisms to be used for the retrieval of images from the WIAS.
Welsh Information System for Diabetes Management (WISDM)	The aim of the project is to deliver a diabetes ICT solution for Wales. This will provide a clinical, multidisciplinary record and share information across primary, secondary and community healthcare settings
Welsh Laboratory Information Management System (WLIMS)	WLIMS is is one of the six systems we looked at in detail (Appendix 2).
Welsh Patient Referral Service (WPRS)	The Welsh Patient Referral Service (WPRS) covers a number of components. The WAP (Welsh Admin Portal) enables electronic referrals sent by a GP via WCCG to be created seamlessly in hospital patient administration systems. Subsequently, via the Welsh Clinical Portal (WCP) the WAP application generates the necessary information needed for a consultant to prioritise the referral. WCP provides electronic updates back to the WAP and WCCG.

Project	NWIS description
Welsh Radiology Information System 2 (WRIS) mergers	WRIS, also known as RADIS 2 is one of the six systems we looked at in detail (Appendix 2).
Welsh Results Reports Service (WRRS)	The WRRS will provide Welsh Clinical Portal and GP Test Requesting users the ability to view diagnostic reports and requests for their patients, regardless of where in Wales these were produced.

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Huw Vaughan Thomas
Auditor General for Wales
Wales Audit Office

6 March 2018

9

Dear Huw,

Further to my letter of 22 January 2018, here is my full response, informed by wider consultation with NHS Wales.

I would like to repeat my appreciation for your report into informatics systems in NHS Wales and the work that the study team have undertaken on this over the past 18 months.

I am pleased to see that the report recognises that NHS Wales has a clear vision for the electronic patient record in Wales and, while I recognise that we do face some challenges, I am confident that we have made substantial progress, even in the time since your team carried out the review, and will continue to drive improvements in the future.

We acknowledge the key findings concerning the difficulties around securing adequate funding to take forward the vision; the need to strengthen prioritisation processes; and the need to review the governance arrangements for NWIS. The report endorses much of the work that we already have underway.

Recommendation 7 of the Final Report of the Parliamentary Review of Health and Social Care in Wales echoes many of the WAO findings, and as such the actions we take following your report will also be informed by our response to the Parliamentary Review. Our Long Term Plan for Health and Social Care, to be published in the spring of 2018, will set out the steps we will take - and the steps we expect NHS and social care partners to take – to make best use of informatics and digital ways of working more widely.

We welcome the findings of the report and offer the following response to the thirteen recommendations contained within it.

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The NHS Wales Informatics Management Board (NIMB) oversees Information Management and Technology (IM&T) in NHS Wales and drives the strategic agenda for a data-driven system, which supports improved access to information and the introduction of new ways of delivering care with digital technologies. NIMB's terms of reference were revised last year. Its purpose was strengthened to hold responsibility for delivering 'Informed Health and Care: the digital health and social care strategy for Wales' (the Strategy). The Strategy sets out the vision to 'transform how the people of Wales, our citizens and staff, embrace modern information technology and digital tools to deliver safer, more efficient and joined-up health and social care services to improve outcomes and experiences of patients and service users'.

NIMB is a Portfolio Board accountable for the delivery of programmes (and projects) established to support the delivery of the Informed Health and Care Strategy (the programmes) and creates an environment where programmes can succeed in delivering the changes necessary for the benefits to be realised.

NIMB provides assurance and advice to Welsh Government, and reports directly in to the NHS Wales Executive Board on all aspects of IM&T.

Recommendation 1 The vision for informatics of incrementally creating an electronic patient record is clear and had a clear rationale when it was first set following the 2003 strategy. However, the informatics market and community have moved on significantly since then. The Welsh Government, working with NWIS and NHS bodies, should review the informatics market to test whether it offers new opportunities to achieve the aims of the Strategy.

Accept – Welsh Government will commission a review of our approach to infrastructure and system design as part of the NHS Wales Informatics Management Board (NIMB) forward workplan for the coming year. This will include developing an understanding of what is currently available on the market and best practice.

Recommendation 2 NHS Wales has set up a task and finish group to seek to clarify the meaning of the 'Once for Wales' approach to developing and rolling out informatics systems. The Welsh Government, working with NWIS and NHS bodies, should:

a. clearly define the balance and respective responsibilities between national systems led by NWIS and locally led systems;
b. ensure that national and local implementation plans are updated to reflect any implications for the funding, development and roll-out of informatics systems of the clarified approach to Once for Wales; and
c. prioritise the development of a set of common standards to ensure that systems procured or developed locally are compatible with other local systems and the national systems.

Accept - NIMB has agreed a definition for 'Once for Wales' and for a list of services and functions best suited to the approach, to be mandated. The balance and respective responsibilities between local and national systems will be considered further as part of the review work described in our response to Recommendation 1, and will inform local and national plans.

A 'Welsh Technical Standards Board (WTSB)' will be established by May 2018 and will focus on technical Interoperability standards. The Board will work in conjunction with the Welsh Information Standards Board which has responsibility for data and Information standards. Together, these two Boards will oversee the delivery and maintenance of a catalogue of standards and requirements to enable integration and interoperability across all health and care systems.

Recommendation 3 We found that the NHS has not set clear priorities for informatics. The Welsh Government, NWIS and NHS bodies should agree a clear and achievable set of priorities for national informatics and resist adding new priorities without either deprioritising something else or adding new resources.

Accept – As I highlighted in my initial response and through the clearance of the report, we have already developed an improved prioritisation process to best use the available funding and support various systems. In its April meeting NIMB will consider a short term, prioritised National Plan for the next year. Welsh Government will commission NIMB to continue the prioritisation work, taking into account the Parliamentary Review's recommendation to "stop, start and accelerate". The National Plan will include a process, overseen by NIMB, to review in-year priorities, and NIMB will advise the NHS Executive Board and Welsh Government on prioritisation and investment decisions.

Recommendation 4 Many of the issues and concerns about barriers to progress that we found during our fieldwork have long been recognised. The Welsh Government, NHS bodies and NWIS should produce an open and honest assessment of what has worked and what has not so far and produce a clear and jointly owned plan for overcoming the known barriers to progress. These documents should be in the public domain so that NHS staff can see that their concerns have been recognised and are being addressed.

Accept – As part of our reviews into infrastructure and system design (Recommendation 1) and governance (Recommendation 6), Welsh Government will consider our approach to service and system development and delivery. This will include an assessment of progress to date and how barriers to progress can be overcome, and will be taken forward as part of NIMB's forward workplan for the coming year.

Recommendation 5 We found that there is considerable scope to strengthen national and local leadership on informatics across the NHS. The Welsh Government should:

a. work with NHS bodies to develop options for strengthening representation of informatics at board level, including reviewing the merits of a board level Chief Clinical Information Officer (or equivalent) role;
b. work with NHS bodies to develop a clear action plan for the development of a cadre of senior clinician-informatics staff, in line with the recommendations of the Wachter review in England; and
c. identify opportunities to strengthen the informatics voice at the most senior level in the Department for Health and Social Services, including reviewing whether and if so, how to strengthen the roles of the NHS Wales Chief Information Officer and Chief Clinical Informatics Officer in NHS Wales' strategic decision-making process.

Accept - The structure and membership of NHS Boards, including having the right skills and experience at Board level, is being developed further in light of the responses received during the consultation on the 'Services Fit for the Future' White Paper. The role of Chief Clinical Information Officers is already being established in many NHS organisations. A Chief Clinical Information Officer development programme and network is being formally launched by the Chief Executive of NHS Wales in March 2018. Leadership roles and skills requirements across the whole Welsh health informatics system will be considered as part of the Governance Review described under recommendation 6.

Recommendation 6 We found that the governance arrangements for overseeing and challenging NWIS are weak. While the Welsh Government has written to Velindre NHS Trust requiring it to strengthen governance arrangements for NWIS, we consider that the Welsh Government should carry out a wider appraisal of options to strengthen governance and oversight of NWIS. The final arrangements should ensure that:

a. there is independent scrutiny of performance and progress;
b. there is greater transparency, with papers and minutes of discussions placed in the public domain; and
c. there are clear lines of accountability between NWIS and the Chief Executive of NHS Wales and the Cabinet Secretary.

Accept - Welsh Government will establish a programme of work to consider the governance model required for delivering informatics that effectively supports Wales-wide digital transformation to enable safer, higher quality and effective patient care, informed by our response to the Parliamentary Review, and our development of the Health and Social Care Plan to be published in spring. This review will consider appropriate scrutiny and transparency, together with overall governance and accountability.

Recommendation 7 We found that the progress reports that NWIS produces for the Welsh Government and the public do not provide a complete or balanced picture. The Welsh Government should work with NWIS to improve the reporting of performance to tell a more balanced story of what is going well, where there are difficulties and why. Performance reporting should include information about progress against initial project plans, user satisfaction and concerns

Accept - Progress reporting to NIMB has recently improved, and Welsh Government has commissioned NWIS to deliver further improved reports during the spring 2018.

Recommendation 8 The Welsh Government needs to decide whether and how to provide the additional funding that NHS bodies and NWIS have estimated is required to deliver the vision for an electronic patient record. The Welsh Government should carry out a full cost-benefit analysis of the proposed investment, including the extent to which financial savings from new systems may enable funding to be redirected from existing services to invest in new informatics systems.

Accept - Welsh Government will undertake a robust assessment of the investment required and predicted business benefits, and together with NWIS and Finance Directors evaluate alternative funding models and savings opportunities. This will be informed by the outcome of the review of our approach to infrastructure and system design described in our response

to Recommendation 1, and the ongoing work on prioritisation being led by NIMB (Recommendation 3).

Recommendation 9 Despite some recent progress, there remains scope for better integration of medium term financial planning of informatics across the NHS. The Welsh Government, working with NHS bodies and NWIS, should set out clear and agreed medium term funding plans for local and national ICT programmes. This should involve NHS bodies and NWIS working together before NHS bodies complete the first draft of their rolling three-year plans. It should also take account of any future decision on funding required to deliver the strategy.

Accept - Integrated Medium Term Plans (IMTPs) are now well established, and for the first time, we have Strategic Outline Programmes (SOPs) from each NHS organisation, outlining their priorities and investment for Informatics. This is in line with guidance issued by Welsh Government on describing digital developments within both IMTPs and SOPs. NWIS engages with other NHS organisations as part of the IMTP planning process, and also through regular account management meetings. The collaborative development of the National Plan is also contributing to more focused planning.

Recommendation 10 NWIS is increasingly using the Agile approach to software development. There are potential benefits to this approach in terms of timeliness and quality, but the approach relies on deep engagement with clinicians and other end users, which has often been difficult to secure. NWIS and NHS bodies should work together to:

a. strengthen the relationship between developers and clinicians, particularly in designing and testing new systems and functions, so that there is a better collective understanding of what is wanted and what is possible; and
b. engage with managers to identify their information needs as well as the needs of clinicians.

Accept – User engagement through the whole lifecycle of system development is a key principle of good digital design. The creation of clinical informaticians (see response to Recommendation 5) within NHS organisations, provides a link between clinicians and developers, and will develop the skills required to support agile working and better stakeholder and user engagement. Stakeholder engagement will also be considered as part of our reviews into infrastructure and system design (Recommendation 1) and governance (Recommendation 6), and through our ongoing work on the Strategy delivery programme.

Recommendation 11 NWIS is developing but does not yet have a full workforce plan, and reports that it struggles to recruit and retain senior developer staff due to competition from the private sector The Welsh Government, NWIS and NHS bodies should work together to explore options to secure the experienced ICT staff and developers that NWIS needs within the context of a comprehensive workforce plan for NWIS and taking account of the ICT staff available to NHS bodies.

Accept - This issue is wider than just within NWIS. The inability to recruit and retain ICT staff is an issue across the wider public sector. The creation of Health Education and Improvement Wales (HEIW) in April 2018, together with the recently-established Welsh Institute of Digital Innovation (in collaboration with University of Wales Trinity St David) will

help to secure and retain the level of skills required, as will improved links with other public sector partners, for example Office for National Statistics, and identifying private sector opportunities.

Recommendation 12 We found that there is a lack of clarity as to responsibility for delivering the intended benefits of national informatics systems and a lack of monitoring. The Welsh Government, NHS bodies and NWIS should work together to ensure that:

a. there is a clear allocation of responsibility for achieving the benefits; and
b. there are clear responsibilities and processes in place for monitoring and reporting progress in delivering those benefits.

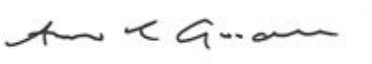
Accept - NIMB, through the Planned Future workstream of the Strategy Delivery Programme, has developed a common framework for describing and quantifying benefits. Further work is underway to review the existing NWIS benefits identification toolkit and register and to identify potential improvements to benefits ownership, quantification and realisation. Work is also already underway on improving the Business Case process, which will deliver better benefit and benefit ownership identification and realisation in line with this framework.

Recommendation 13 We found that many staff in the NHS are frustrated with some of the functionality and quality of national informatics systems. NWIS has a process for updating national systems, but there are concerns about the slow pace and lack of feedback and the Change Advisory Boards themselves could function more effectively. NWIS should review its process for managing change requests and where necessary make changes to:

a. provide clearer feedback to the service about how their requests have been dealt with and whether and when any changes can be expected;
b. remain open to minor changes that could have a significant impact in improving end users' use and perception of the systems; and
c. provide clearer agendas and work programmes for the Change Advisory Boards to make them more focussed on enabling impactful improvements to systems.

Accept – Welsh Government has written to NWIS to ask them to work in partnership with their stakeholders to review their process for managing change requests. Progress on this will be monitored by Welsh Government through monthly meetings with the NWIS Director. Our reviews into infrastructure and system design (Recommendation 1) and governance (Recommendation 6) will help to address this recommendation.

Yours sincerely



Dr Andrew Goodall

cc: Nick Ramsay AM, Chair, Public Accounts Committee
Frances Duffy, Director of Primary Care and Innovation, HSS Group
David Richards, Director of Governance and Performance

WALES AUDIT OFFICE
SWYDDFA ARCHWILIO CYMRU

Archwilydd Cyffredinol Cymru
Auditor General for Wales

Audit Committee Update – **Cardiff and Vale University Health Board**

Date issued: April 2018

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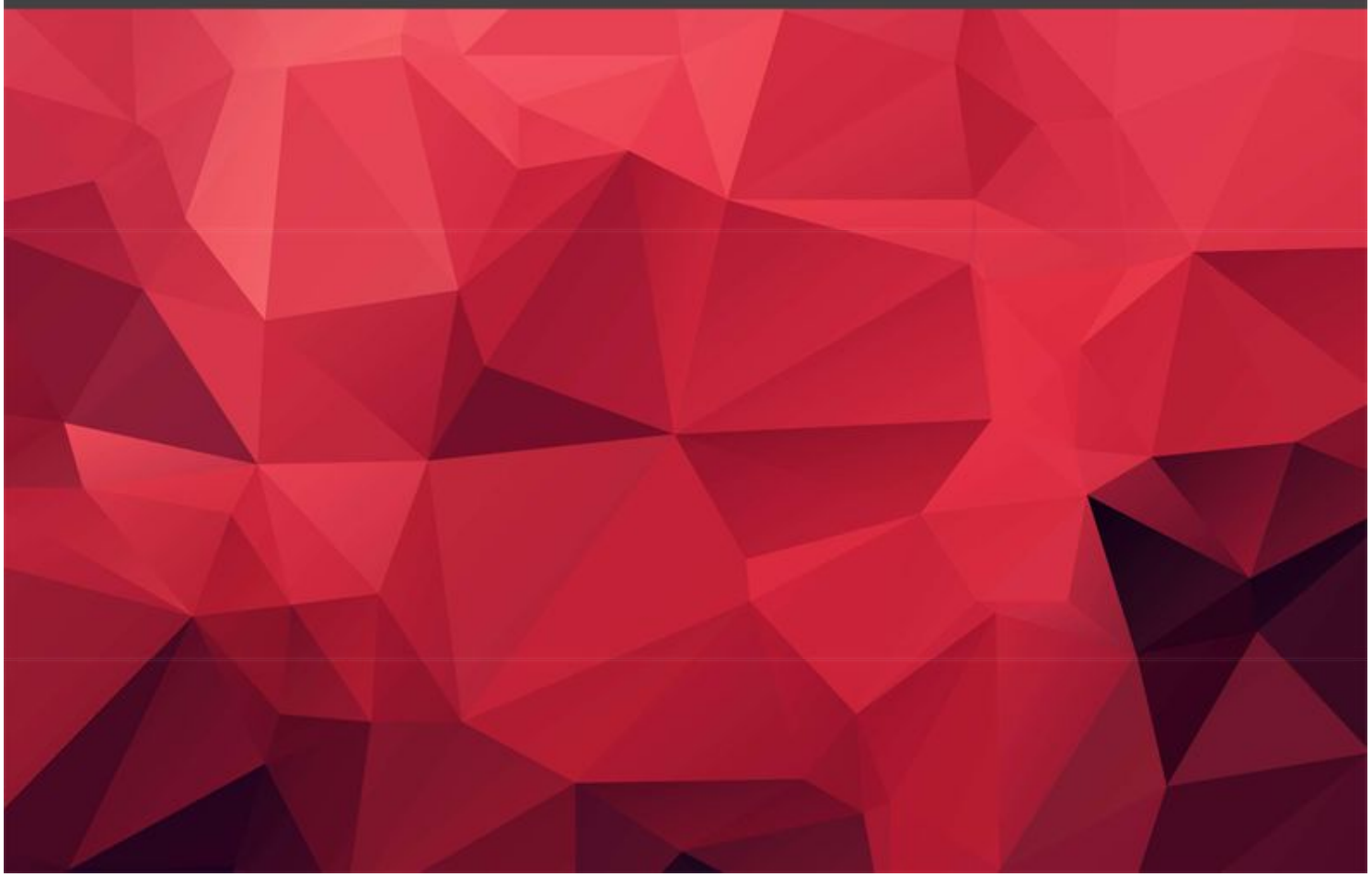

Contents

Summary report

10

Summary report

About this document

1 This document provides the Audit Committee of Cardiff and Vale University Health Board (the Health Board) with an update on current and planned Wales Audit Office work. Financial and performance audit work is considered and information is also provided on the Auditor General's programme of national value-for-money examinations.

Financial audit update

Exhibit 1: Financial audit update

Work area	Progress	Conclusions
Annual Accounts and other financial-audit work		
The financial audit work relating to the Health Board's 2017-18 accounts and its Whole of Government Account return is progressing in accordance with the planned timescales. We are due to receive the draft accounts towards the end of April and the Audit Committee and Board are due to consider the audited accounts on 31 May 2018. The Auditor-General is scheduled to certify the (approved and signed) accounts on 5 June. As set out in the 2018 Audit Plan, which the Audit Committee considered at its last meeting, in the latter part of 2017 we will be auditing the Health Board's grant claims and its 2017-18 Funds Held on Trust accounts.		

10

Performance audit update

Work completed since the last Audit Committee update

Exhibit 2: Work completed since last Audit Committee update

Topic (year of Audit Plan)	Conclusions	Status	Executive lead	Considered by Audit Committee	Management response status
Structured Assessment (2017)	Savings approaches are helping to curtail the growing financial deficit, but while operational arrangements are largely robust, there are weaknesses in governance arrangements and informatics are not yet effectively supporting services. • The Health Board now has effective arrangements in place to support the planning and monitoring of savings, but is facing an increased deficit position for the three-year period ending March 2018 • Operational arrangements are generally effective but there are weaknesses in Board oversight and assurance, and it is unlikely that the new data protection regulations will be met in time • Workforce and estates are increasingly supporting the goals of the Health Board, though informatics is struggling to keep pace	Complete. Report finalised.	Peter Welsh	February 2018	Being developed

Work currently underway

Exhibit 3: Work currently underway

Topic (year of Outline Plan)	Focus of the work	Status	Executive Lead	For Audit Committee
Local project (2017)	We will examine the health board's progress with implementing the recommendations from our previous work on medical equipment.	Drat report	Fiona Jenkins	~~April 2018~~ Amended to September 2018
Thematic review – primary care (2017)	We are delivering this work in two phases. Phase 1 will provide an all-Wales data rich picture of primary care. Phase 2 will look at Health Board's implementation of the strategic vision for primary care. This will include the commitments from the 2014 Plan for Primary Care Services for Wales. Also, other relevant work such as national delivery plans, developing primary care clusters and increases in primary care services' capacity and capability.	Fieldwork underway	Steve Curry	~~April 2018~~ Amended to September 2018 as work now not due to commence until February
Thematic review – integrated care fund (2017)	We are looking at how health boards and local authorities are using the Integrated Care Fund (ICF) to develop integrated services. We have not yet finalised the exact scope, but is likely to evaluate if the fund is being used effectively. We will look at this from both a national and regional perspective. We are likely to issue a single national report.	Fieldwork underway	Abi Harris	~~April 2018~~ Amended to September 2018

10

Other Auditor General studies

Since the last Audit Committee, we have published the following reports, which are of relevance to the NHS.

Exhibit 4: Auditor General Reports published since last audit committee

Product	Summary
Housing Adaptations March 2017	We looked at whether public bodies, with responsibilities for delivering housing adaptations, have an effective strategic approach that delivers value for money. Most public bodies have seen more demand for adaptations in recent years. More people will need help in the future because of old age and disabilities. The funding systems for adaptations are complex. There is also a complicated system for carrying out the adaptations. People with similar needs often receive different standards of service. The service is different depending on where people live and who provides the help. Half of the 12 NHS organisations we surveyed (a mix of Health Boards and individual hospitals) felt they knew what delivery bodies expected of them and how referral processes operate. But only two felt they fully understood what adaptation services were available for them to use and how long it took to assess and approve adaptations. Similarly, just four NHS organisations told us they knew the full range of services available and the relevant eligibility criteria. The complexity of systems adds to the time taken to assess people and deliver timely solutions. Occupational Therapists and other health professionals we spoke to believe that their work would benefit from standardising assessment approaches and forms across delivery organisations.

Good Practice Exchange

The Good Practice Exchange (GPX) helps public services improve by sharing knowledge and practices that work. We run events where people can exchange knowledge face to face and share resources online.

Details of past and forthcoming events, shared learning seminars and webinars can be found on the GPX page on the Wales Audit Office's website. The table in Exhibit 5 lists recent and forthcoming events.

Exhibit 5: Good Practice Exchange

Recent and forthcoming events
Recent events
I'm a patient get me out of here – 14 March 2018, and 22 March 2018 This seminar shared examples of how public services are collaborating to deliver a hospital discharge service, which provides better outcomes for individuals.
How you manage risks around organisational change, service transformation and innovation – 15 March 2018 This seminar focused on how public services can use well-managed risk taking to respond effectively to the major challenges they face and the requirements of the Wellbeing of Future Generations Act.
Forthcoming events
Inspiring public services to deliver independence and wellbeing through digital ambition – 5 June 2018 and 14 June 2018 This seminar asks how ambitious your organisation is in using technology to deliver better public services. It is aimed at those responsible for: designing service delivery; delivering services; and commissioning services.

Diary markers and details of new events are circulated in advance to the Health Board, together with information on booking delegate places. Further information on any of our past or planned GPX events can be obtained by contacting the local audit team or emailing good.practice@audit.wales.

10

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We welcome correspondence and telephone calls in Welsh and English.
Rydym yn croesawu gohebiaeth a galwadau ffôn yn Gymraeg a Saesneg.

Wales Audit Office Tracking Report April 2018

Date of Report	Title of Review	Summary of Findings / Recommendations (as reported to Audit Committee	Excutive Lead	Management Response to Date	Status (Ongoing / Completed)	Assurance Committee & Chair	Date Reported to Assurance Committee
01 Jan 2014	Combined follow-up review of progress made against recommendations relating to disaster recovery, data back-up arrangements, Caldicott and data quality (Local Work 2013)	The WAO work summarised the key messages and recommendations raised from their previous work on waiting lists, data quality, disaster recovery and business continuity, Caldicott, and data backup and recovery arrangements. It also concluded that there are a number of issues facing the UHB's IM&T service: • Financial investment in IM&T has been low historically, and the UHB's own figures indicate it compares unfavourably with the Welsh NHS as a whole. As a result, much of the IT infrastructure is now approaching the end of its useful life. • The IM&T risk assessment process does not seem to be escalating risks appropriately to a corporate level. WAO recent work in several areas had highlighted this issue. • The structure of the IM&T Department is uneven, with a concentration of expertise residing in a small number of individuals. • The replacement programme for aging servers is not keeping pace with need so the volume of obsolete and unsupported equipment is rising. • The UHB's strategic approach to IM&T is unclear. There is an Implementation programme but this has not been formally agreed and falls between the functions of a strategy and an operational plan, in WAO view satisfying neither. Without such a strategy, it will be difficult both to prioritise work and to evaluate progress.	Director of Therapies and Health Science and IT	Action Plan produced and received by PPD Committee in January 2014. Recognised that there was a need for additional investment which were captured in the Integrated Medium Term Plan and Capital Plan as appropriate. The IM&T Programme Board and the Information Governance (IG) Group were both re-established in 2014/15 as sub-Committees of the PPD Committee under the Chair of the Independent Member - Information, Communication and Technology. This has ensured that appropriate scrutiny has started to be provided. A follow up review has been undertaken and the final report was received on 10 February 2015 (see below) 28/09/17 - There were 14 recommendations within this report – 12 of which have been completed entirely, the remaining two (these were bother investment dependant) have partially been completed with a target date to be completed December 2017.	On-going	Strategy and Engagement John Antoniazzi Information Governance & Technology sub-Committee - Eileen Brandreth	28/01/2014 - initial report 26/02/2015 - (PPP) Follow-up Report See below for update. IGSC 23.03.16 Presented to IT&GSC Oct 17
01 Feb 2015	Orthopaedics (2012)	Orthopaedic services are generally coping with demand, which is consistently low, but MRI waits are long, the inpatient pathway needs to be improved to make better use of resources and although outcomes are generally positive, revision rates and missed follow-up appointments are some of the highest in Wales - Investment in primary care services is increasing and there is a consistently lower rate of GP referrals, although the impact of the Clinical Musculoskeletal Assessment and Treatment Service (CMATS) is unclear. - Outpatient and physiotherapy services are generally meeting demand, although a reduction in did not attend rates for outpatient appointments and the availability of direct access to physiotherapy could further improve waiting times. Access to MRI for GP referred patients is problematic. - More timely pre-operative assessment, increased day surgery rates, maximised bed occupancy and a reduction in prosthetic costs could improve the use of inpatient resources; and - Patients generally have positive outcomes with the exception of revision rates, which are some of the highest in Wales and not all patients are followed-up. **WAO informed of upcoming follow-up review for next financial year 2018/19**	Chief Operating Officer	Report received and action plan approved by PPP Committee in July 2015. Interim report received in January 2016 and a full report in 12 months February 2017) R&D 7.11.17 - A revised model of care was being piloted in CMATS and indicated a significant impact on outpatient demand. Substantial work had been undertaken to reduce the waiting list. This remained challenging as there were pockets with significant demand but was confident this would continue to improve which had been reflected in the RTT position over the last few quarters. In regard to prosthesis costs; the service with NWSSP had negotiated the lowest cost of knee replacement in Wales. The Planned Care Programme had been rolled out to spinal surgery and achieved an 84% response rate for this year. This had allowed only 5-6% of patients to require follow-up stating clinical outcomes were better than the UK average.	On-going	Resource and Delivery - Charles Janczewski	21/07/2015 (PPP) 18.01.16 (PPP) R&D 7.11.117
01 Feb 2015	Combined follow-up review of Informatics and Communication Technology Audits (2013)	The combined follow-up review examined progress against recommendations relating to the WAO previous work on disaster recovery and business continuity, data back-up arrangements, Caldicott and data quality (see above). The UHB has made progress in addressing some of the issues raised in previous reviews but the WAO have made seven new recommendations to ensure that key areas continue to be addressed - The Information Governance Committee and Data Quality Group are in their infancy but provide a good foundation to provide the Board with assurance on data quality - The UHB does not have a standard approach to disaster recovery and business continuity planning, with plans less established in clinical departments, than in the ICT department. Testing of disaster recovery and business continuity plans and training in clinical areas is also limited - Caldicott governance arrangements have been strengthened but there remains a need to develop training on Caldicott, data protection and information confidentiality - Clinical departments and ICT have agreements in place to identify data owners and responsibilities for backups but some agreements remain unsigned and the testing of backups remains ad hoc	Director of Therapies and Health Science (IM&T)/Director of Public Health (Data Quality)/Director of Strategic Planning (Business Continuity Planning)/Medical Director (Information Governance and Caldicott)	As the report related to a number of different areas of work agreement of the action plan took longer than anticipated. The PPP Committee received and approved the action plan on 10 November 2015. It was agreed that responsibility for monitoring the implementation of the actions would be remitted to the Information Governance sub-Committee and the Information Management and Technology sub-Committee as appropriate.	On-going	Information Technology and Governnance sub-Committee Eileen Brandreth	10/11/2015 IM&T 7.03.16 IM&T 10.06.16 IGSC 18.12.16
01 Jun 2015	Medicines Management (2014)	The work reviewed medicines management arrangements in the acute sector to assess scope for making improvements in relation to the quality and efficiency of services. The review concluded that there are strengths in the way the Health Board managed medicines but there were also issues associated with the strategic approach, storage facilities, transfer of medicines information and performance monitoring. - There was clear executive leadership, regular financial monitoring and improved clinical engagement but there was scope to raise pharmacy's profile, clarify accountabilities and strengthen the strategy. - Pharmacy staff costs per bed day were lower than the Welsh average and workload pressures were similar to the rest of Wales. There was scope to dedicate more resource to training and improve access to the pharmacy team outside normal hours. - Pharmacy facilities largely comply with key requirements although there were risks associated with storage of medicines, monitoring the temperature of ward fridges and infrequent audit of injectable medicine preparation on the ward. - There were some strengths to medicines management processes but there were risks related to information transfer between primary and secondary care, timeliness of reconciliations, non-medical prescribing and supporting patients to take their medicines properly. - There is scope to improve performance reporting, mixed evidence about the effectiveness of learning processes and a need to understand more about the root causes of the pharmacy team's safety interventions.	Medical Director	Report agreed and action plan developed. Action plan presented to and agreed by the PPP Committee in January 2016. Whilst the Committee did not agree when a follow-up would be received it will be added to the workplan for February 2017 by which time most actions will have been completed. Report to be presented to Committee, 7 November 2017 7.11.17 - The Nurse Executive Director was pleased to see there was improvement and progress being made. This was endorsed by the Chair in light of looking at the action plan. It was agreed for further assurance that recommendations were being acted on, a report would be brought back to the Committee on an annual basis for an update on progress but would be monitored through the Medicines Management Group.	On-going	Resource and Delivery - Charles Janczewski	18.01.16 (PPP) R&D 7.11.17
01/10/2017 **01/10/2015**	Review of Follow-up Outpatients - Assessment of Progress Management of follow-up of outpatient appointments (2014)	R1 Broaden the range of performance information regularly reported to the People, Planning and Performance Committee. This should ensure that it: a) covers a broader range of specialities; and b) clearly reports clinical risks associated with delayed follow-up appointments. R2 Identify clinical conditions across all specialties where patients could come to irreversible harm through delays in follow-up appointments. R3 Develop interventions to minimise the risk to patients with those conditions who are delayed beyond their target follow-up date. R4 Develop an outpatient transformation programme to create sustainable, efficient and good-quality services that meet population demand in the long term R5 Identify the change management arrangement needed to accelerate the pace of long-term outpatient transformation. The WAO review concluded that from a difficult starting point, the Health Board was taking appropriate action to identify the volume of its outpatient follow-up need but too many patients are delayed, the trend is worsening and it needs to do a lot more to develop sustainable follow-up outpatient services. The reason for their conclusion was that: - The Health Board has taken a pragmatic approach to determining the volume of outpatient follow-up demand, but it needs to better understand clinical risks to patients. - While follow-up waiting lists are more accurate, too many patients are delayed, the trend is worsening, and scrutiny and assurance arrangements needs strengthening - The Health Board is improving the administration of follow-up waiting lists but needs to develop a planned approach to modernise outpatient services.	Chief Operating Officer	Presented to Audit 5.12.17 and forwarded to QSE for monitoring purposes. Action plan approved by the PPP Committee on 10 November 2015. The Committee received a further report regarding Outpatients Follow-ups in March 2016 where it was agreed to receive a report at every meeting. The Committee has been advised that further work is required regarding pathway redesign and the Committee will be kept appraised of this via the regular reports. To report to Private Session of Board 28 July 2016 Reported to QSE on 20 June 2017. Minute QSE 17/105	Ongoing	Resource and Delivery - Charles Janczewski	Audit 5.12.17 QSE - 13.02.18 10/11/2015 & 15/03/16 (PPP) 12.07.16 (PPP) QSE 20.06.17

Wales Audit Office Tracking Report April 2018

Date of Report	Title of Review	Summary of Findings / Recommendations (as reported to Audit Committee	Excutive Lead	Management Response to Date	Status (Ongoing / Completed)	Assurance Committee & Chair	Date Reported to Assurance Committee
01 Nov 2015	Diagnostic review of IT capacity (2014)	This high-level diagnostic work assessed whether budgetary pressures were affecting capacity within informatics teams and the IT infrastructure, and provided an independent comparative analysis of the capacity of IM&T teams and resources across Wales. Despite above-average investment in ICT, their diagnostic work indicated that there were some weaknesses in the Health Board's arrangements and its clinical ICT infrastructure was not fully effective in supporting the delivery of healthcare. - Overall spend on ICT is just above the all-Wales average but remains below the recommended level of spend despite substantive additional funding in the past year. - Staffing levels for ICT are some of the lowest in Wales. - The Health Board is committed to ICT but there is a mixed level of integration of both systems and resources, and doctors' perception of IT facilities is not as positive as others across Wales. - The Health Board has a low number of devices and access to PCs was perceived as problematic. - A considerable amount of ICT equipment has reached its end of life and, although systems were generally reliable, downtime records were incomplete for many systems. - Despite some positive aspects, refresher information governance training was not mandated and training arrangements for some temporary staff were weak. - The mainstream clinical ICT systems were not fully effective in supporting doctors to provide patient care.	Director of Therapies and Health Science	Report received by UHB on 24 Nov 2015. Management response has been developed and considered by the Information Management and Technology sub-Committee. It will be received by the PPP Committee in May 2016 when the arrangements for receiving assurance regarding completion of all action highlighted will be agreed. There will be a workshop at end of September 2016 for all clinicians	On-going	Information Technology and Governance sub-Committee - Eileen Brandreth	02.05.16 (PPP)
26 Jan 2016	Review of Operating Theatres (Jan 2016)	1) The theatre improvement project is driving change through a clear focus on improving processes and performance management to improve efficiency 2) Theatre utilisation and productivity have improved but the Health Board has not clearly demonstrated that its investment has led to cashable financial savings. 3) Problems with staff engagement and workforce capacity mean there are risks to maintaining momentum 4) The focus on utilisation has not been matched by a strong enough focus on quality, although staff have positive views about surgical safety.	Chief Operating Officer	To be considered by the PPP Committee in May 2015 To report to PPP Committee January 2017 meeting. 10.01.17 - The report from WAO was responded to and an action plan developed, 86% of which was now green. This prompted the Theatre Strategy work and out of this five workstreams had been created. 16.05.17 - • Theatres had received £860k of replacement equipment but faced a backlog of £3m. • The metrics were looked at in relation to the utilization of theatres. This provided visibility to what was happening across the patch. They were able to predict what would happen with the ability to track all categories. • There were issues with a few of the theatres. These were currently addressed and a plan was in place. • An theatre estates plan was being developed to refurbish the wards at UHW and UHL. 7.11.17 - THEATRE UTILISATION • In order to strengthen areas key strategies were put in place such as; a workforce plan to improve staffing levels; to strengthen governance and accountability with the clinicians; to look at systems reviewing whole pathways around the surgical stream• The position has increased to 78-79% utilisation with a stretch target of 83% being the national standard. Bookings have reached 86% compliance; this was an 8% improvement. Improvements in CAVOC had shown 92% of theatre utilization. Work had commenced with the Children's Hospital predominantly to do with the use of theatres for elective and emergency surgery. There has also been improved trajectory for day units on both the UHL and UHW sites.	On-going	Resource and Delivery - Charles Janczewski	02.05.16 (PPP) 12.07.16 (PPP) 10.01.17 (PPP) 16.05.17 PPP 7.11.17 - R&D
01 Sep 2016	Consultant Contract: Follow-up of previous audit recommendations	1) Processes to review job plans annually 2) Guidance and training 3) Appropriate involvement 4) Information and outcome setting 5) Appraisal 6) Monitoring arrangements 7) Service improvement 8) Supporting processional activities 9) Wider benefits realisation	Medical Director	Draft being prepared. To go forward to PPP in May 2017	Ongoing	Resource and Delivery - Charles Janczewski	Audit 28.02.17
01 Nov 2016	Review Delayed Transfers of Care	1) Discharge Planning Audit - address the findings from the Delivery Units discharge planning audit either by: developing an action plan; or incorporating actions into existing service improvement action plans. 2) Imtermediate Care Fund (ICF) - Explore ways of mainstreaming services funded through the ICFG to ensure services remain resilient	Chief Operating Officer	Draft being prepared. To go forward to next QSE meeting in April 2017. Asked when it was anticipated that progress would be seen (the UHB had the third highest number of delayed transfers of care) in Wales, it was noted that Mrs Alice Casey was taking the lead on length of stay through the transformation work and this would be reported to the UHB Board through the Transformation Board.	Complete	Resource and Delivery - Charles Janczewski	Audit 28.02.17 18.04.17 - QSE
01 Jan 2017	Review of Estates	1) To ensure thte estates service is represented at board level, priortise recruiting an independent board member for estates. 2) Create a central log of estates related issues and actions resulting from Clinical Board meetings. 3) Develop a fully costed Estates Management Strategy. 4) Develop a zero based estates budget that makes provision for likely revenue costs arising from changes to the Health Board estate, such as new buildings. 5) Introduce a system to inspect a percentage of repairs each month. 6) Strengthen performance management by: extending the performance dashboard to include Key Performance Indicators (KPIs) for the other serices covered by the Service Board; and making greater use of the data captured through the Backtraq repairs maintenance system. 7) To ensure repairs are correctly priortised: run Backtraq refresher training for helpdesk staff; and review questions on call handlers' script	Director of Strategic Planning	1) An Independent Member with responsibility for Capital & Estates has been appointed. 2) This can be achieved by our Backtraq Maintenance System. All actions can be logged on this system. 3) Estate Strategy ready for launch, also Modernisation programme near completion. 4) Exec Teams to consider options. 5) Full KPI pack for Estates in place and being measured. 6) KPI's completed and communicated each month. Content covers all of Service Board responsibilities. 7) Refreshers completed and Backtraq has multi levels dedicated for prioritisation. Teams manage all tasks by priority on a daily basis. Levels 1 to 5. (Immediate to Planned Work within 28 days).	Ongoing	Strategy and Engagement John Antoniazzi	Audit 28.02.17 Audit 5.12.17
01 Jan 2017	Structured Assessment 2016	1) Financial Reporting - strengthen financial reporting arrangements: a dashboard summarising performance against against key financial performance indicators and the issues and detail of actions being taken to manage overspend and deliver necessary savings by clinical area 2) Development of Plans: clear connectivity between the medium term plan and its longer term strategy, as well as its other strategic plans 3) Monitoring and scrutiny of plans 4) Planning capacity 5) Board and assurance framework 6) Transparency of public reporting 7) Board membership, vacancies to be filled and support quorate running of committees 8) Scrutiny of performance: Establish new Resources and Delivery Committee as a matter of urgency to ensure robust scrutiny is given to HBs performance and ensure relevant information is provided to Committee including sharing of clinical board reviews to focus attention on areas which need greatest scrutiny. 9) Governance capacity: to undertake further evaluation. The views of IMs on what assurances are needed should be sought as part of evaluation 10) Tracking arrangements: Strengthen tracking arrangements for external audit recommendations by providing more detailed information to the Audit Committee	Director of Governance	Draft being discussed by the Management Executive and presented to Audit Committee in February 2018	Ongoing	Audit - John Antoniazzi	28.02.17 24.04.17 27.02.18
01 Jan 2017	Annual Audit Report	Key findings from the Annual Report included: 1) Comments on financial management 2) Governance and asssurance arrangements 3) Performance audit reviews 4) Internal controls 5) Arrangements for securing efficiency , effectiveness and economy in the use of services 6) Issues relating to estates management 7) Capacity of the corporate governance team 8) Monitoring of previous recommendations	Director of Governance	Management Executive provided comments on the draft report and two meetings were arranged to discuss with WAO. Final version agreed. Presented to the Board 30 March 2017 and to be 'tracked ' by Committees Final report presented to Audit Committee 27.02.18	Ongoing	Audit - John Antoniazzi	28.02.17 30.03.17 - Board 27.02.18 **CLOSED**

Wales Audit Office Tracking Report April 2018

Date of Report	Title of Review	Summary of Findings / Recommendations (as reported to Audit Committee	Excutive Lead	Management Response to Date	Status (Ongoing / Completed)	Assurance Committee & Chair	Date Reported to Assurance Committee
01 Feb 2017	Radiology Services	1) Develop an action plan detailing how reporting backlogs will be managed sustanability. 2) Over the next year, increase appraisal rates for non-clinical radiology staff to at least the level of all other radiology staff. 3) Over the next year, increase mandatory training rates for all radiology to staff at least eh Health Board target of 85%. 4) Liaise with referring clinicians when developing and reviewing referral guidance. Ensure all referring clinicians know ehre to access up to date versions of guidance. 5) To develop a radiology strategy over the next 12 months. 6) Develop a workforce plan alongside the radiology strategy which identifies the baseline capacity needed to sustainably meet radiology demand in a timely and safe way. 7) By mid-way 2017 develop an equipment replacement plan. 8) Strengthen directorate performance management	Chief Operating Officer	On Audit agenda for 24 April 2017 but not discussed as no representation. To be reported at Resource and Delivery Committee 7 November 2017 the Radiology Strategy is a complex piece of work and in the main actions were being progressed as intended. • Would like to see an indication of the timeframe with milestones finalised and how this would fit in with the IMTP process. • Over the next few months this piece of work would continue, with more specific timelines as this will be a part of the IMTP document. Once this was complete it would be shared with the Committee. •To have a brief update presented to the Committee of what was being put in place in regard to the recommendation that had not been accepted	Ongoing	Resource and Delivery - Charles Janczewski	7.11.17 - R&D
01 Jul 2017	Contractual Relationships with RKC Associates Ltd and its Owner	1) Board members and senior officials with significant financial responsibility should be on the organisations payroll, unless there are exceptional circumstances - in which case the Accounting Officer should approve the arrangements - and such exceptions should exisit for no longer than six months. 2) Engagements of more than six months in duration for more than a daily rate of £220, should include contractual provisions that allow the department to seek assurance regarding the income tax and NICS obligations of the engagee - and to terminate the contract if that assurance is not provided; and 3) These measures should be implements within three months - and implementation will be monitored after one year, reporting back to hte Chief Secretary to the Treasury and the Minister for the Cabinet Office; and if it emerges that any departments have not abided by these rules, sanctions will apply - wiht departmental resource budgets reduced by up to five times the payment in question	Medical Director	Action plan to be presented at Audit Committee 26.09.17 and Board Meeting 28 September will be a standing agenda item for Audit Committee until all actions complete.	Ongoing	Audit - John Antoniazzi	Audit - 26.09.17 Board - 28.09.17
01 Nov 2017	Discharge Planning	R1: Health Board collates a comprehensive range of information about community health and social care services. a) develop a system where ward staff are able to access up-to-date information about community health and social care services b) review the range and frequency of data about community health and social care services. For example, waiting times for some services anfd the frequency data on services available through other NHS bodies and housing options is collated. R2: We found that recently revised discharge and transfer of care and choice of accommodation policies were part of partnershipa ction plans but we found no evidence that patients and carers were involved in the process. The HB should seek to involve patients and carers when the next policy revisions are due. R3: we found that ward staff were unaware of discharge policies and pathways. The HB should undertake training and awareness raising once the draft discharge policy has been finalised to ensure all staff involved in dishcarge planning understand how to use it. R4: We found that staff training on discharge planning is patchy and that the HB does not monitor compliance with training. Plans to improve training is included on the discharge improvement plans but staff told us taht a lack of capcaity on the wards is a barrier to attending training. The HB should: a) explore developing an e-learning course for discharge planning which ward staff may find more accessible. b) ensure that attendance at training is captured on the ESR, which will help to improve compliance and monitoring.	Chief Operating Officer	Presented to Audit 5.12.17 and forwarded to QSE for monitoring purposes.	Ongoing		Audit - 5.12.17 QSE - 13.02.18
01 Sep 2017	Review of GP Out of Hours Service	R1 the Health Board does not have a GP out-of-hours strategy or workforce plan. The HB should A) Develop a process for regularly comparing its out-of-hours expenditure with other health boards, given the GP out-of-hours service's mixed performance; and b. develop a long-term workforce plan aimed at permanently resolving problems with filling GP shifts and improving the timeliness of all aspects of the service. R2 the Health Board has strengthened the way it monitors GP out-of-hours performance. Some weaknesses remain in clinical audit for GPs and learning from patient feedback. a. introduce processes for learning from patient feedback to improve GP out-of-hours services; b. prioritise clinical audit to ensure all GPs have their out-of-hours clinical contacts regularly reviewed, to meet the national standards; and c. check its out-of-hours data relating to the number of call terminations, to ensure the information is accurate. R3 Public messaging: a) improve signposting on its website by including information about GP out-of-hours on the landing page, providing a description of the service, details of the opening hours and locations, and the conditions and circumstances in which patients should use it. b. work has already been undertaken to try to ensure all GP practices have a standard answerphone message that provides appropriate information about the out-of-hours service. The Health Board now needs to ensure this is rolled out and implemented in all practices. c) as part of the eventual introduction of 111, consider replacing the five different telephone numbers with a single number for accessing GP out-of-hours. R4 Interface with other services: a. share data with all practices showing the variation in use of out-of-hours services between 6.30pm and 7.30pm, with a view to highlighting outliers and resolving issues that are driving out-of-hours demand; and b. identify and address the reasons that are preventing out-of-hours staff from accessing the GP record.	Chief Operating Officer	Presented to Audit 5.12.17 and forwarded to QSE for monitoring purposes.	Ongoing		Audit 5.12.17 QSE - 13.02.18
01 Oct 2017	Review of Follow-up Outpatients - Assessment of Progress	R1 Broaden the range of performance information regularly reported to the People, Planning and Performance Committee. This should ensure that it: a) covers a broader range of specialities; and b) clearly reports clinical risks associated with delayed follow-up appointments. R2 Identify clinical conditions across all specialties where patients could come to irreversible harm through delays in follow-up appointments. R3 Develop interventions to minimise the risk to patients with those conditions who are delayed beyond their target follow-up date. R4 Develop an outpatient transformation programme to create sustainable, efficient and good-quality services that meet population demand in the long term R5 Identify the change management arrangement needed to accelerate the pace of long-term outpatient transformation.	Chief Operating Officer	Presented to Audit 5.12.17 and forwarded to QSE for monitoring purposes.	Ongoing		Audit 5.12.17 QSE - 13.02.18
01 Oct 2017	Collaborative Arrangements for Managing Local Public Health Resources	R1 Collaborative arrangements for managing local public health resources do not work as effectively as they should do. The Wales Audit Office recognises, in part, that the problems identified in this report relate to matters that are the responsibilities of Welsh Government, Health Boards and Public Health Wales. R2 Continued working with Health Boards through the DsPH to agree the public health priorities that need to be delivered collectively, including identifying individual contributions to delivery and agreeing how outcomes will be measured collectively and monitored and reported locally and nationally. R3 Developing effective arrangements to demonstrate that PHW is securing value for money from the specialist public health resources allocated to LPHTs. R4 Clarifying the roles and responsibilities of the Trust's national and local teams in relation to developing and delivering health improvement programmes. R5 Progressing work to develop reliable methods for allocating specialist public health resources to LPHTs and other stakeholders that covers the breadth of public health practice including healthcare public health. R6 Agreeing appropriate mechanisms for communicating and sharing information between the Trust and LPHTs. R7 Agreeing a mechanism whereby workforce planning discussions take place on a more formal basis between the Trust and DsPH R8 Clarifying the requirements for career progression for staff working within LPHTs, including whether a post-graduate degree in public health is a pre-requisite R9 Clarifying expectations for staff working within LPHTs about voluntary registration with the UK Public Health Register and whether it is, or should be, a requirement to undertake particular roles.	Director of Public Health	Presented to Audit 5.12.17	Ongoing		

AUDIT ENQUIRIES TO THOSE CHARGED WITH GOVERNANCE AND MANAGEMENT	
Name of Meeting : Audit Committee Meeting	**Date : 24 April 2018**

Executive Lead : Executive Director of Finance
Author : Deputy Director of Finance 029 20743555
Caring for People, Keeping People Well: Not Applicable
Financial impact: The responses provided to the enquiries made by the WAO give assurances that the financial statements should be free from material misstatement.
Quality, Safety, Patient Experience impact: This report supports robust financial reporting against the UHBs one year operational plan which supports improvements in quality, safety and patient / carer experience.
Health and Care Standard Number 1
CRAF Reference Number 6.7
Equality Impact Assessment Completed: Not Applicable

ASSURANCE AND RECOMMENDATION

REASONABLE ASSURANCE is provided by:

- The response to the enquiries made by the Wales Audit Office.

The Audit Committee is asked to:

- **REVIEW** the draft response to the Wales Audit Office enquiries;
- **APPROVE** its submission to the Wales Audit office, subject to any agreed changes made by the Audit Committee and any further comments received from the Chief Executive and Chair.

SITUATION

The WAO as part their Final Accounts Audit are responsible for obtaining reasonable assurances that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error. The WAO have written to the UHB to gain responses on a number of risk, legal, fraud and governance questions. These responses are required both from management and those charged with governance.

BACKGROUND

The WAO have sent the Health Board Finance Director a letter which formally seeks documented consideration and understanding on a number of governance areas that impact on their audit of our financial statements. These considerations are relevant to both the management of the Health Board and 'those charged with governance' (the Board).

The areas of governance on which views are being sought are summarized as:

- Management processes in relation to risk, fraud and ethical behavior;
- Management's and Board awareness of any actual or alleged instances of fraud;
- How management and the Board gain assurance that all relevant laws and regulations have been complied with;
- Whether there is any potential litigation or claims that would affect the financial statements;
- Management processes to disclose related party transactions and the Board's oversight of these processes.

The letter received from the Wales Audit office is attached and a response to their questions has been requested by 30 April 2018.

ASSESSMENT

The draft response to the questions posed by the Wales Audit Office is attached and is detailed in Appendices 1, 2 and 3 of the accompanying letter. For information purposes, Appendix 4 also includes the responses provided in 2015/16 and 2016/17.

The Audit committee, as part of its lead role in Final Accounts review and scrutiny, is asked to review the draft response, propose any changes to strengthen the response and support its submission to the Wales Audit Office within the timescales they have requested. To ensure good governance, this draft response has also been sent to the Chief Executive and Chair for their review and endorsement.

WALES AUDIT OFFICE
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Mr Bob Chadwick
Director of Finance
Cardiff and Vale University Local Health Board
Headquarters
University Hospital of Wales
Heath Park
CARDIFF
CF14 4XW

Reference: JH06/NG

Date issued: 28 February 2018

Dear Bob

Cardiff and Vale University Local Health Board 2017/18 - Audit enquiries to those charged with governance and management

In my 2018 Audit Plan I indicate that I am responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error. I also set out the respective responsibilities of auditors, management and those charged with governance.

This letter formally seeks documented consideration and understanding on a number of governance areas that impact on my audit of your financial statements. These considerations are relevant to both the management of the Cardiff and Vale University Local Health Board (the UHB) and 'those charged with governance' (the Board).

I have set out below the areas of governance on which I am seeking views.

1. Management processes in relation to:
   - undertaking an assessment of the risk that the financial statements may be materially misstated due to fraud;
   - identifying and responding to risks of fraud in the organisation;
   - communication to employees of views on business practice and ethical behaviour; and
   - communication to those charged with governance the processes for identifying and responding to fraud.
2. Management's and the Board's awareness of any actual or alleged instances of fraud.
3. How management and the Board gain assurance that all relevant laws and regulations have been complied with.
4. Whether there is any potential litigation or claims that would affect the financial statements.

5. Management processes to identify, authorise, approve, account for and disclose related party transactions and relationships and the Board's oversight of these processes.

The information you provide will inform our understanding of the UHB and its business processes and support our work in providing an audit opinion on your 2017-18 financial statements.

I would be grateful if you could complete the attached tables in Appendices 1 to 3. The questions have changed since last year, with a slight reduction in their number. I have however attached last year's completed questionnaire for information at Appendix 4

Your responses should be formally considered and communicated to us on behalf of both management and those charged with governance by 30 April 2018. In the meantime, if you have queries, please contact Mark Jones on 07748181679 or by e-mail at mark.jones@audit.wales

Yours sincerely

John Herniman
Engagement Director

cc Chris Lewis, Deputy Director of Finance

Appendix 1

Matters in relation to fraud

International Standard for Auditing (UK and Ireland) 240 covers auditors' responsibilities relating to fraud in an audit of financial statements.

The primary responsibility to prevent and detect fraud rests with both management and 'those charged with governance', which for the Health Board is the Board. Management, with the oversight of the Board, should ensure there is a strong emphasis on fraud prevention and deterrence and create a culture of honest and ethical behaviour, reinforced by active oversight by those charged with governance.

As external auditors, we are responsible for obtaining reasonable assurance that the financial statements are free from material misstatement due to fraud or error. We are required to maintain professional scepticism throughout the audit, considering the potential for management override of controls.

What are we required to do?

As part of our risk assessment procedures we are required to consider the risks of material misstatement due to fraud. This includes understanding the arrangements management has put in place in respect of fraud risks. The ISA views fraud as either:

- the intentional misappropriation of assets (cash, property, etc); or
- the intentional manipulation or misstatement of the financial statements.

We also need to understand how the Board exercises oversight of management's processes. We are also required to make enquiries of both management and the Board as to their knowledge of any actual, suspected or alleged fraud and for identifying and responding to the risks of fraud and the internal controls established to mitigate them.

Enquiries of management - in relation to fraud	
Question	**2017-18 Response**
1. What is management's assessment of the risk that the financial statements may be materially misstated due to fraud and what are the principal reasons?	The assessed risk is extremely low as management are not aware of any fraud or potential fraud that would materially impact on the financial statements. This assessment is made on the basis of a robust and comprehensive counter fraud and internal audit services. Any potential fraud cases are rigorously investigated and pursued by counter fraud. Internal Audit also undertake a detailed annual review of the main financial systems from which the financial statements are prepared which has been reviewed as giving substantial assurance.
2. What processes are employed to identify and respond to the risks of fraud more generally and specific risks of misstatement in the financial statements?	The Health Board has a year-end accounts closure process, including an analytical review which aims to mitigate against the risks of any financial misstatements. The Health Board's internal auditors also annually review the fundamental financial systems upon which the financial statements are based. This is also supported by a robust and well-resourced counter fraud programme. In addition, the Health Board has undertaken, through the Counter Fraud Department, a range of measures such as establishing a Post Payment Verification Panel which evaluates and monitor 'errors' with claims that have been submitted to Primary Care Services by the individual GP Practices and/or Opticians. All senior staff in the Finance Department must be professionally qualified accountants whose professional institutes have strong code of conducts and professional ethics. Any deliberate mis-statements would likely result in the individual being stuck off from their professional body.
3. What arrangements are in place to report fraud issues and risks to the Audit Committee?	The Audit Committee agrees a Counter Fraud Work Plan at the start of the year. It then receives regular Counter Fraud progress reports at all of its normal business meetings. It also receives an annual counter fraud report which details the work that has been

	undertaken during the year, together with a Self-Risk Assessment that is required to be submitted to the NHS Counter Fraud Authority (formerly NHS Protect) which measures the Health Board's level of counter fraud work against a set of agreed National Standards for NHS Bodies in relation to fraud, bribery and corruption.
4. How has management communicated expectations of ethical governance and standards of conduct and behaviour to all relevant parties, and when?	All staff have access to the Standards of Behaviours Framework Policy via the Intra and Internet plus this is included upon recruitment and at induction. Consultant Medical and Dental Staff are reminded of the need to declare interests etc, when completing their job plans. This has been re-enforced throughout the year by the Assistant Medical Director – Workforce and the Clinical Boards, Board members are made aware of the policy on recruitment and are also prompted to complete a declaration on an annual basis. This requires them to confirm that they have read and understood the policy. 'Declarations of Interest' is also a standing item on the agenda of all Board and Committee meetings. The Review of Board and Committee working would also have acted as a reminder of the governance responsibilities of the Board. In addition, the Standards of Behaviours Framework policy has been circulated and also raised at the Health Systems Management Board to ensure that it is cascaded through Clinical Boards. This has been done to make sure that expectations of ethical governance and standards of conduct and behaviour are being communicated to all professional staff and not only to Medical and Dental staff.
5. Are you aware of any instances of actual, suspected or alleged fraud within the audited body since 1 April 2017?	Yes, this is fully reported to the Audit Committee at its regular business meeting in its private session via a counter fraud progress report. Also, as part of their private meetings, the Board receives minutes from the private meeting of the Audit Committee, which include reference and any significant points highlighted in the Counter Fraud Progress Reports.
6. Are you aware of any fraud within the NHS Wales Shared Services Partnership since 1 April 2017?	Yes, this is also fully reported to both the NWSSP and Velindre NHS Trust (as the hosting body) Audit Committees at its regular business meeting via a counter fraud progress report.

Enquiries of those charged with governance – in relation to fraud	
Question	**2017-18 Response**
1. How does the Board exercise oversight of management's processes for identifying and responding to the risks of fraud within the audited body and the internal control that management has established to mitigate those risks?	The Board has delegated the review and monitoring of management processes for identifying and responding to fraud risks to the Audit Committee. This monitoring is supported by the work of the Audit Committee and the internal audit and counter fraud functions for which the Finance Director is the lead Executive. The Audit Committee receives regular reports on counter fraud matters and on the adequacy of internal control that exist within the Health Board and on the actions being taken to mitigate these risks. The Chair of the Audit Committee is an Independent Member of the Board and reports back to the Health Board on these matters and the minutes of both the public and private meetings of the Audit Committee are included in the meeting papers of the Board.
2. Are you aware of any instances of actual, suspected or alleged fraud with the audited body since 1 April 2017?	Yes, as part of their private meetings, the Board receives minutes from the private meeting of the Audit Committee, which includes any significant points highlighted in the Counter Fraud Progress Reports.

Appendix 2

Matters in relation to laws and regulations

International Standard for Auditing (UK and Ireland) 250 covers auditors' responsibilities to consider the impact of laws and regulations in an audit of financial statements.

Management, with the oversight of those charged with governance, the Board, is responsible for ensuring that the Health Board's operations are conducted in accordance with laws and regulations, including compliance with those that determine the reported amounts and disclosures in the financial statements.

As external auditors, we are responsible for obtaining reasonable assurance that the financial statements are free from material misstatement due to fraud or error, taking into account the appropriate legal and regulatory framework. The ISA distinguishes two different categories of laws and regulations:

- laws and regulations that have a direct effect on determining material amounts and disclosures in the financial statements; and
- other laws and regulations where compliance may be fundamental to the continuance of operations, or to avoid material penalties.

What are we required to do?

As part of our risk assessment procedures we are required to make inquiries of management and the Board as to whether the Health Board is in compliance with relevant laws and regulations. Where we become aware of information of non-compliance or suspected non-compliance we need to gain an understanding of the non-compliance and the possible effect on the financial statements.

Enquiries of management – in relation to laws and regulations	
Question	**2017-18 Response**
1. How have you gained assurance that all relevant laws and regulations have been complied with?	Assurances are gained via the appropriate Board Committees where these issues are discussed. Where relevant these are linked to the Corporate Risk and Assurance Framework for the Health Board.
2. Have there been any instances of non-compliance or suspected non-compliance with relevant laws and regulations since 1 April 2017, or earlier with an ongoing impact on the 2017-18 financial statements?	Yes, there has been a Health and Safety Executive notice of potential criminal action and this has been accounted for within the financial statements.
3. Are there any potential litigations or claims that would affect the financial statements?	There are some of Employment Tribunal cases involving the Health Board and these have been accounted for within the financial statements.
4. Have there been any reports from other regulatory bodies, such as HM Revenues and Customs which indicate non-compliance?	Whilst no reports have been issued, the Health Board has been reviewed by HRMC this year in respect of the employment status of its GP OOH service and for compliance with VAT regulations. These have been accounted for in the financial statements.
Enquiries of those charged with governance – in relation to laws and regulations	
Question	**2017-18 Response**
1. How does the Board, in its role as those charged with governance, obtain assurance that all relevant laws and regulations have been complied with?	Assurances are gained via the appropriate Board Committees where these issues are discussed. Where relevant these are linked to the Corporate Risk and Assurance Framework for the Health Board.
2. Are you aware of any instances of non-compliance with relevant laws and regulations?	No.
3. Are you aware of any non-compliance with laws and regulations within the NHS Shared Services Partnership since 1 April 2017?	No, but a breach in procurement regulations was reported in 2017/18 relating to prior years (as per WAO report).

Appendix 3

Matters in relation to related parties

International Standard for Auditing (UK and Ireland) 550 covers auditors' responsibilities relating to related party relationships and transactions.

The nature of related party relationships and transactions may, in some circumstances, give rise to higher risks of material misstatement of the financial statements than transactions with unrelated parties.

Because related parties are not independent of each other, many financial reporting frameworks establish specific accounting and disclosure requirements for related party relationships, transactions and balances to enable users of the financial statements to understand their nature and actual or potential effects on the financial statements. An understanding of the entity's related party relationships and transactions is relevant to the auditor's evaluation of whether one or more fraud risk factors are present as required by ISA (UK and Ireland) 240, because fraud may be more easily committed through related parties.

What are we required to do?

As part of our risk assessment procedures, we are required to perform audit procedures to identify, assess and respond to the risks of material misstatement arising from the entity's failure to appropriately account for or disclose related party relationships, transactions or balances in accordance with the requirements of the framework.

Enquiries of management – in relation to related parties	
Question	**2017-18 Response**
1. Confirm that you have disclosed to the auditor: • the identity of any related parties, including changes from the prior period; • the nature of the relationships with these related parties; • details of any transactions with these related parties entered into during the period, including the type and purpose of the transactions.	Yes
2. What controls are in place to identify, authorise, approve, account for and disclose related party transactions and relationships?	Staff are required to make declarations in accordance with the Standards of Behaviour Framework Policy, incorporating Gifts, Hospitality and Sponsorship. All Board members are asked to make a declaration on an annual basis, which is then recorded and published in the Declarations of Board Members' Interests. Where a Board Member's interests change during the year, they have a personal responsibility to declare this and inform the Board Secretary. These related party transactions are identified in the annual accounts and their materiality quantified. For all Committees and the Board we have a standing agenda item at the beginning of each meeting 'Declaration of Interest' in relation to items on the agenda.
Enquiries of the those charged with governance – in relation to related parties	
Question	**2017-18 Response**
1. How does the Board, in its role as those charged with governance, exercise oversight of management's processes to identify, authorise, approve, account for and disclose related party transactions and relationships?	The Audit Committee receives bi-annual reports relating to compliance with the policy and the Gifts, Hospitality and Sponsorship Register. It also scrutinises the Annual Accounts which contain details of related party transactions.

Appendix 4

Recent years' replies: International Standard for Auditing (UK and Ireland) 240 – The auditor's responsibilities relating to fraud in an audit of financial statements

Under the ISA, the primary responsibility for preventing and detecting fraud rests with both management and 'those charged with governance', which for the Commission is the Audit Committee. This includes fraud that could impact on the accuracy of the annual accounts. The ISA requires us, as external auditors, to obtain an understanding of how the Board exercises oversight of management's processes for identifying and responding to the risks of fraud and the internal controls established to mitigate them.

What is 'fraud' in the context of the ISA?

The ISA views fraud as either:

- the intentional misappropriation of the UHB's assets (cash, property, etc); or
- the intentional manipulation or misstatement of the financial statements.

What are we required to do?

We have to obtain evidence of how management and those charged with governance are discharging their responsibilities if we are to properly discharge our responsibilities under ISA240. We are therefore making requests from both management and the Audit Committee:

Enquiries of management		
Question	**2016-17 Response**	**2015-16 Response**
1. What is management's assessment of the risk that the financial statements may be materially misstated due to fraud and what are the principal reasons?	The assessed risk is extremely low as management are not aware of any fraud or potential fraud that would materially impact on the financial statements. This assessment is made on the basis of a robust and comprehensive counter fraud and internal audit services. Internal Audit also undertake a detailed annual review of the main financial systems from which the financial statements are prepared which has been reviewed as giving substantial assurance.	The assessed risk is minimal as management are not aware of any potential fraud that would materially impact on the financial statements. This assessment is made on the basis of a robust and comprehensive counter fraud and internal audit services. Internal Audit undertake a detailed annual review of the main financial systems from which the financial statements are prepared which has been reviewed as giving substantial assurance.

Enquiries of management		
Question	**2016-17 Response**	**2015-16 Response**
2. What are management's processes to identify any misstatements in significant judgment areas, such as accounting estimates, which could a risk of material misstatement due to fraud?	Major financial judgements and estimates are prepared and reviewed by senior finance staff and shared with the Audit Committee and Wales Audit Office for further review and scrutiny. In addition a detailed analytical analysis of income and expenditure is carried out to identify and explain any significant movements between financial years and this is also reviewed.	[WAO comment: please note that we did not ask this question last year.]
3. How can management assure the Board that it has not been inappropriately influenced by external pressures?	The Board has a good understanding of its statutory financial duties and accountabilities. Finance is a Board level responsibility and the Board is fully appraised of the financial position at every Board meeting and it receives Financial Reports that are consistent with the WG monitoring returns. Finance is considered alongside other performance metrics and is reported in an open, honest and consistent manner. This includes an assessment of Financial risk and the year-end forecast position. The Board has also set up a Finance Committee that meets monthly to have in-depth reviews of the in-year financial position, its forecast year end position and progress against financial targets.	The Board has a good understanding of its statutory financial duties and accountabilities. Finance is a Board level responsibility and the Board is fully appraised of the financial position at every Board meeting and it receives Financial Reports that are consistent with the WG monitoring returns. The Board has also had in-depth financial sessions to consider the financial plan as part of its development programme. Finance is considered alongside other performance metrics and is reported in an open, honest and consistent manner. This includes an assessment of Financial risk and the year-end forecast position.

Enquiries of management		
Question	**2016-17 Response**	**2015-16 Response**
4. Are management aware of any organisational pressure to meet revenue and capital budgets or other financial constraints?	The UHB did not have its three-year IMTP approved in 2016/17. The organisation was then requested to submit a one year operational plan which it has done. The formation and sign off of these plans follows a rigorous scrutiny process, both internally and externally, where they are reviewed by both the Board and Welsh Government. The organisational accountabilities for meeting financial and non-financial targets are clear and the Executive Team have performance meetings with Welsh Government where this is discussed. In addition, the Chief Executive Officer and Chair have regular meeting with Welsh Government Chief Officers and Cabinet Secretary where performance is discussed and challenged. Finance is considered alongside other key tier 1 performance targets.	The organisation has clear financial duties and plans to deliver these as set out in the three year IMTP. The agreement of these plans follows a rigorous scrutiny process, both internally and externally, where both the Board and Welsh Government need to sign these off. The organisational accountabilities for meeting financial and non-financial targets are clear and the Executive Team have performance meetings with Welsh Government where this is discussed. In addition, the Chief Executive Officer and Chair have regular meeting with Welsh Government Chief Officers and Ministers where performance is discussed and challenged. The Health Board had its IMTP approved in August 2015 despite it not having a balanced financial plan. The Health Board has worked with the Welsh Government all year to work towards financial sustainability. Financial balance is considered alongside other key tier 1 targets.

Enquiries of management		
Question	**2016-17 Response**	**2015-16 Response**
5. What processes are employed to identify and respond to the risks of fraud more generally and specific risks of misstatement in the financial statements?	The Health Board has a year-end accounts closure process, including an analytical review which aims to mitigate against the risks of any financial misstatements. The Health Board's internal auditors also annually review the fundamental financial systems upon which the financial statements are based. This is also supported by a robust and well-resourced counter fraud programme. In addition, the Health Board has undertaken, through the Counter Fraud Department, a range of measures such as establishing a Post Payment Verification Panel which evaluates and monitor 'errors' with claims that have been submitted to Primary Care Services by the individual GP Practices and/or Opticians. All senior staff in the Finance Department must be professionally qualified accountants whose professional institutes have strong code of conducts and professional ethics. Any deliberate mis-statements would likely result in the individual being stuck off from their professional body.	The Health Board has a year-end accounts closure process, including an analytical review which aims to mitigate against the risks of any financial misstatements. The Health Board's internal auditors also annually review the fundamental financial systems upon which the financial statements are based. This is also supported by a counter fraud programme which checks for such items as overpayments of salaries. In addition, the Health Board has undertaken, through the Counter Fraud Department, a range of measures such as establishing a Post Payment Verification Panel which evaluates and monitor 'errors' with claims that have been submitted to Primary Care Services by the individual GP Practices and/or Opticians. All senior staff in the Finance Department must be professionally qualified accountants whose professional institutes have strong code of conducts and professional ethics. Any deliberate mis-statements would likely result in the individual being stuck off from their professional body

Enquiries of management		
Question	**2016-17 Response**	**2015-16 Response**
6. How has management communicated expectations of ethical governance and standards of conduct and behaviour to all relevant parties, and when?	All staff have access to the Standards of Behaviours Framework Policy via the Intra and Internet plus this is included upon recruitment and at induction. Consultant Medical and Dental Staff are reminded of the need to declare interests etc, when completing their job plans. This has been re-enforced throughout the year by the Assistant Medical Director – Workforce and the Clinical Boards, Board members are made aware of the policy on recruitment and are also prompted to complete a declaration on an annual basis. This requires them to confirm that they have read and understood the policy. 'Declarations of Interest' is also a standing item on the agenda of all Board and Committee meetings. The Review of Board and Committee working would also have acted as a reminder of the governance responsibilities of the Board. In addition, the Standards of Behaviours Framework policy has been circulated and also raised at the Health Systems Management Board to ensure that it is cascaded through Clinical Boards. This has been done to make sure that expectations of ethical governance and standards of conduct and behaviour are being communicated to all professional staff and not only to Medical and Dental staff.	All staff have access to the Standards of Behaviours Framework Policy via the Intra and Internet plus this is included in recruitment and at induction. Consultant Medical and Dental Staff are reminded of the need to declare interests etc, when completing their job plans. This has been re-enforced throughout the year by the Assistant Medical Director – Workforce and the Clinical Boards, Board members are made aware of the policy on recruitment and are also prompted to complete a declaration on an annual basis. This requires them to confirm that they have read and understood the policy. 'Declarations of Interest' is also a standing item on the agenda of all Board and Committee meetings. The Review of the Board and Committee working, would also have acted as a reminder of the governance responsibilities of the Board. In addition, the Standards of Behaviours Framework policy has been circulated and also raised at the Health Systems Management Board to ensure that it is cascaded through Clinical Boards. This has been done to make sure that expectations of ethical governance and standards of conduct and behaviour are being communicated to all professional staff and not only to Medical and Dental staff.

Enquiries of management		
Question	**2016-17 Response**	**2015-16 Response**
7. What arrangements are in place to report about fraud to those charged with governance?	The Audit Committee agree a Counter Fraud Work Plan at the start of the year and then receives regular Counter Fraud progress reports at all of its normal business meetings. It also receives an annual counter fraud report which details the work that has been undertaken during the year, together with a Self-Risk Assessment that is required to be submitted to NHS Protect and which measures the Health Board's level of counter fraud work against a set of agreed National Standards for NHS Bodies in relation to fraud, bribery and corruption.	As part of the agreed Annual Counter Fraud Work-Plan, the Audit Committee receive regular Counter Fraud progress reports at all of their normal business meetings, an annual report which details the work that has been undertaken during the year, together with a Self-Risk Assessment that is required to be submitted to NHS Protect and which measures the Health Board's level of counter fraud work against a set of agreed National Standards for NHS Bodies in relation to fraud, bribery and corruption.

Enquiries of the Board		
Question	**2016-17 Response**	**2015-16 Response**
1. How does the Board, in its role as those charged with governance, exercise oversight of management's processes for identifying and responding to the risks of fraud within the UHB and the internal control that management has established to mitigate those risks?	The Board has delegated the review and monitoring of management processes for identifying and responding to fraud risks to the Audit Committee. This monitoring is supported by the work of the Audit Committee and the internal audit and counter fraud functions for which the Finance Director is the lead Executive. The Audit Committee receives regular reports on counter fraud matters and on the adequacy of internal control that exist within the Health Board and on the actions being taken to mitigate these risks. The Chair of the Audit Committee is an Independent Member of the Board and reports back to the Health Board on these matters and the minutes of both the public and private meetings of the Audit Committee are included in the meeting papers of the Board.	The Board has delegated the review and monitoring of management processes for identifying and responding to fraud risks to the Audit Committee. This monitoring is supported by the work and the internal audit and counter fraud functions for which the Finance Director is the Executive lead. The Audit Committee receives regular reports on counter fraud matters and on the adequacy of internal control that exist within the Health Board and on the actions being taken to mitigate these risks. The Chair of the Audit Committee is an Independent Member of the Board and reports back to the Health Board on these matters and the minutes of both the public and private meetings of the Audit Committee are included in the meeting papers of the Board.
2. Has the Board knowledge of any actual, suspected or alleged fraud since 1 April 2015?	As part of their private meetings, the Board receives minutes from the private meeting of the Audit Committee, which include reference and any significant points highlighted in the Counter Fraud Progress Reports.	As part of their private meetings, the Board receives minutes from the private meeting of the Audit Committee, which include reference and any significant points highlighted in the Counter Fraud Progress Reports.
3. Has the Board any suspicion that fraud may be occurring within the organisation?	Yes, but only what is reported as actual or suspected fraud as per the counter fraud reports to the Audit Committee for which the minutes and any key areas of concern are reported back to the Board.	Yes, but only what is reported as actual or suspected fraud as per the counter fraud reports to the Audit Committee for which the minutes and any key areas of concern are reported back to the Board.

Enquiries of the Board		
Question	**2016-17 Response**	**2015-16 Response**
4. Is the Board satisfied that internal controls, including segregation of duties, exist and work effectively? If 'yes', please provide details. If 'no' what are the risk areas?	Yes, the Health Board is satisfied that key internal controls work effectively. The Health Board has adopted the NHS Wales model Standing orders and Standing Financial instructions. It also has in place a detailed scheme of delegation and Financial Control Procedures and Policies. The adequacy of Internal Controls is reviewed on behalf of the Board by the Audit Committee and this is supported by the work of the Internal Audit and Counter Fraud Teams. The Board also agrees the Annual Governance Statement which sets out its review and opinion of internal controls. The Internal Audit review of the Health Boards Financial Systems was rated as substantial assurance.	Yes, the Health Board is satisfied that key internal controls work effectively. The Health Board has adopted the NHS Wales model Standing orders and Standing Financial instructions. It also has a detailed scheme of delegation to support these. There are also a number of Financial Control Procedures and Policies in place and a schedule for review of these is reported to the Audit Committee. The adequacy of Internal Controls is reviewed on behalf of the Board by the Audit Committee and this is supported by the work of the Internal Audit and Counter Fraud Teams. The Board also agrees the Annual Governance Statement which sets out its review and opinion of internal controls. The Internal Audit review of the Health Boards Financial Systems was rated as substantial assurance.
5. How do you encourage staff to report their concerns about fraud and what concerns about fraud are staff expected to report?	The Counter Fraud department has a regular annual programme of raising fraud awareness within the Health Board. Regular fraud awareness sessions are held with the various staff groups at which details on how and to who fraud is to be reported are outlined. In addition to this, a quarterly newsletter is produced that is available on the Health Board's Intranet website and all successful prosecutions' cases are also publicised to obtain the maximum deterrent.	As part of the ongoing programme of raising fraud awareness within the Health Board, regular fraud awareness sessions are held with the various staff groups at which details on how and to who fraud is to be reported are outlined. In addition to this, a quarterly newsletter is produced that is available on the Health Board's Intranet website and all successful prosecutions' cases are also publicised to obtain the maximum deterrent.

Enquiries of the Board		
Question	**2016-17 Response**	**2015-16 Response**
6. From a fraud and corruption perspective, what are considered by the Board to be high risk posts within the organisation and how are the risks relating to these posts identified, assessed and managed?	The highest risk functions are payroll, procurement, capital and estates, financial accounting and services, asset management and primary care contractor services. These areas are governed by Standing orders and Standing Financial instructions with supporting financial control procedures. Risks in these areas are covered within the internal audit, counter fraud and PPV work plans which are overseen by the Audit Committee on behalf of the Board.	The highest risk functions are payroll, procurement, capital and estates, financial accounting and services, asset management and primary care contractor services. These areas have governed by Standing orders and Standing Financial instructions with supporting financial control procedures. Risks in these areas are covered within the internal audit, counter fraud and PPV work plans which are overseen by the Audit Committee on behalf of the Board.
7. Is the Board aware of any related party relationships or transactions that could give rise to instances of fraud and how does the Audit Committee mitigate the risks associated with fraud related to related party relationships and transactions?	The Declarations of Interest Register is published and made available to the Board Secretary who is responsible for keeping the Chair appraised of any potential related party relationships or transactions that could give rise to fraud. There have been no known instances during the year.	The Declarations of Interest Register is published and made available to the Board Secretary who is responsible for keeping the Chair appraised of any potential related party relationships or transactions that could give rise to fraud. There have been no known instances during the year.
8. Is the Board aware of any entries made in the accounting records of the organisation that it believes or suspects are false or intentionally misleading?·	No. All major accounting judgements and estimates are reported to and discussed at the Audit Committee as part of the final accounts scrutiny process. These are thoroughly considered a separate workshop which concentrates on reviewing and scrutinising the draft annual accounts.	No. All major accounting judgements and estimates are reported to and discussed at the Audit Committee as part of the final accounts scrutiny process. These are thoroughly considered at the annual accounts workshop.

Enquiries of the Board		
Question	**2016-17 Response**	**2015-16 Response**
9. Is the Board aware of any organisational, or management pressure to meet revenue and capital budgets or other financial constraints?	The UHB did not have its three year IMTP approved in 2016/17. The organisation was then requested to submit a one year operational plan which it has done. The formation and sign off of these plans follows a rigorous scrutiny process, both internally and externally, where they are reviewed by both the Board and Welsh Government. Organisational and Executive Director accountabilities for meeting financial and non-financial targets are clear and the Chief Executive Officer and Chair have regular meeting with Welsh Government Chief Officers and Cabinet Secretary where performance is discussed and challenged. Finance is considered alongside other key tier 1 performance targets.	The organisation has clear financial duties and plans to deliver these are set out in the three year IMTP. The agreement of these plans follows a rigorous scrutiny process both internally and externally where both the Board and Welsh Government need to sign these plans off. Organisational and Executive Director accountabilities for meeting financial and non-financial targets are clear and the Chief Executive Officer and Chair have regular meeting with Welsh Government Chief Officers and Ministers where performance is discussed and challenged. The Health Board had its IMTP approved in August 2015 despite it not having a balanced financial plan. The Health Board has worked with the Welsh Government all year to work towards financial sustainability. Financial balance is considered alongside other key tier 1 targets.

International Standard for Auditing (UK and Ireland) 250 – Consideration of laws and regulations in an audit of financial statements

Under the ISA, in the UK and Ireland, the primary responsibility for ensuring that the entity's operations are conducted in accordance with laws and regulations and the responsibility for the prevention and detection of non-compliance rests with management and 'those charged with governance', which for the UHB is the Board. The ISA requires us, as external auditors, to obtain an understanding of how the Committee gains assurance that all relevant laws and regulations have been complied with.

What are we required to do?

We have to obtain evidence of how management and those charged with governance are discharging their responsibilities, if we are to properly discharge our responsibilities under ISA 250. We are therefore making requests from both management and the Board:

Enquiries of management		
Question	**2016-17 Response**	**2015-16 Response**
1. Is the Board aware of any non-compliance with relevant laws and regulations?	Discussed at appropriate Committees and where relevant linked to the Corporate Risk and Assurance Framework for the Health Board. Further training for Board members on legal requirements is also planned for a Board Development session in early 2017/18.	Discussed at appropriate Committees and where relevant linked to the Corporate Risk and Assurance Framework for the Health Board

Enquiries of management		
Question	**2016-17 Response**	**2015-16 Response**
2. If there have been instances of non-compliance what are they, and what oversight has the Board had to ensure that action taken by management to address and gaps in control?	Instances of non-compliance are: • Fire Safety Enforcement Notices where a plan of action has been agreed with Whitchurch Hospital the Fire and Rescue Authority. This is monitored via the Health and Safety Committee. • Breaches in 2016/17 of Welsh Government procurement rules, where action has been taken to correct processes. This is monitored by the Audit Committee. • Information Governance Breaches which are monitored by the People Performance and Delivery Committee (supported by the Information Governance sub group) which agree improvements plans. • Through the Committees this is then reported to the Board. • Health and Safety Executive (one breach C.O.S.H. regulations) Action Plan delivered and compliance notice removed 6 Feb 2017 and was monitored by the Health and Safety Committee.	Instances of non-compliance are: • Fire Safety Enforcement Notices where a plan of action has been agreed with Whitchurch Hospital the Fire and Rescue Authority. This is monitored via the Health and Safety Committee. • Breaches in 2016/17 of Welsh Government procurement rules, where action has been taken to correct processes. This is monitored by the Audit Committee. • Information Governance Breaches which are monitored by the People Performance and Delivery Committee (supported by the Information Governance sub group) which agree improvements plans. • Through the Committees this is then reported to the Board. • Health and Safety Executive (one breach C.O.S.H. regulations) Action Plan delivered and compliance notice removed 6 Feb 2017 and was monitored by the Health and Safety Committee.

International Standard for Auditing (UK and Ireland) 550 – Related parties

The nature of related party relationships and transactions may, in some circumstances, give rise to higher risks of material misstatement of the financial statements than transactions with unrelated parties. For example:

- Related parties may operate through an extensive and complex range of relationships and structures, with a corresponding increase in the complexity of related party transactions.
- Information systems may be ineffective at identifying or summarising transactions and outstanding balances between an entity and its related parties.
- Related party transactions may not be conducted under normal market terms and conditions; for example, some related party transactions may be conducted with no exchange of consideration.

Because related parties are not independent of each other, many financial reporting frameworks establish specific accounting and disclosure requirements for related party relationships, transactions and balances to enable users of the financial statements to understand their nature and actual or potential effects on the financial statements. An understanding of the entity's related party relationships and transactions is relevant to the auditor's evaluation of whether one or more fraud risk factors are present as required by ISA (UK and Ireland) 240, because fraud may be more easily committed through related parties.

What are we required to do?

Where the applicable financial reporting framework establishes requirements for related parties, the auditor has a responsibility to perform audit procedures to identify, assess and respond to the risks of material misstatement arising from the entity's failure to appropriately account for or disclose related party relationships, transactions or balances in accordance with the requirements of the framework. We are therefore making requests from both management and the Board:

Enquiries of management		
Question	**2016-17 Response**	**2015-16 Response**
1. What controls are in place to identify, authorise, approve, account for and disclose related party transactions and relationships?	Staff are required to make declarations in accordance with the Standards of Behaviour Framework Policy, incorporating Gifts, Hospitality and Sponsorship. All Board members are asked to make a declaration on an annual basis, which is then recorded and published in the Declarations of Board Members' Interests. Where a Board Member's interests change during the year, they have a personal responsibility to declare this and inform the Board Secretary. These related party transactions are identified in the annual accounts and their materiality quantified. For all Committees and the Board we have a standing agenda item at the beginning of each meeting 'Declaration of Interest' in relation to items on the agenda.	Staff are required to make declarations in accordance with the Standards of Behaviour Framework Policy, incorporating Gifts, Hospitality and Sponsorship. All Board members are asked to make a declaration on an annual basis, which is then recorded and published in the Declarations of Board Members' Interests. Where a Board Member's interests change during the year, they have a personal responsibility to declare this and inform the Board Secretary. These related party transactions are identified in the annual accounts and their materiality quantified. For all Committees and the Board we have a standing agenda item at the beginning of each meeting 'Declaration of Interest' in relation to items on the agenda.
2. Confirm that you have: • disclosed to the auditor the identity of the entity's related parties and all the related party relationships and transactions of which you are aware; and • appropriately accounted for and disclosed such relationships and transactions in accordance with the requirements of the framework.	Yes	Yes

Enquiries of the Board		
Question	**2016-17 Response**	**2015-16 Response**
3. How does the Board, in its role as those charged with governance, exercise oversight of management's processes to identify, authorise, approve, account for and disclose related party transaction sand relationships?	Audit Committee receives bi-annual reports relating to compliance with the policy and the Gifts, Hospitality and Sponsorship Register. It also scrutinises the Annual Accounts which contain details of related party transactions.	Audit Committee receives bi-annual reports relating to compliance with the policy and the Gifts, Hospitality and Sponsorship Register. It also scrutinises the Annual Accounts which contain details of related party transactions.

INTERNAL AUDIT PLAN 2018/19	
Audit Committee	**April 2018**

Executive Lead : Director of Corporate Governance
Author : Head of Internal Audit, NWSSP Audit & Assurance Service, UHW 42724
Caring for People, Keeping People Well : n/a
Financial impact : n/a
Quality, Safety, Patient Experience impact : n/a
Health and Care Standard Number - ALL **CRAF Reference Number ALL**
Equality Impact Assessment Completed: n/a

RECOMMENDATION

The Audit Committee is asked to:

APPROVE the Internal Audit Plan including the Strategy and Charter for 2018/19.

SITUATION

Following an extensive planning process and in accordance with the Public Sector Audit Standards, the Internal Audit Plan has been prepared which sets out our risk based plan of work for the year 2018/19. In addition the Strategy and Charter have also been prepared for 2018/19.

BACKGROUND

The NHS Wales Shared Services Partnership (NWSSP) Audit and Assurance Service provides an Internal Audit service to the Cardiff and Vale University Health Board.

It is a requirement of the Public Sector Internal Audit Standards an Internal Audit Plan Strategy and Charter is prepared on an annual basis and presented to the Audit Committee for approval

The work undertaken by Internal Audit will accordance with its plan of work, which is prepared following a detailed planning process and subject to Audit

Committee approval. The plan sets out the programme of work for the year ahead, covering a broad range of organisational risks. The full document also describes how we deliver that work in accordance with professional standards.The plan has been prepared following consultation the Executive Directors.

ASSESSMENT AND ASSURANCE

The progress report provides the Committee with a level of assurance that an appropriate Internal Audit Plan, Strategy and Charter have been prepared for the year in order that there is a level of audit work undertaken, covering a broad range of risks in order the an annual opinion can be delivered.

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

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

Cardiff and Vale University Health Board

Internal Audit Plan 2018/19

April 2018

NHS Wales Shared Services Partnership
Audit and Assurance Services

15

Contents

15

1. Introduction

This document sets out the Internal Audit Plan for 2018/19 ('the Plan') detailing the audits to be undertaken and an analysis of the corresponding resources. It also contains the Internal Audit Charter which defines the over-arching purpose, authority and responsibility of Internal Audit and the Key Performance Indicators for the service.

As a reminder, the Accountable Officer (the Health Board's Chief Executive) is required to certify in the Annual Governance Statement that they have reviewed the effectiveness of the organisation's governance arrangements, including the internal control systems, and provide confirmation that these arrangements have been effective, with any qualifications as necessary including required developments and improvement to address any issues identified.

The purpose of Internal Audit is to provide the Accountable Officer and the Board, through the Audit Committee, with an independent and objective annual opinion on the overall adequacy and effectiveness of the organisation's framework of governance, risk management, and control. The opinion should be used to inform the Annual Governance Statement.

Additionally, the findings and recommendations from internal audit reviews may be used by Health Board management to improve governance, risk management, and control within their operational areas.

The Public Sector Internal Audit Standards require that "The risk-based plan must take into account the requirement to produce an annual internal audit opinion and the assurance framework. It must incorporate or be linked to a strategic or high-level statement of how the internal audit service will be delivered in accordance with the internal audit charter and how it links to the organisational objectives and priorities."

Accordingly this document sets out the risk based approach and the Plan for 2018/19. The Plan will be delivered in accordance with the Internal Audit Charter. All internal audit activity will be provided by Audit & Assurance Services, a division of NHS Wales Shared Services Partnership.

2. Developing the Internal Audit Plan

2.1 Link to the Public Sector Internal Audit Standards

The Plan has been developed in accordance with Public Sector Internal Audit Standard 2010 – Planning, to enable the Head of Internal Audit to meet the following key objectives:

- the need to establish risk-based plans to determine the priorities of the internal audit activity, consistent with the organisation's goals;
- provision to the Accountable Officer of an overall independent and objective annual opinion on the organisation's governance, risk management, and control, which will in turn support the preparation of the Annual Governance Statement;
- audits of the organisation's governance, risk management, and control arrangements which afford suitable priority to the organisation's objectives and risks;
- improvement of the organisation's governance, risk management, and control arrangements by providing line management with recommendations arising from audit work;
- quantification of the audit resources required to deliver the Internal Audit Plan;
- effective co-operation with external auditors and other review bodies functioning in the organisation; and
- the provision of both assurance (opinion based) and consulting engagements by Internal Audit.

2.2 Risk based internal audit planning approach

Our risk based planning approach recognises the need for the prioritisation of audit coverage to provide assurance on the management of key areas of risk, and our approach addresses this by considering the:

- organisation's risk assessment and maturity;
- coverage of the audit domains;
- previous years' internal audit activities; and
- audit resources required to provide a balanced and comprehensive view.

Our planning also takes into account the NHS Wales Planning Framework 2018/21 and is also mindful of significant national changes that are taking place. In addition, the Plan aims to reflect the significant local changes occurring as identified through the

15

Integrated Medium Term Plan (IMTP) and/or Annual Plan and other changes within the organisation, assurance needs, identified concerns from our discussions with management, and emerging risks.

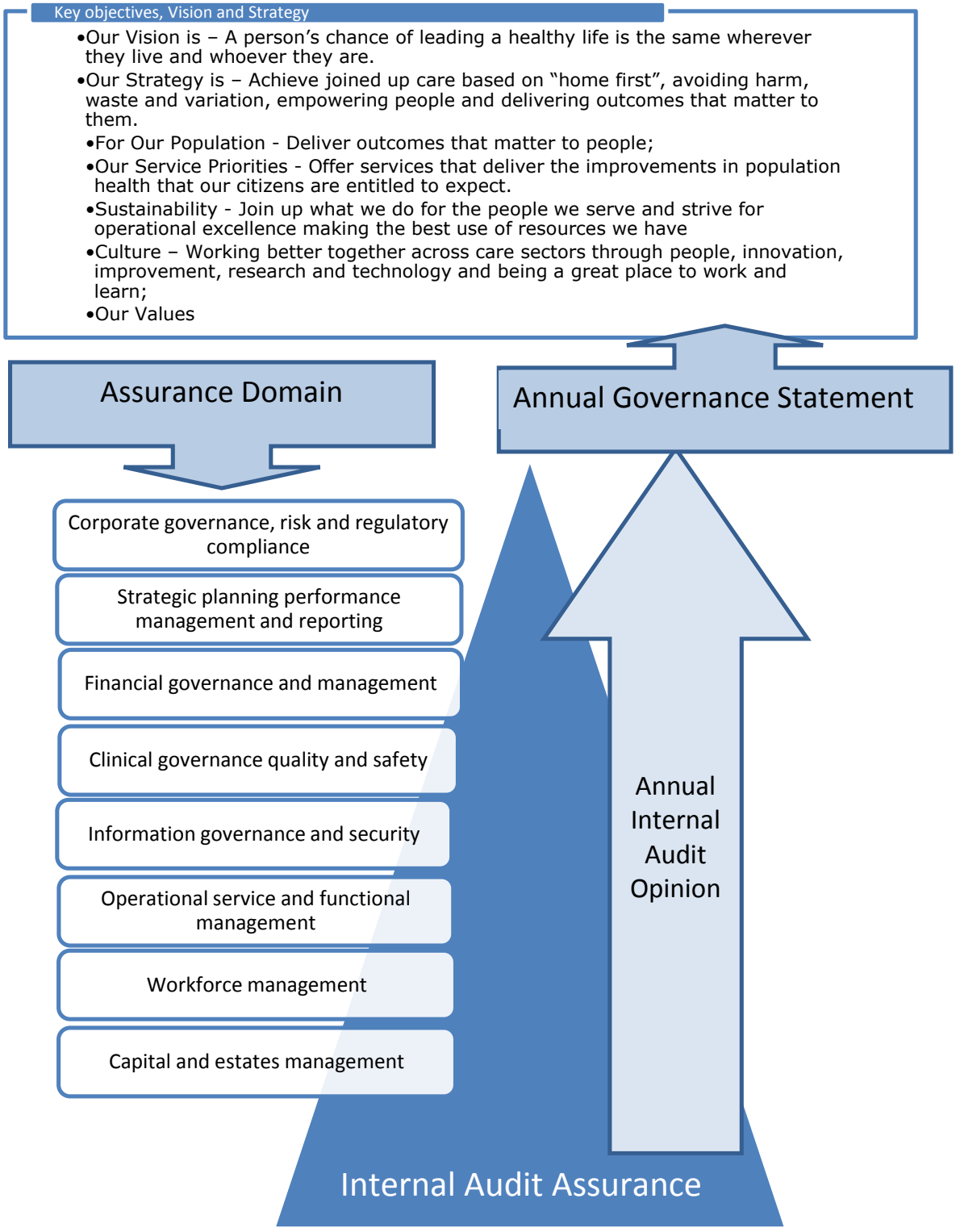
We will ensure that the Plan remains fit for purpose by reacting to any emerging issues throughout the year. Any necessary updates will be reported to the Audit Committee in line with the Internal Audit Charter.

While some areas of governance, risk management and control require annual review, and some work is mandated by Welsh Government, our risk based planning approach recognises that it is not possible to audit every area of an organisation's activities every year. Therefore, our approach identifies auditable areas (the audit universe), categorised into eight assurance domains. The risk associated with each domain is assessed and this determines the appropriate frequency for review. As part of this approach we also develop and maintain a 3-year audit strategy to identify when audit areas will be audited.

The eight audit domains are shown in figure 1 which also shows how the cumulative internal audit coverage of them contributes to the Annual Internal Audit Opinion which in turn feeds into the Annual Governance Statement and the achievement of the key objectives for the organisation.

The mapping of the Plan to the eight assurance domains is designed to give balance to the overall annual audit opinion which supports the Annual Governance Statement.

Figure 1 Internal Audit assurance on the domains



2.3 Link to the Health Board's systems of assurance

The risk based internal audit planning approach integrates with the Health Board's systems of assurance; thus we have considered the following:

- a review of the Board's vision, values and forward priorities as outlined in the Annual Plan and three year Integrated Medium Term Plan (IMTP);
- an assessment of the Health Board's governance and assurance arrangements and the contents of the Corporate Risk Register;
- risks identified in papers to the Board and its Committees (in particular the Audit Committee and Quality & Safety Committee);
- key strategic risks identified within the corporate risk register and assurance processes;
- discussions with Executive Directors regarding risks and assurance needs in areas of corporate responsibility;
- cumulative internal audit knowledge of governance, risk management, and control arrangements (including a consideration of past internal audit opinions);
- new developments and service changes;
- legislative requirements to which the organisation is required to comply;
- other assurance processes including planned audit coverage of systems and processes now provided through NHS Wales Shared Services Partnership (NWSSP) and, where appropriate, WHSSC, EASC and NWIS;
- work undertaken by other assurance bodies including the Health Board's Local Counter-Fraud Services (LCFS) and the Post-Payment Verification Team (PPV)
- work undertaken by other review bodies including Wales Audit Office (WAO) and Health Inspection Wales (HIW); and
- Coverage necessary to provide reasonable assurance to the Accountable Officer in support of the Annual Governance Statement.

2.4 Audit planning meetings

In developing the Plan, in addition to consideration of the above, the Head of Internal Audit has met with a number of Health Board Executives and Independent Members to discuss current areas of risk and related assurance needs. Meetings have been held with the following key personnel during the planning process:

- Chief Executive Officer;
- Executive Director of Public Health and Deputy CEO

- Executive Director of Finance;
- Chief Operating Officer;
- Clinical Board Directors of Operations
- Executive Director of Planning;
- Director of Governance;
- Executive Medical Director;
- Executive Director of Nursing;
- Executive Director of Workforce;
- Executive Director of Therapies and Health Sciences (inc. I.T.)
- Director of Capital & Estates;
- Audit Committee Chair

The draft Plan was then discussed at the full Management Executive meeting to ensure that internal audit effort was best targeted to areas of risk.

3. Audit risk assessment

The prioritisation of audit coverage across the audit universe is based on the organisation's assessment of risk and assurance requirements as defined in the Board Assurance Framework.

The maturity of these risk and assurance systems allows us to consider both inherent risk (impact and likelihood) and mitigation (adequacy and effectiveness of internal control). Our assessment also takes into account corporate risk, materiality or significance, system complexity, previous audit findings, potential for fraud and sensitivity.

4. Planned internal audit coverage

4.1 Internal Audit Plan 2018/19

The Plan is set out in Appendix A and identifies the audit assignment, lead executive officer, outline scope, and proposed timing.

Where appropriate the Plan makes cross reference to key strategic risks identified within the corporate risk register and related systems of assurance together with the proposed audit response within the outline scope.

The scope objectives and audit resource requirements and timing will be refined in each area when developing the audit scope in

discussion with the responsible executive director(s) and operational management.

The scheduling takes account of the optimum timing for the performance of specific assignments in discussion with management and WAO requirements if appropriate.

The Audit Committee will be kept appraised of performance in delivery of the Plan, and any required changes, through routine progress reports to each Audit Committee meeting.

Audit coverage in terms of capital audit and estates assurance will be delivered by our Specialist Services Unit. Given the specialist nature of this work and the assurance link with the all-Wales capital programme we will need to refine with management the scope and coverage on specific schemes. The Plan will then be updated accordingly to integrate this tailored coverage.

4.2 Keeping the plan under review

Our risk assessment and resulting Plan is limited to matters emerging from the planning processes indicated above. We will review and update the risk assessment and rolling 3-year audit plan annually giving definition to the upcoming operational year and extending the strategic view outward.

Audit & Assurance Services is committed to ensuring its service focuses on priority risk areas, business critical systems, and the provision of assurance to management across the medium term and in the operational year ahead. Hence, the Plan will be kept under review and may be subject to change to ensure it remains fit for purpose. In particular the Plan will need to be periodically reviewed to ensure alignment with the developing systems of assurance.

Consistent with previous years and in accordance with best professional practice an unallocated contingency provision has been retained in the Plan to enable internal audit to respond to emerging risks and priorities identified by the Executive Management Team and endorsed by the Audit Committee. Any changes to the Plan will be based upon consideration of risk and need and will be presented to the Audit Committee for approval.

Regular liaison with the Wales Audit Office as your External Auditor will take place to coordinate planned coverage and ensure optimum benefit is derived from the total audit resource.

5. Resource needs assessment

The Plan indicates an indicative resource requirement of 1250 days to provide balanced assurance reports to the Chief Executive as Accountable Officer in accordance with the Public Sector Internal Audit Standards.

This assessment is based upon an estimate of the audit resource required to review the design and operation of controls in review areas for the purpose of sizing the overall resource needs for the Plan. Provision has also been made for other essential audit work including planning, management, reporting and follow-up.

This total resource available covers the servicing of the local audit plan including capital audit and estates assurance coverage less a contribution to the audit of national systems through the NWSSP plan. These numbers are consistent with previous years.

The top-slice funding passed to NWSSP is sufficient to meet these audit resource needs. The inclusive internal provision through NWSSP Audit & Assurance Services represents best value for NHS Wales in comparison with external commercial rates for the equivalent provision of these professional services.

The Public Sector Internal Audit Standards enable internal audit to provide consulting services to management. The commissioning of these additional services by the Health Board is discretionary and therefore not included in the Plan. Accordingly, any requirements to service management consulting requests would be additional to the Plan and will need to be negotiated separately.

6. Action required

The Audit Committee is invited to consider the Internal Audit Plan for 2018/19 and:

- Approve the Internal Audit Plan for 2018/19;
- Approve the Internal Audit Charter; and
- Note the associated internal audit resource requirements and key performance Indicators.

James Johns
Head of Internal Audit (Cardiff and Vale University Health Board)
Audit & Assurance Services
NHS Wales Shared Services Partnership

15

Cardiff and Vale University Health Board
Internal Audit Plan 2018/19

Appendix A

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
(1) Corporate governance, risk and regulatory compliance					
Annual Governance Statement	---	To provide an opinion and undertake specific areas of review to underpin the completion of the Statement.	Corporate Governance	Q4	Feed in to annual report.
Governance, Leadership & Accountability Assessment	-----	To review the process that has been adopted and evidence supporting the self-assessment.	Corporate Governance	Q4	Feed in to annual report.
Risk Management & Assurance	8.2	On-going overview of general governance and risk management arrangements. Undertake specific areas of review to support annual opinion.	Corporate Governance	Q1-4	Feed in to annual report.
Health and Care Standards	5.1.6	Review utilisation of standards within the Health Board and processes for assessing performance against them.	Director Nursing	Q2-4	Apr
Claims Reimbursement	---	Review compliance with Welsh Risk Pool Standard requirements for claims reimbursement.	Director Nursing	Q3	Feb
Risk Management / CRAF development /Risk registers	8.2	To review the enhanced corporate risk and assurance arrangements currently being developed.	Corporate Governance	Q3/4	Apr
Legislative / Regulatory Compliance	8	To review the corporate arrangements for monitoring and managing compliance requirements.	Corporate Governance	Q2/3	Feb

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
Standards of Business Conduct (DoI & G&H)	8.2	To review compliance with the updated policy requirements.	Corporate Governance	Q3	Feb
(2) Strategic planning performance management and reporting					
Continuing Healthcare - Follow up	5.1.13	Follow up of 2017/18 Limited Assurance Report. (This follow up and subsequent report with be split between the Child and Adult service)	COO	Q2	Dec
Strategic Planning/IMTP	5	Review on going delivery and monitoring of the plans. Review quality of information as part of PODs to support decision making.	Director of Planning	Q3	
Public Health Targets	1.2	Review delivery and achievement of PH targets for Obesity in relation to physical activity targets. Health Board has introduced internal standards around healthy options.	DoPH	Q1	Sept
Performance Reporting Data Quality RTT	5.3	Review adequacy and appropriateness of performance reporting covering sample of key RTT targets.	DoPH	Q3	Dec
Performance Reporting – data quality. (Non RTT / key targets) reporting dashboard	5.3	Review adequacy and appropriateness of performance reporting covering other / non RTT targets.	DoPH	Q2	Dec

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
Commissioning	2.1	Assurance over whether HB has effective commissioning framework / process in place and is it fit for purpose.	DoPH	Q2/3	Feb
UHB Transformation Process	10	Review the progress with the UHB transformation process.	DoPH	Q3/4	Apr
Delayed Transfers of Care		Compliance with DTOC Reporting	COO	Q3	Feb
(3) Financial Governance and management					
UHB Core Financial Systems	6.7	Review a selection of controls in place to manage key risk areas across the range of the main financial systems including Budget setting monitoring and reporting	Director of Finance	Q2/3	Dec
Charitable Funds	----	Review governance arrangements, including the management of expenditure and donations, including spend activity within Medicine Clinical Board.	Director of Finance	Q1/2	Sept
Cost Improvement Programme	6.7	Review the development, delivery and reporting of progress of the financial improvement plans.	Director of Finance	Q2	Dec

Cardiff and Vale University Health Board
Internal Audit Plan 2018/19

Appendix A

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
Private and Overseas patients		Review organisational arrangements for the management of private and overseas patients including income collection.	Medical Director	Q1/2	Sept
(4) Clinical governance quality and safety					
Annual Quality Statement	5.1	To provide an opinion on the process that has been adopted and if the evidence recorded supports the self-assessment.	Director Nursing	June	Sept
DOLS	8.1.3	Follow up of agreed actions form previous Limited assurance report. (subject to finalisation of existing report, possible re-audit)	Medical director	Sept	Dec
Ombudsman Reports	5.6	Review arrangements as to how the Health Board deals with Ombudsman report.	Director Nursing	Q1/2	Sept
Ward Nurse Staffing Levels	6.2	Review of this area looking at actions implemented to ensure compliance.	Director Nursing	Q3	Feb
MHRA Compliance	8	Review arrangements for compliance with regulatory requirements	COO	Q3	Feb

Cardiff and Vale University Health Board
Internal Audit Plan 2018/19

Appendix A

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
(5) Information Governance and Security					
IT system follow up – Neuroscience It System	6.8	Follow up review to ensure agreed actions have been implemented.	COO	Q1/2	Sept
Departmental IT System - Renal It System	6.8	Review controls in place to manage the system, including security, data, contingency planning and operations.	COO	Q1/2	Sept
GDPR	8.1.5	Review UHB arrangements for compliance	DoPH	Q2/3	Feb
e-advice	6.8	Review controls in place to manage key risk areas within the process.	Director of Therapies	Q2/3	Dec
Cyber Security (TBA)	6.8	The delivery of this audit will depend on the outcome of report of the external review.	Director of Therapies	Q3/4	Feb/Apr tba
IT service management or /e IT learning (TBA)	6.8	Coverage to be agree with management.	Director of Therapies	Q2/3	Feb

Cardiff and Vale University Health Board
Internal Audit Plan 2018/19

Appendix A

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
(6) Operational service and functional management					
PCIC Clinical Board		PCIC Incident Reporting (deferred 17/18) Review process for managing incidents that are cross cutting overall multiple areas District Nursing Rotas being managed in-line with the new rostering policy.	COO/Clinical Board	Q1/2	Dec
Surgery Clinical Board		Medical finance governance (e.g. locum spend)	COO/Clinical Board	Q1/2	Dec
Medicine Clinical Board		To review absence management and training compliance within a directorate.	COO/Clinical Board	Q1/2	Sep
Children & Women Clinical Board		Transition plans between Paediatrics and Adults.	COO/Clinical Board	Q1	Dec
Mental Health Clinical Board	6.2.1	Use of Section 17 leave in the context of the risk management of patients. Sickness management and support offered to Staff.	COO/Clinical Board	Q1/2	Dec

Cardiff and Vale University Health Board
Internal Audit Plan 2018/19

Appendix A

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
CD&T Clinical Board		Governance around bank, agency and overtime spend.	COO/Clinical Board	Q1/2	Sep
Specialist Clinical Board		To review a specific serious of risk as agreed with the Clinical Boards.	COO/Clinical Board		
Dental Clinical Board		Theatre cancellations – rationale used for prioritising which lists and patients are cancelled over others and who makes the decision as we are not confident there is any clinician input. Dental nurse provision – Are the current levels of dental nurse staffing enough to provide full cover to compliment both education and service requirements, and are they aligned to the booking of clinical sessions and student timetabling.	COO/Clinical Board	Q1/2	Dec
(7) Workforce management					
Consultant Job Planning follow up	6.2	Follow up (subject to finalisation of current report)	Medical	Q3	Feb
Management of the Disciplinary process.		Review adequacy of arrangements for effective and timely management of the disciplinary process.	Workforce	Q1	Sept

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
Electronic Staff Record		Use, roll out, hierarchy set up	Workforce	Q1	Sept
(8) Capital and Estates 5					
Sustainability Reporting	6..4	To provide an opinion that the Health Board has robust systems in place to record and report minimum sustainability requirements as required by the Welsh Government.	Director of Planning	Q1	Sept
Carbon Reduction Commitment	6.4	To ensure the Health Board complies with the requirements of the Order and that the information held is accurate, complete and the purchase of the credits is based upon actual usage or informed estimates.	Director Planning	Q1	Sept
Cleaning Standards – follow up	6.4.8	Follow up to Limited assurance report.	Director Planning	Q1/2	Sept
Commercial Outlets (Deferred1718)	6.4	Review arrangements for commercial outlets	Director Planning	Q3	Feb
Estates Time recording / KRONOS system	6.4	Review operation of new system to establish whether it has delivered the control improvements and benefits.	Director Planning	Q1	Sept
Service Improvement Team	6.4	Review the establishment and working of new team. Phased review.	Director Planning	Q1 - Q4	

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
Estates statutory compliance	6.4.1	Review arrangement for managing estates statutory compliance.	Director Planning	Q2	Dec
Capital project – Rook Wood	6.4	Review management of key aspects of the capital scheme.	Director Planning	Q2/3	Dec
Capital– Safeguarding work CRI	6.4	Review management of key aspects of the capital scheme.	Director Planning	Q2/3	Dec
Audit Management and Reporting					
Contingency & Assurance and Advisory		This element of the plan allows the flexibility to respond to management requests in order to meet specific Health Board needs throughout the course of the financial year.	Director of Finance		
Follow-up		We will conduct follow-up reviews throughout the year to provide the Audit Committee with assurance regarding management's implementation of agreed actions.	Director of Finance		
Planning, Management and Audit Committee		An allocation of time is required for the management of the service to the Health Board:- • Planning, liaison and management – Incorporating preparation and attendance at Audit Committee; completion of risk assessment and	Director of Finance		

Cardiff and Vale University Health Board
Internal Audit Plan 2018/19

Appendix A

Cardiff and Value UHB Internal Audit Plan 2018/19 -Planned output.	CRAF	Outline Scope	Executive Lead	Proposed Timing	Audit Committee meeting
		planning; liaison with key contacts and organisation of the audit reviews; and • Reporting and meetings – Key reports will be provided to support this, including preparation of the annual plan and progress reports to the Audit Committee. • Liaison with External Audit and other stakeholders.			
Head of Internal Audit Annual Report and Opinion	---	Mandatory requirement to comply with the Public Sector Internal Audit Standards and Annual Governance Statement.	Executive Director Finance /Director Corporate Governance	Q4	

Cardiff and Vale University Health Board **Appendix B**
Key Performance Indicators

The KPIs reported monthly for Internal Audit are:

KPI	SLA required	Target 2018/19
Audit plan 2017/18 agreed/in draft by 30 April	✓	100%
Audit opinion 2016/17 delivered by 31 May	✓	100%
Audits reported vs. total planned audits	✓	varies
% of audit outputs in progress	No	varies
Report turnaround fieldwork to draft reporting [10 days]	✓	80%
Report turnaround management response to draft report [15 days]	✓	80%
Report turnaround draft response to final reporting [10 days]	✓	80%

15

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

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

Cardiff and Vale University Health Board

INTERNAL AUDIT CHARTER

April 2018

Cardiff and Vale University Health Board **Appendix C**
Internal Audit Charter

Contents

15

Cardiff and Vale University Health Board **Appendix C**
Internal Audit Charter

1 Introduction

1.1 This Charter is produced and updated regularly to comply with the Public Sector Internal Audit Standards. The Charter is complementary to the relevant provisions included in the organisation's own Standing Orders and Standing Financial Instructions.

1.2 The terms 'board' and 'senior management' are required to be defined under the Standards and therefore have the following meaning in this Charter:

- Board means the Board of Cardiff and Vale University Health Board with responsibility to direct and oversee the activities and management of the organisation. The Board has delegated authority to the Audit Committee in terms of providing a reporting interface with internal audit activity; and
- Senior Management means the Chief Executive as being the designated Accountable Officer for Cardiff and Vale University Health Board. The Chief Executive has made arrangements within this Charter for an operational interface with internal audit activity through the Director of Corporate Governance with liaison with the Executive Director of Finance.

2 Purpose and responsibility

2.1 Internal audit is an independent, objective assurance and advisory function designed to add value and improve the operations of Cardiff and Vale University Health Board. Internal audit helps the organisation accomplish its objectives by bringing a systematic and disciplined approach to evaluate and improve the effectiveness of governance, risk management and control processes. Its mission is to enhance and protect organisational value by providing risk-based and objective assurance, advice and insight.

2.2 Internal Audit is responsible for providing an independent and objective assurance opinion to the Accountable Officer, the Board and the Audit committee on the overall adequacy and effectiveness of the organisation's framework of governance, risk management and control. In addition, internal audit's findings and recommendations are beneficial to management in securing improvement in the audited areas.

15

Audit work designed to deliver an audit opinion on the risk management, control, and governance arrangements is referred to in this Internal Audit Charter as Assurance Work because management use the audit opinion to derive assurance about the effectiveness of their controls

2.3 The organisation's risk management, internal control and governance arrangements comprise:

- the policies, procedures and operations established by the organisation to ensure the achievement of objectives;
- the appropriate assessment and management of risk, and the related system of assurance;
- the arrangements to monitor performance and secure value for money in the use of resources;
- the reliability of internal and external reporting and accountability processes and the safeguarding of assets;
- compliance with applicable laws and regulations; and
- compliance with the behavioural and ethical standards set out for the organisation.

2.4 Internal audit also provides an independent and objective advisory service specifically to help management improve the organisations risk management, control and governance arrangements. The service applies the professional skills of internal audit through a systematic and disciplined evaluation of the policies, procedures and operations that management have put in place to ensure the achievement of the organisations objectives, and through recommendations for improvement. Such advisory work contributes to the opinion which internal audit provides on risk management control and governance.

3 Independence and Objectivity

3.1 Independence as described in the Public Sector Internal Audit Standards is the freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner. To achieve the degree of independence necessary to effectively carry out the responsibilities of the internal audit activity, the Head of Internal Audit will have direct and unrestricted access to the Board and Senior Management, in particular the Chair of the Audit Committee and Accountable Officer.

3.2 Organisational independence is effectively achieved when the auditor reports functionally to the Audit Committee on behalf of the Board. Such functional reporting includes the Audit Committee:

- approving the internal audit charter;
- approving the risk based internal audit plan;
- approving the internal audit budget and resource plan;
- receiving outcomes of all internal audit work together with the assurance rating; and
- reporting on internal audit activity's performance relative to its plan.

3.3 Whilst maintaining effective liaison and communication with the organisation, as provided in this Charter, all internal audit activities shall remain free of untoward influence by any element in the organisation, including matters of audit selection, scope, procedures, frequency, timing, or report content to permit maintenance of an independent and objective attitude necessary in rendering reports.

3.4 Internal Auditors shall have no executive or direct operational responsibility or authority over any of the activities they review. Accordingly, they shall not develop nor install systems or procedures, prepare records, or engage in any other activity which would normally be audited

3.5 This Charter makes appropriate arrangements to secure the objectivity and independence of internal audit as required under the standards. In addition, the shared service model of provision in NHS Wales through NWSSP provides further organisational independence.

3.6 In terms of avoiding conflicts of interest in relation to non-audit activities, Audit & Assurance has produced a Consulting Protocol that includes all of the steps to be undertaken to ensure compliance with the relevant Public Sector Internal Audit Standards that apply to non-audit activities.

4 Authority and Accountability

4.1 Internal Audit derives its authority from the Board, the Accountable Officer and Audit Committee. These authorities are established in Standing Orders and Standing Financial Instructions adopted by the Board.

4.2 The Minister for Health has determined that internal audit will be provided to all health organisations by the NHS Wales Shared Services Partnership (NWSSP). The service provision will be in accordance with the Service Level Agreement agreed by the Shared Services Partnership Committee and in which the organisation has permanent membership.

4.3 The Director of Audit & Assurance leads the NWSSP Audit and Assurance Services and after due consultation will assign a named Head of Internal Audit to the organisation. For line management (e.g. individual performance) and professional quality purposes (e.g. compliance with the Public sector Internal Audit Standards), the Head of Internal Audit reports to the Director of Audit & Assurance.

4.4 The Head of Internal Audit reports on a functional basis to the Accountable Officer and to the Audit Committee on behalf of the Board. Accordingly the Head of Internal Audit has a direct right of access to the

Accountable Officer the Chair of the Audit Committee and the Chair of the organisation if deemed necessary.

4.5 The Audit Committee approves all Internal Audit plans and may review any aspect of its work. The Audit Committee also has regular private meetings with the Head of Internal Audit.

4.6 In order to facilitate its assessment of governance within the organisation, Internal Audit is granted access to attend any committee or sub-committee of the Board charged with aspects of governance e.g. Quality & Patient Safety Committee, and the Information Governance Committee.

5 Relationships

- 5.1 In terms of normal business the Accountable Officer has determined that the Director of Corporate Governance with Liaison with the Executive Director of Finance will be the nominated executive lead for internal audit. Accordingly, the Head of Internal Audit will maintain functional liaison with this officer.
- 5.2 In order to maximise its contribution to the Board's overall system of assurance, Internal Audit will work closely with the organisation's Director of Corporate Governance with Liaison with the Executive Director of Finance in planning its work programme.

5.3 Co-operative relationships with management enhance the ability of internal audit to achieve its objectives effectively. Audit work will be planned in conjunction with management, particularly in respect of the timing of audit work.

5.4 Internal Audit will meet regularly with the external auditor to consult on audit plans, discuss matters of mutual interest, discuss common understanding of audit techniques, method and terminology, and to seek opportunities for co-operation in the conduct of audit work. In particular, internal audit will make available their working files to the external auditor for them to place reliance upon the work of Internal Audit where appropriate.

5.5 The Head of Internal Audit will establish a means to gain an overview of other assurance providers' approaches and output as part of the establishment of an integrated assurance framework.

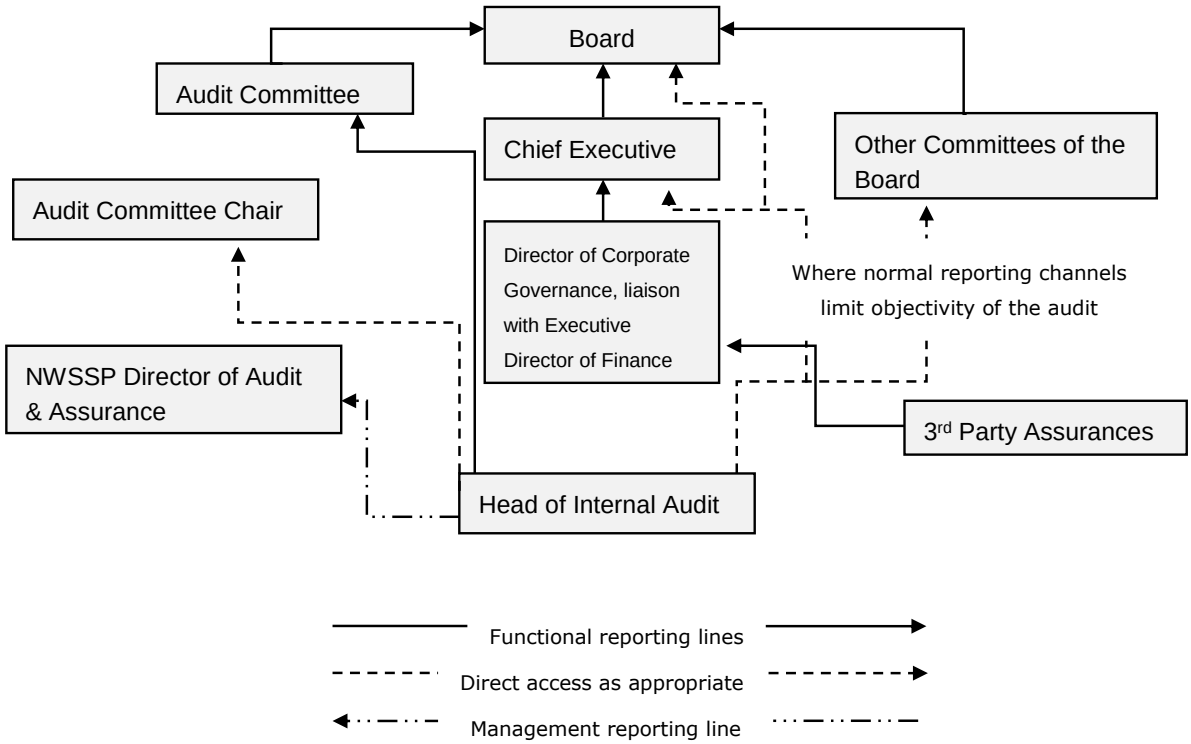
5.6 The Head of Internal Audit will take account of key systems being operated by organisation's outside of the remit of the Accountable Officer, or through a shared or joint arrangement, e.g. the NHS Wales Shared Services Partnership, WHCCS, EASC and NWIS.

5.7 Internal Audit strives to add value to the organisation's processes and help improve its systems and services. To support this Internal Audit will

obtain an understanding of the organisation and its activities, encourage two way communications between internal audit and operational staff, discuss the audit approach and seek feedback on work undertaken.

5.8 The key organisational reporting lines for Internal Audit are summarised in Figure 1 overleaf. As part of this, the Audit Committee may determine that another Committee of the organisation is a more appropriate forum to receive and action individual audit reports. However, the Audit Committee will remain the final reporting line for all reports.

Figure 1 Audit reporting lines



6 Standards, Ethics, and Performance

6.1 Internal Audit must comply with the Definition of Internal Auditing, the Core Principles, Public Sector Internal Audit Standards and the professional Code of Ethics, as published on the NHS Wales e-governance website.

6.2 Internal Audit will operate in accordance with the Service Level Agreement (updated 2017) and associated performance standards

15

agreed with the Audit Committee and the Shared Services Partnership Committee. The Service Level Agreement includes a number of Key Performance Indicators and we will agree with each Audit Committee which of these they want reported to them and how often.

7 Scope

7.1 The scope of Internal Audit encompasses the examination and evaluation of the adequacy and effectiveness of the organisation's governance, risk management arrangements, system of internal control, and the quality of performance in carrying out assigned responsibilities to achieve the organisation's stated goals and objectives. It includes but is not limited to:

- reviewing the reliability and integrity of financial and operating information and the means used to identify measure, classify, and report such information;
- reviewing the systems established to ensure compliance with those policies, plans, procedures, laws, and regulations which could have a significant impact on operations, and reports on whether the organisation is in compliance;
- reviewing the means of safeguarding assets and, as appropriate, verifying the existence of such assets;
- reviewing and appraising the economy and efficiency with which resources are employed, this may include benchmarking and sharing of best practice;
- reviewing operations or programmes to ascertain whether results are consistent with the organisation’s objectives and goals and whether the operations or programmes are being carried out as planned;
- reviewing specific operations at the request of the Audit Committee or management, this may include areas of concern identified in the corporate risk register;
- monitoring and evaluating the effectiveness of the organisation's risk management arrangements and the overall system of assurance;
- reviewing arrangements for demonstrating compliance with the Health and Care Standards.
- ensuring effective co-ordination, as appropriate, with external auditors; and

- reviewing the Governance and Accountability modular assessment and the Annual Governance Statement prepared by senior management.

7.2 Internal Audit will devote particular attention to any aspects of the risk management, internal control and governance arrangements affected by material changes to the organisation's risk environment.

7.3 If the Head of Internal Audit or the Audit Committee consider that the level of audit resources or the Charter in any way limit the scope of internal audit, or prejudice the ability of internal audit to deliver a services consistent with the definition of internal auditing, they will advise the Accountable Officer and Board accordingly.

7.4 The scope of the audit coverage will take into account and include any hosted body.

8 Approach

8.1 To ensure delivery of its scope and objectives in accordance with the Charter and Standards Internal Audit has produced an Audit Manual (called the Quality Manual). The Quality Manual includes arrangements for planning the audit work. These audit planning arrangements are organised into a hierarchy as illustrated in Figure 2 overleaf

Figure 2 Audit planning hierarchy

NHS Wales Level	NWSSP overall audit strategy	Arrangements for provision of internal audit services across NHS Wales to meet
Organisation Level	Entity strategic 3-year audit plan	Entity level medium term audit plan linked to organisational objectives
	Entity annual internal audit plan	Annual internal audit plan detailing audit engagements to be completed in year ahead leading to the overall HIA opinion
Business Unit Level	Assignment plans	Assignment plans detail the scope and objectives for each audit engagement within the annual operational plan

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8.2 NWSSP Audit & Assurance Services has developed an overall audit strategy which sets out the strategic approach to the delivery of audit services to all health organisations in NHS Wales. The strategy also includes arrangements for securing assurance on the national transaction processing systems including those operated by NWSSP on behalf of NHS Wales.

8.3 The main purpose of the Strategic 3-year Audit Plan is to enable the Head of Internal Audit to plan over the medium term on how the assurance needs of the organisation will be met as required by the Public sector Internal Audit Standards and facilitate:

- the provision to the Accountable Officer and the Audit Committee of an overall opinion each year on the organisation's risk management, control and governance, to support the preparation of the Annual Governance Statement;
- audit of the organisation's risk management, control and governance through periodic audit plans in a way that affords suitable priority to the organisations objectives and risks;
- improvement of the organisation's risk management, control and governance by providing management with constructive recommendations arising from audit work;
- an assessment of audit needs in terms of those audit resources which "are appropriate, sufficient and effectively deployed to achieve the approved plan";
- effective co-operation with external auditors and other review bodies functioning in the organisation; and
- the allocation of resources between assurance and consulting work.

8.4 The Strategic 3-year Audit Plan will be largely based on the Board Assurance Framework where it is sufficiently mature, together with the organisation-wide risk assessment.

8.5 An Annual Internal Audit Plan will be prepared each year drawn from the Strategic 3-year Audit Plan and other information, and outlining the scope and timing of audit assignments to be completed during the year ahead.

8.6 The strategic 3-year and annual internal audit plans shall be prepared to support the audit opinion to the Accountable Officer on the risk management, internal control and governance arrangements within the organisation.

8.7 The annual internal audit plan will be developed in discussion with executive management and approved by the Audit Committee on behalf of the Board.

8.8 The NWSSP Audit Strategy is expanded in the form of a Quality Manual and a Consulting Protocol which together define the audit approach applied to the provision of internal audit and consulting services.

8.9 During the planning of audit assignments, an assignment brief will be prepared for discussion with the nominated operational manager. The brief will contain the proposed scope of the review along with the relevant objectives and risks to be covered. In order to ensure the scope of the review is appropriate it will require agreement by the relevant Executive Director or their nominated lead, and will also be copied to the Director of Corporate Governance. The key stages in this risk based audit approach are illustrated in figure 3 below.

Figure 3 Risk based audit approach

9 Reporting

9.1 Internal Audit will report formally to the Audit Committee through the following:

- An annual report will be presented to confirm completion of the audit plan and will include the Head of Internal Audit opinion provided for the Accountable Officer that will support the Annual Governance Statement. The process for arriving at the appropriate assurance level for each Head of Internal Audit opinion was subject to a review process during 2013/14, which led to the creation of a set of criteria for forming the judgement that was adopted and used for 2013/14 opinions onwards;

- The Head of Internal Audit opinion will:

a) State the overall adequacy and effectiveness of the organisation's risk management, control and governance processes, with reference to compliance with the Health and Care Standards;
b) Disclose any qualification to that opinion, together with the reasons for the qualification;

15

c) Present a summary of the audit work undertaken to formulate the opinion, including reliance placed on work by other assurance bodies;
d) Draw attention to any issues Internal Audit judge as being particularly relevant to the preparation of the Annual Governance Statement;
e) Compare work actually undertaken with the work which was planned and summarise performance of the internal audit function against its performance measurement criteria; and
f) Provide a statement of conformity in terms of compliance with the Public Sector Internal Audit Standards and associated internal quality assurance arrangements.

- For each Audit Committee meeting a progress report will be presented to summarise progress against the plan. The progress report will highlight any slippage and changes in the programme. The findings arising from individual audit reviews will be reported in accordance with Audit Committee requirements; and

- The Audit Committee will be provided with copies of individual audit reports for each assignment undertaken unless the Head of Internal Audit is advised otherwise. The reports will include an action plan on any recommendations for improvement agreed with management including target dates for completion.

9.2 The process for audit reporting is summarised below and presented in flowchart format in Appendix A:

- Following the closure of fieldwork and the resolution of any queries, Internal Audit will discuss findings with operational managers to confirm understanding and shape the reporting stage;
- Operational management will receive draft reports which will include any proposed recommendations for improvement within 10 working days following the discussion of findings. A copy of the draft report will also be provided to the relevant Executive Director;
- The draft report will give an assurance opinion on the area reviewed in line with the criteria at Appendix B. The draft report will also indicate priority ratings for individual report findings and recommendations;
- Operational management will be required to respond to the draft report in consultation with the relevant Executive Director within 15 working days of issue, stating their agreement or otherwise to the content of the report, identifying actions, identifying staff with responsibility for implementation and the dates by which action will be taken;

- The Head of Internal Audit will seek to resolve any disagreement with management in the clearance of the draft report. However, where the management response is deemed inadequate or disagreement remains then the matter will be escalated to the Director of Corporate Governance and Executive Director of Finance. The Head of Internal Audit may present the draft report to the Audit Committee where the management response is inadequate or where disagreement remains unresolved. The Head of Internal Audit may also escalate this directly to the Audit Committee Chair to ensure that the issues raised in the report are addressed appropriately;
- Reminder correspondence will be issued after the set response date where no management response has been received. Where no reply is received within 5 working days of the reminder, the matter will be escalated to the Director of Corporate Governance and Executive Director of Finance. The Head of Internal Audit may present the draft report to the Audit Committee where no management response is forthcoming;
- Final reports inclusive of management comments will be issued by Internal Audit to the relevant Executive Director within 10 working days of management responses being received; and
- The final report will be copied to the Accountable Officer and Director of Corporate Governance and Executive Director of Finance and placed on the agenda for the next available Audit Committee.

9.3 Internal Audit will make provision to review the implementation of agreed action within the agreed timescales. However, where there are issues of particular concern provision maybe made for a follow up review within the same financial year. Issue and clearance of follow up reports shall be as for other assignments referred to above.

10 Access and Confidentiality

10.1 Internal Audit shall have the authority to access all the organisation's information, documents, records, assets, personnel and premises that it considers necessary to fulfil its role. This shall extend to the resources of the third parties that provide services on behalf of the organisation.

10.2 All information obtained during the course of a review will be regarded as strictly confidential to the organisation and shall not be divulged to any third party without the prior permission of the Accountable Officer. However, open access shall be granted to the organisation's external auditors.

10.3 Where there is a request to share information amongst the NHS bodies in Wales, for example to promote good practice and learning, then

permission will be sought from the Accountable Officer before any information is shared.

11 Irregularities, Fraud & Corruption

11.1 It is the responsibility of management to maintain systems that ensure the organisation's resources are utilised in the manner and on activities intended. This includes the responsibility for the prevention and detection of fraud and other illegal acts.

11.2 Internal Audit shall not be relied upon to detect fraud or other irregularities. However, Internal Audit will give due regard to the possibility of fraud and other irregularities in work undertaken. Additionally, Internal Audit shall seek to identify weaknesses in control that could permit fraud or irregularity.

11.3 If Internal Audit discovers suspicion or evidence of fraud or irregularity, this will immediately be reported to the organisation's Local Counter Fraud Service (LCFS) in accordance with the organisation's Counter Fraud Policy & Fraud Response Plan and the agreed Internal Audit and Counter Fraud Protocol.

12 Quality Assurance

12.1 The work of internal audit is controlled at each level of operation to ensure that a continuously effective level of performance, compliant with the Public Sector Internal Audit Standards, is being achieved.

12.2 The Director of Audit & Assurance will establish a quality assurance programme designed to give assurance through internal and external review that the work of Internal Audit is compliant with the Public Sector Internal Audit Standards and to achieve its objectives. A commentary on compliance against the Standards will be provided in the Annual Audit Report to Audit Committee.

12.3 The Director of Audit & Assurance will monitor the performance of the internal audit provision in terms of meeting the service performance standards set out in the NWSSP Service Level Agreement. The Head of Internal Audit will periodically report service performance to the Audit Committee through the reporting mechanisms outlined in Section 9.

13 Resolving Concerns

13.1 NWSSP Audit & Assurance was established for the collective benefit of NHS Wales and as such needs to meet the expectations of client partners. Any questions or concerns about the audit service should be raised initially with the Head of Internal Audit assigned to the organisation. In addition any matter may be escalated to the Director of Audit & Assurance. NWSSP Audit & Assurance will seek to resolve any issues and find a way forward.

13.2 Any formal complaints will be handled in accordance with the NWSSP complaint handling procedure. Where any concerns relate to the conduct of the Director of Audit & Assurance, the NHS organisation will have access to the Director of Shared Services.

14 Review of the Internal Audit Charter

14.1 This Internal Audit Charter shall be reviewed annually and approved by the Board, taking account of advice from the Audit Committee.

Simon Cookson
Director of Audit & Assurance - NHS Wales Shared Services Partnership
April 2018

15

Appendix C Audit Reporting Process

Audit fieldwork completed and debrief with management.	Following closure of audit fieldwork and management review audit findings are shared with operational management to check accuracy of understanding and help shape recommendations for improvement to address any control deficiencies identified.
A draft report is issued within 10 working days of fieldwork completion and the resolution of any queries.	Draft reports are issued with an assurance opinion and recommendations within 10 days of fieldwork completion to Operational Management Leads, and copied to the relevant Executive Leads.
Management responses are provided on behalf of the Executive Lead within 15 working days of receipt of the draft report.	A report clearance meeting may prove helpful in finalising the report between management and auditors. A response, including a fully populated action plan, with assigned management responsibility and timeframe is required within 15 days of receipt of the Draft report.
Outstanding responses are chased for 5 further days.	Where management responses are still awaited after the 15 day deadline, a reminder will be sent. Continued non-compliance will be escalated to Executive management after 5 further days.
Report finalised by Internal Audit within 10 days of management response.	Internal Audit issues a Final report to Executive Director, within 10 working days of receipt of complete management response. All Final reports are copied to the Chief Executive.
Individual audit reports received by Audit Committee.	Final reports are received by the Audit Committee at next available meeting and discussed if applicable. For reports with "green/ yellow" assurance ratings, Executive Summaries are received for noting. For those with "red/ amber" ratings, the full reports are received for discussion. The Audit Committee identifies their priority areas for Internal Audit to follow up.

Appendix B Audit Assurance Ratings

RATING	INDICATOR	DEFINITION
Substantial assurance	 - + Green	The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.
Reasonable assurance	 - + Yellow	The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with **low to moderate impact on residual risk** exposure until resolved.
Limited assurance	 - + Amber	The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.
No assurance	 - + Red	The Board has **no assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Action is required to address the whole control framework in this area with **high impact on residual risk** exposure until resolved.

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15

Handover of Care at Emergency Departments

Draft Internal Audit Report

2017/18

Private and Confidential

Welsh Ambulance Services NHS Trust

NHS Wales Shared Services Partnership

Audit and Assurance Services

CONTENTS Page

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16

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

1. Introduction and Background

The 'Handover of Care at Emergency Departments' review has been completed in line with the 2017/18 Internal Audit Plan. The review seeks to provide the Welsh Ambulance Service NHS Trust (WAST) with assurance that operational procedure is compliant with Welsh Health Circulars issued by Welsh Government.

The statement of intent section of the Welsh Health Circular titled 'NHS Wales Hospital Handover Guidance' (reference WHC/2016/029) states:

'The safety, effectiveness and dignity of care of patients must be at the forefront of systems of emergency care. The best care is provided to patients in the correct care environment. When ambulance crews take a patient to hospital it is essential that they are released swiftly so they can continue to provide a safe and efficient service to the local community.

Health Boards are responsible for ensuring the safe emergency transport, and timely treatment, of citizens in their local area. When a patient is conveyed to a hospital by ambulance, care must be handed over to the hospital team within 15 minutes, and Health Boards are responsible for ensuring that this happens reliably. All members of the Health Board Executive team have a special responsibility to communicate the importance of handover.

Patients and their carers are important partners in the process of handover and admission. Their involvement should be a key part of planning emergency care, and when delays occur they should be kept fully informed of the reasons and the progress being made in resolving them.

Staffing arrangements in hospitals should ensure the safe care and treatment of patients. Hospital sites should have effective Escalation Plans in place to ensure ambulances can be offloaded at times of peak pressure. Senior clinical decision makers should be present routinely at the hospital front door and their presence strengthened as part of the escalation plan when pressures build in the system.

The planning of Unscheduled Care must be given a high priority by Health Boards. Delays in hospital handover is frequently associated with blockages to patient flow further upstream, and work across the whole pathway of health and social care is necessary to address this properly.

Key actions to support hospital handover have been highlighted and summarised. They are intended for implementation by the Health Boards and Trusts in the NHS across Wales in local policies and protocols, and should be incorporated into local site Escalation Plans as they are revised in line with the latest Welsh Government advice.'

2. Scope and Objectives

The internal audit review has assessed compliance with the Welsh Health Circular titled 'NHS Wales Hospital Handover Guidance' (reference WHC/2016/029), across all Health Boards in Wales with a focus on compliance with pathways and hospital handover. Any weaknesses have been brought to the attention of management and advice issued on how particular problems may be resolved and control improved to minimise future occurrence.

The review assessed compliance with the following key actions highlighted within the Welsh Health Circular to support hospital handover:

- planning for emergency care should involve patients with recent experience of care and must be clearly visible in the Integrated Medium Term Plan (IMTP);
- ambulance conveyance should be actively managed by Health Boards and WAST;
- pathways for emergency care that bypass the Emergency Department should be in place;
- safe, sustainable, staffing levels for emergency care, able to flex to meet demand, must be in place, with appropriate levels of supervision;
- Health Boards and WAST should meet weekly to manage emergency care flow. These meetings should ensure that care pathways that reflect the five step ambulance model used to commission ambulance services in Wales are in place;
- Health Board executives must visibly and repeatedly communicate the importance of ambulance handover to staff;
- hospital clinical staff must ensure that any patient waiting more than 30 minutes has been assessed and moved immediately into hospital if there is a risk to patient safety; and
- wards must increase their ability to pull patients safely from Emergency Departments at times of peak demand. If significant ambulance delays occur Health Boards must ensure that effective site escalation arrangements allow ambulances to be released promptly.

In addition, we reviewed the training provided to paramedics and Emergency Departments to support effective hospital handover.

3. Associated Risks

The risks considered in the review are as follows:

- Non-compliance with Welsh Government guidance resulting in patients coming to harm; and
- Failure to achieve the most efficient and effective use of resources.

OPINION AND KEY FINDINGS

4. Overall Assurance Opinion

We are required to provide an opinion as to the adequacy and effectiveness of the system of internal control under review. The opinion is based on the work performed as set out in the scope and objectives within this report. An overall assurance rating is provided describing the effectiveness of the system of internal control in place to manage the identified risks associated with the objectives covered in this review.

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with Handover of Care at Emergency Departments is **Limited** Assurance.

RATING	INDICATOR	DEFINITION
Limited Assurance		The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.

The overall level of assurance that can be assigned to a review is dependent on the severity of the findings as applied against the specific review objectives and should therefore be considered in that context.

5. Assurance Summary

The summary of assurance given against the individual objectives is described in the table below:

Assurance Summary – Compliance with WHC/2016/029					
1	Planning for emergency care should involve patients with recent experience of care and must be visible in the IMTP.			✓	
2	Ambulance conveyance should be actively managed by Health Boards and WAST.		✓		
3	Pathways for emergency care that bypass the Emergency Department should be in place.		✓		
4	Safe, sustainable staffing levels for emergency care, able to flex to meet demand, must be in place, with appropriate levels of supervision.			✓	
5	Health Boards and WAST should meet weekly to manage emergency care flow.		✓		
6	Health Board executives must visibly and repeatedly communicate the importance of ambulance handover to staff.			✓	
7	Hospital clinical staff must ensure that any patient waiting more than 30 minutes has been assessed and moved immediately into hospital is there is a risk to patient safety.		✓		
8	Wards must increase their ability to pull patients safely from Emergency Departments at times of peak demand. If significant ambulance delays occur Health Boards must ensure that effective site escalation allows ambulances to be released promptly.			✓	
9	Training is provided to paramedics and Emergency Departments to support effective hospital handover.		✓		

6. Summary of Audit Findings

The key findings summarised below and detailed in the Management Action Plan (Appendix A).

This review has sought assurance that WAST and six Health Boards are compliant with the Welsh Health Circular 2016/029 requiring principally that '*when a patient is conveyed to a hospital by ambulance, care must be handed over to the hospital team within 15 minutes, and Health Boards are responsible for ensuring that this happens reliably.'*

Each Major Emergency Department (ED) hospital has a WAST Hospital Arrival Screen (HAS) that the paramedic and hospital clinician use to enter the times of the conveyance arrival, notification and handover. We found that the HAS is not always completed by crews and clinicians which affects the quality of the underlying data.

The performance of each Health Board on achievement of the 15 minute target during 2017 varies from circa 40% up to 90% (against a target of 100%). We have looked at reasons for variation within the scope and objectives of the audit and identified some areas for improvement. However, issues around capacity to enable admission of the patient into ED in a timely manner are complex. A number of factors contribute, including demand and available resources to provide specialist services outside of ED; for example, mental health pathways, social care packages and primary care services within the Health Board.

Patient flow is critical in managing front door blockages and bed management mechanisms are applied across Health Boards. Patient flow varies at each hospital and to reach a conclusive reason as to why handover compliance is better at some Health Boards (noticeably Cwm Taf University Health Board) than others requires a much deeper and broader analysis. Undertaking a detailed review of bed management, discharge procedures, elective surgery, social care packages, GP referrals and Out of Hours services are just some of the explanations provided during this audit regarding the unavailability of beds that then result in handover delays.

There has been progress made by each Health Board, to varying levels of development and implementation, to agree conveyance pathways with WAST that bypass the ED. It is recognised that there is a need to develop these further in order to reduce handover delays by reducing the demand on the ED. WAST and each Health Board have produced Winter Plans that include specific actions to manage conveyance to ED. We found that more work is required to progress this development in a more structured manner with improved governance, analysis and communication of each pathway.

The Emergency Ambulance Services Committee (EASC) have developed a set of 24 Ambulance Quality Indicators (AQI's) that are reported within the

Integrated Quality and Performance Report. There are a number of AQIs that relate to conveyance including the '*number of incidents that resulted in non-conveyance to hospital*' under '*Step 4: Give Me Treatment*' and the '*number of 999 patients conveyed to hospital*', including analysis by type and also those conveyed to hospital outside of the local Health Board area, under '*Step 5: Take me to Hospital'*. However, it was unclear how the outcomes of pathways to bypass ED are measured and therefore a lack of data on success rates.

Live Escalation Levels are reported by each Health Board and recorded on the NHS Wales Integrated Unscheduled Care Dashboard (http://nww.iuscdash.wales.nhs.uk/). This informs each Health Board and the Welsh Government of the current 'live' status of ambulances at each hospital including handovers over 15 minutes and waiting times over 4 and 12 hours. Every morning at 11am a conference call is held with representatives from each Health Board, the Welsh Government and WAST when significant handover delays can be addressed and if necessary, agreement to redirect ambulances.

Each Health Board has a Local Escalation Action Plan (LEAP) that seeks to manage handover delays requiring additional actions and further executive intervention if the delay persists. In order to test in detail that the appropriate completion of these plans was undertaken at all times would have required greater analysis, not least data on individual patients that was not easily available. However, data provided to us during the audit showed noticeable improvement in the handover rates between 15, 30 and 60 minutes.

We were informed by hospital staff that attendance at site meetings by WAST was dependant on the availability of the Clinical Team Leader (CTL). Where a designated Hospital Ambulance Liaison Officer (HALO) was in place at a hospital, this provided more opportunity for WAST to liaise with the hospital staff to assist in managing hospital handovers.

Whilst the plans seek to admit patients that need to be seen by the clinician in the ED as quickly as possible, where there isn't capacity in the hospital, the least acute patients have to wait on the ambulance. This results in the WAST crews waiting with the patient in the ambulance preventing them from attending calls, recorded as 'lost hours'. For the period July – September 2017, 3,910 patients across Wales had to wait for more than 60 minutes outside the ED. A further 81 patients waited over 4 hours. In this period no patients had to wait over 12 hours. During delayed handovers, paramedics provide ongoing patient assessment.

Action 7 of the Welsh Health Circular states: '*WAST crews should not routinely be responsible for monitoring patients over prolonged periods outside A&E, and hospital clinicians should be responsible for overseeing the assessment of patients*.'

Clinical staff at all of the hospitals visited, with the exception of the University Hospital of Wales (UHW) in Cardiff, undertake a face to face assessment of the patient in the ambulance before admission to the hospital. The practice at UHW is to perform an assessment through communication with the paramedic which is not in line with action 7 of the Welsh Health Circular.

WAST have a 'multi-channel approach' to patient feedback; this links feedback provided through online questionnaires (Have Your Say), compliments and complaints forums, face to face surveys carried out by volunteers at hospitals (patient stories) and feedback provided directly by patients. WAST's Patient Experience team triangulates feedback with the Risk Management and Concerns teams that assists in identifying improvements in the handover service. One of the key feedback improvement themes that has been identified is in regards to the provision of nutrition, hydration and continence when a patient experiences a significant delay and is held outside the ED. Handover delays provide additional patient care responsibilities for paramedics to ensure hydration, nutrition and continence is provided appropriately and with dignity. Whilst these care needs are provided, the process is not documented and arrangements are not formalised.

We identified 3 **High Priority** findings that require prompt management action:

- **Conveyance to ED**
    - Improvement should be made to conveyance reporting arrangements to enable more transparent data on success factors; and to monitor whether the projects and initiatives put in place to reduce conveyance to Emergency Departments are working.
    - GP Referrals should be scheduled to help prevent bottlenecks.
- **Pathways to bypass ED**
    - Improvement should be made to the governance arrangements for the identification and approval of pathways, together with a consistent process for their recording, dissemination and outcome measurement.
    - Improved recording and action where pathways are not able to be utilised.
    - Possible development of electronic tools to assist in the awareness and utilisation of available pathways by paramedics.

- **Delayed handover clinical triage** – University Hospital of Wales (UHW) in Cardiff procedure for initial conveyed patient assessment is not consistent with WHC guidance or with other hospitals visited.

We identified 4 **Medium priority** findings which require management's attention:

- **HALO role** –A dedicated hospital site presence by a member of WAST staff could provide more opportunity to liaise with the hospital staff to improve management of handover delays.
- **Strategic forums** – Whilst there is communication between WAST and Health Boards on operational matters there was little evidence of strategic forums to assist in better uniformity and best practice sharing.
- **Patient flow initiatives** – 90% of patients are handed over to hospital teams within 15 minutes at Cwm Taf UHB. There is opportunity to share good practice to improve performance at all Health Boards.
- **HAS data quality** – recording of the notification and handover together with the late reason (>15mins) is not always accurate and complete.

We also identified 1 **Low priority** recommendation for management consideration. Details of these can be found in the next section of the report.

7. Detailed Audit Findings

This section of the report details the findings of our review. Each section highlights areas of good practice identified. Where relevant, any weaknesses identified are outlined, including proposed actions to address the associated risks. The matrix used for scoring risks is provided at Appendix C.

In order to evaluate compliance with the Welsh Government Health Circular we observed hospital handover procedures at 6 major accident and emergency departments, one from each Health Board (excluding Powys Teaching Health Board), namely the emergency departments at:

- Morriston Hospital (Abertawe Bro Morgannwg University Health Board)
- Royal Gwent Hospital (Aneurin Bevan University Health Board)
- Glan Clwyd Hospital (Betsi Cadwaladr University Health Board)
- University Hospital of Wales (Cardiff and Vale University Health Board)
- Royal Glamorgan Hospital (Cwm Taf University Health Board)

16

- Glangwili Hospital (Hywel Dda University Health Board)

We met with hospital managers responsible for unscheduled care, ED and acute medicine. We visited Vantage Point House where we held meetings with the WAST Director and the Deputy Director of Operations. We also visited Blackweir and Hawthorn Ambulance Stations where we met with Area Operations Managers for Cardiff and Vale University Health Board, Cwm Taf University Health Board and Betsi Cadwaladr University Health Board.

Further information was obtained from:

- WAST Health Informatics Department;
- Head of Patient Experience and Community Involvement, WAST;
- Head of Planning and Performance, WAST;
- Head of Emergency Care Policy and Performance, Welsh Government; and
- Board Secretary, Emergency Ambulance Services Committee (EASC)

Unless otherwise stated, all data has been obtained from WAST's Informatics or Planning and Performance teams. In all instances we have reviewed data supplied for reasonableness, but have not performed any specific tests over the quality of the data.

WHC/2016/029 – Planning for handover

Health Boards, together with WAST, should assess emergency demand and plan emergency care pathways, in Acute Care Alliances where appropriate. Patients with recent experience of emergency care should be active partners in this planning. Effective arrangements with social care should be put in place through integrated planning of services for the community served by the Health Board. This planning process must be visible in the Integrated Medium Term Plan (IMTP) submitted by Health Boards to Welsh Government, and should be reflected in local operational protocols and policies.

Action 1: Planning for emergency care should involve patients with recent experience of care and must be clearly visible in the IMTP.

We reviewed the IMTP for WAST and found several references to handovers including;

'System pressures – our ability to fully deliver on our plan will be impacted on system pressures that are outside of WAST control. An example of this is the handover delays at ED sites. Whilst we continue to work with the

16

Chief Ambulance Services Commissioner (CASC) and HB partners to improve demand management and flow, our ability to be our most effective and efficient is significantly affected by the inefficiencies of handover delays and their impact on quality and patient safety. Our internal escalation status (REAP levels) increases with the pressures and this reduces availability of clinical and operational staff. There is also a link between system pressures and experiences for our staff and workforce.'

'Timely handover at Emergency Departments - we will continue to work with HB's on improving the flow in this part of the system, with a focus on sites where there remain a number of challenges. This will include working with HB's to identify suitable holding areas in times of pressure and agreeing the underpinning governance, operational and workforce models. We will work with HB's to pilot and implement direct admission pathways, avoiding the need to take patients through Emergency Departments.'

The WAST IMTP 2016/17-2018/19 includes a 'Summary of Health Board IMTPs integration with WAST' that highlights joint working. See Appendix B.

We reviewed the IMTPs for the six Health Boards and found that emergency care is included with reference to developing joined-up health and social care services. Whilst there is not specific reference to patient experience informing the handover of care at emergency departments within the Health Board IMTPs, there is reference to patient feedback and concerns mechanisms.

We noted that the level of content relating to handovers within the IMTPs of the six Health Boards did not correlate to handover performance. The two Health Boards achieving over 80% of handovers within 15 minutes have the least amount of detail within their IMTP, whilst the Health Boards that have more content and plans to reduce the number of handover delays and improve patient flow within their IMTP, currently have the lowest rates of handovers within 15, 30 and 60 minutes. It is recognised that this is a complex issue for most Health Boards that will require ongoing action and development.

From discussions with ED staff and the WAST Head of Patient Experience and Community Involvement, we were informed that each Health Board and WAST have methods to capture patient experience feedback. WAST have a 'multi-channel approach'; this links patient feedback provided through online questionnaires (Have Your Say), compliments and complaints forums, face to face surveys carried out by volunteers at hospitals (patient stories) and feedback provided directly by patients to WAST. WAST's Patient Experience team triangulates feedback with the Risk Management and Concerns teams which has enabled WAST to identify improvements in the handover service.

WAST has introduced 'dignity champions' whose role it is to observe daily activity. Where champions identify action that is not deemed in line with best practice in regards to the dignity of the patient, they raise the incident to the Quality, Safety and Patient Experience team. We have not evaluated the patient experience process in further detail as it is not in scope for this audit.

One of the key feedback improvement themes that has been identified is in regards to the provision of nutrition, hydration and continence when a patient experiences a significant delay and is held outside the ED. Although the majority of patients conveyed to ED are admitted within 60 minutes, there are over 1,300 patients each month that wait in an ambulance for long periods as Table 1 shows:

TABLE 1:

July-Sept 2017	All Wales	ABM	AB	BCU	CV	CT	HD	OOA
Number of Handovers > 60 Minutes	3,910	790	425	2,132	338	4	221	84
Total Number of Handovers	60,699	10,760	9,550	14,254	8,706	8,058	9,371	2,231
% Handovers > 60 Minutes	6.40%	7.34%	4.45%	14.96%	3.88%	0.05%	2.27%	3.77%

July-Sept 2017	All Wales	ABM	AB	BCU	CV	CT	HD	OOA
Number of Handovers > 4 Hours	81	4	13	63	0	0	1	0
Total Number of Handovers	60,699	10,760	9,550	14,254	8,706	8,058	9,371	2,231
% Handovers > 4 Hours	0.13%	0.04%	0.14%	0.44%	0.00%	0.00%	0.01%	0.00%

Source: WAST Informatics Department

In order to address continence concerns WAST now participates with the All Wales Continence Bundle to ensure that pre-hospital patient care is included in their monitoring. The approach regarding the appropriate provision of continence, nutrition and hydration is currently informal and there are no standard operating procedures. Arrangements vary and it would assist ambulance crews if Health Boards had a clearer process in place, particularly at those hospitals that typically experience handover delays in excess of 60 minutes. During our site visits at EDs we observed instances where WAST staff were providing food and drink to patients from stock cupboards held at hospitals. In addition to nutrition, hydration and continence considerations, significant handover delays can lead to patients requiring pressure sore area care.

We recommend that:

- Health Boards undertake a review of the arrangements in place for the provision of continence, nutrition and hydration at each hospital to ensure safe and dignified care is provided to patients during handover delays.

16

- Although handover delays should not occur, where they do Health Boards should maintain a formal record of continence, nutrition and hydration offered and declined or accepted by the patient to evidence that adequate care in these areas was provided at reasonable times.

A process to manage the peaks in the flow of emergency care should be in place and managed to prevent bottlenecks at ambulance handover. Clinical processes to manage conveyance rates (Hear and Treat, See and Treat) should be in place and actively managed in all Health Board areas. Pathways for care based on the 5 step model for ambulance services should be in place to ensure that only those patients requiring immediate hospital care are transported there. Arrangements should be put in place to bypass the need for assessment and admission through the Emergency Department (ED) for appropriate patients (e.g. hot clinic slots for patients referred from primary care).

Action 2: Ambulance conveyance should be actively managed by Health Boards and WAST.

Patient flow management is essential to ensure that there are no bottlenecks in the hospitals that prevent the patient accessing the ED. All hospitals visited have similar protocols and procedures to seek to avoid bottlenecks, in particular:

- Daily (between two and four) site bed management meetings to manage current and projected patient flow through the hospital. These meetings are used to highlight issues in respect of demand and capacity. Observation of these meetings and review of situation reports confirmed that updates are provided on bed management issues on the wards including potential discharges, ward staffing issues which may adversely impact a ward's bed capacity and other information such as infections on wards reducing the flow of patients.

  In addition, regular meetings are held between the Health Boards and WAST to review and manage, amongst other matters, handover delays. Refer to Action 5 for further detail.

- Hospital Escalation levels and Local Escalation Action Plans (LEAP) document the process to follow dependent on the site escalation level.

  The Plans detail roles and responsibilities and actions which escalate relative to the length of delay. Each hospital's plans are relative to resources and each have sought to identify appropriate capacity flow to enable access to ED, most noticeably dedicated beds, boarding/surge (i.e. additional bed on wards) and earlier discharge of patients. Refer to Action 8 for further detail.

In addition to these, WAST has agreed with all Health Boards an NHS Wales Ambulance Availability Protocol that sets out the procedure that must be followed and requires the immediate release of ambulance vehicles when any WAST Allocator has no resources available to respond to RED/AMBER 1 calls.

- The Major EDs have WAST Hospital Arrival Screens (HAS) which inform the ED of ambulances that are on their way to the hospital and their expected time of arrival. The HAS is then updated to reflect the patient flow from the WAST conveyance (inbound), arrival (notify) and admittance (handover) at the hospital. This assists the Nurse in Charge seeking to accommodate capacity in the hospital to meet demand. Refer to Action 9 for further detail.
- It is recognised that many frequent callers have psychological or social needs and conveyance to ED is often not the care they require and is a drain on resources. Alternative pathways and social care plans help manage unnecessary conveyance and are being developed by Health Boards with WAST. Refer to Action 3 for further detail.
- Avoiding 'batching' due to many patients being conveyed to ED in an ambulance at the same time. This is a difficult area to evaluate but appears to occur principally when crew rest breaks are not staggered effectively. We have not evaluated this as crew rest breaks are not in scope for this audit.
- Developing pathways to bypass conveyance to ED. Refer to Action 3 for further detail.
- Projects and initiatives to manage conveyance to ED. Examples highlighted within WAST's *'National Winter Plan and Local Health Board Plans'* presented at WAST Board meeting on 28 September 2017, which vary by type and maturity across the Health Board areas and the effectiveness of which has not been tested individual in any detail during this audit, include:
  - Paramedic Pathfinder - the development and roll out of a reductive triage model for paramedics to better enable them to conduct face to face triage of patients when they arrive at scene, using a flow chart of presenting signs and symptoms to determine the most appropriate clinical pathway for the patient's needs e.g. community care, self-care or patient specific pathways which should help reduce conveyance rates to ED.
  - Advanced Paramedics to reduce conveyance through Paramedic referrals and sensible deployment to low acuity calls
  - Mental Health Pathways - support for patients who find themselves in a crisis situation without any need for medical intervention
  - Dedicated Falls Service (with a Paramedic and Community Resource Team member)

- Additional Community First Responder (CFR) schemes
- Ambulatory Care – dedicated ED units for the treatment of patients who can return home or do not require a ward bed between treatments (i.e. on an outpatient basis).
- Alcohol treatment centres
- WAST is piloting a number of community paramedic schemes. This will involve paramedics supporting GP clusters with home visits, with the aim of improving primary care capacity and reduced conveyance.

Reducing conveyance to ED will assist in reducing handover delays as these are often due to capacity issues. This is well recognised and under the Commissioning and Quality Delivery Framework (CQDF) WAST follows the Five-Step Ambulance Care Pathway. This is a five step process for the delivery of emergency ambulance services within NHS Wales:

The WAST *'Performance Analysis 2015/16'* report states*:*

'The framework has a clear strategic aim to focus on a 'shift left' of patient flow along the pathway, where it is clinically appropriate and safe to do so, so that patients are better informed as to how to access the urgent and emergency care system, where appropriate they can receive telephone advice or be treated by a paramedic providing care and treatment 'on scene' or be taken to an emergency department or other services as and when appropriate.'

Following the five-step process should result in fewer conveyances to ED but to date the conveyance rates following 'See and Treat' (steps 3 & 4) have remained at 69-70% month on month in 2016 and 2017 (AQI19 i – 'Percentage of patients conveyed to hospital following a face to face assessment'). The conveyance rates quoted above, and analysed in further detail below, are following a face to face assessment (See and Treat) and when comparing June - September 2016 with the same period in 2017 there was little change in the number of patients where an ambulance resource attended the scene (2016: 76,942, 2017: 77,682). Similarly, those then conveyed in 2017 were 53,364 compared to 53,402 in 2016, hence the percentage not changing significantly.

However, it is worth noting that during this period the number of 999 calls processed through the Medical Priority Dispatch System (MPDS) increased by 2,450; (2016=115,734, 2017=118,184). We understand that this

16

increase is because more calls are being closed at the 'Hear and Treat' stage following WAST CCC telephone assessment and triage. We are aware that the new 111 Service has recently been piloted and this will hopefully further reduce the levels of 'See and Treat' and subsequent conveyance to ED.

The above shows an increased demand on the service, which in the past would likely have resulted in an increase in patients conveyed to hospital, is being managed through improved 'Hear and Treat' services. The number conveyed following 'See and Treat' has not reduced. This should improve following the recent announcement of the Band 6 Paramedic Model which will see an increased scope of practice for Paramedics, linked to a 3-year training plan. As the Band 6 has only recently been introduced, the impact on conveyance is not yet measurable.

There are a number of AQIs that relate to conveyance including the '*number of incidents that resulted in non-conveyance to hospital*' under '*Step 4: Give Me Treatment*' and the '*number of 999 patients conveyed to hospital*', including analysis by type and also those conveyed to hospital outside of the local Health Board area, under '*Step 5: Take me to Hospital'*. The Wales Audit Office Review of Emergency Ambulance Services Commissioning Arrangements dated July 2017 highlighted improvement areas for the AQIs. There is recognition that these indicators are still developing and require further refining to ensure they demonstrate key data in a clear way. There are also opportunities to improve the presentation of some indicators so that they become more accessible and understandable to readers and make them more meaningful in understanding patient outcomes and patient experiences. Additionally, the report highlighted that EASC members are not yet fully recognising and making the most of the potential that this information holds to inform decisions for improving the quality of ambulance services for patients across Wales.

It is recognised that it would not be appropriate to set a 'target' of reduced conveyance following 'See and Treat' as this could incentivise decision making to the detriment of the patient. However, there could be improved usage of the conveyance data that would enable analysis that should improve handover delays and reduce the cost of lost hours. For example, improved analysis of patients who were seen by the hospital clinician and released without requiring treatment, highlighting that the conveyance was not necessary or identifying patients that were conveyed to ED where an alternative pathway was more appropriate, also known as 'missed opportunities'. Further analysis would also identify if paramedics require training and development and ensure that all crews have the guidance and understanding to reduce conveyance to ED. Clearer recording and reporting of conveyance to pathways that bypass ED is covered in more detail in Action 3.

16

Table 2 below shows the September 2017 conveyance rates by Health Board. Cwm Taf University Health Board has the highest conveyance rate whilst Betsi Cadwaladr University Health Board has the lowest.

TABLE 2:

AQI Ref: AQI23	All Wales	ABM	AB	BCU	C&V	CT	HD
Number of 999 Patients conveyed to Hospital	17,513	2,765	3,034	4,248	2,489	1,878	2,330
Total Number of Incidents where an Ambulance Resource Attended Scene	25,339	4,142	4,461	6,524	3,523	2,407	3,159
Percentage of patients conveyed to hospital following a face to face assessment	69.1%	66.8%	68.0%	65.1%	70.7%	78.0%	73.8%

Source: Emergency Ambulance Services Committee (EASC) Ambulance Quality Indicators July – September 2017 (http://www.wales.nhs.uk/easc/ambulance-quality-indicators)

Table 3 below shows the number of notification to handover within 15 minutes in September 2017. The opposite trend is highlighted where Betsi Cadwaladr University Health Board has the lowest achievement of handovers within 15 minutes whilst Cwm Taf University Health Board has the highest handover rate despite the highest percentage of patients conveyed to hospital. This would indicate that conveyance rates do not in themselves have a direct correlation with handover within 15 minute rates. The reason could be the total number of handovers relative to bed capacity.

TABLE 3:

AQI Ref: AQI20 i	All Wales	ABM	AB	BCU	C&V	CT	HD
Number of Notification to Handover within 15 minutes	11,912	1,993	1,781	1,768	1,774	2,053	2,099
Total Number of Handovers	20,660	3,353	3,215	5,014	2,925	2,325	2,973
Percentage of notification to handover within 15 minutes of arrival at hospital	57.7%	59.4%	55.4%	35.3%	60.6%	88.3%	70.6%

Source: EASC Ambulance Quality Indicators July – September 2017

16

Table 4 below shows that Betsi Cadwaladr University Health Board had circa 2,250 average available daily beds during 2016/17 and in September had circa 165 handovers per day. Cwm Taf University Health Board has circa 1,260 average available daily beds and in September had circa 75 handovers per day. This suggests that handover rates do not correlate directly to bed capacity with Cwm Taf University Health Board achieving 88% handover within 15 minutes but Betsi Cadwaladr University Health Board only managing 35% in September 2017.

TABLE 4:

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Wales	81.5	84.7	85.2	86.3	85.9	86.7	86.9	87.4
Betsi Cadwaladr University Health Board	74.3	79.4	81.7	83.8	83.1	83.8	83.9	86.4
Hywel Dda University Health Board	85.4	87.7	85.1	87.1	85.5	88.1	89.2	87.7
Abertawe Bro Morgannwg University Health Board	85.1	86.9	87.0	86.4	87.0	88.4	88.7	89.1
Cwm Taf University Health Board	76.4	82.9	80.2	82.6	83.2	83.6	83.4	84.1
Aneurin Bevan University Health Board	83.8	85.6	88.3	89.6	89.2	87.9	88.7	88.6
Cardiff and Vale University Health Board	84.8	87.2	88.4	89.0	87.0	88.5	88.4	88.0

Source: Stats Wales Website (NHS-Hospital-Activity/NHS-Beds)

Whilst the proportion of average daily occupied beds to average daily available beds is similar across each Health Board, each percentage is significant. If Betsi Cadwaladr University Health Board had the same proportion rate as Cwm Taf University Health Board it would equate to 51 more beds. This data is insufficient in detail to accurately analyse the impact on handovers, however, good bed management and patient flow is recognised as having impact on delays and there may be a link that the Health Board with the lowest average daily bed occupancy have the highest rate of handover within 15 minutes.

During this audit there was a particular point raised by all of the Health Boards and by WAST regarding the impact on conveyance and peaks in attendance to ED that result in handover delays. GP referrals are unscheduled and occur between GP hours, typically 10am to 6pm which can contribute to bottlenecks outside hospitals. Furthermore, we were informed that the time lost during hospital handover delays, coupled with the way the WAST clinical model is designed to prioritise calls in line with their red, amber, green rating, mean that ambulance crews are often unable convey GP referrals to hospital within the relevant department's opening hours. This is due to GP referrals typically being classified as green priority and results in the patient not receiving timely and appropriate care. It was generally recognised that improvements could be made by having scheduled conveyance for GP referrals where appropriate.

We recommend that:

- WAST, in conjunction with EASC, evaluates how it records, analyses and reports on conveyance and how this information is used to gain assurance that conveyance to ED is restricted to those cases where the presenting condition determines that the ED is the appropriate pathway for the patient. WAST should develop ways of identifying missed opportunities, for example, through undertaking sample audits across a range of indexed conditions and comparing conveyance rates across Health Boards.
- WAST and Health Boards undertake a project to investigate whether GP referrals could be scheduled, where the patient condition allows, so that the time of arrival at the ED is more likely to improve the patient experience by being aligned to the demand and capacity models of the hospital.

Action 3: Pathways for emergency care that bypass the Emergency Department should be in place.

Each of the Health Boards has developed unscheduled care pathways with WAST to bypass ED. In addition, WAST has a Clinical Pathways Approval & Appraisal Group (CPAG) with the focus of approving clinical pathways. At present, the Terms of Reference for this Group are in draft but should be finalised soon.

Whilst we were provided with examples of pathways that have been developed by both WAST and the Health Boards, accepting there will be local variances, the process of developing and implementing pathways appears disjointed. The number of pathways vary across Health Boards and whilst there are examples of uniformity e.g. mental health and falls pathways, there is opportunity for improved sharing of good practice. It may be, that a lack of analysis currently undertaken or made available regarding the effectiveness of each pathway in reducing conveyance to ED ('admission avoidance'), is currently preventing this.

As noted under Action 2 above there is no clear breakdown of conveyance by pathway, however AQI 17 measures the 'number of incidents that resulted in a non-conveyance to hospital'. This relates to the number of 999 verified incidents that received an emergency response that resulted in either being resolved at scene or in the home or referred to an alternative care provider.

The AQI specification details that this data is for incidents:

- Referred to GP
- Referred to GP Out of Hours
- Referred to Falls Pathway

16

- Referred to Other Healthcare Professional
- Referred to Diabetic Pathway
- Referred to Epilepsy Pathway
- Referred to Midwife
- Referred to Specialist Practitioner
- Referred to Social Care Pathway
- Referred to Mental Health Pathway
- Passed to PCS
- Referred to Palliative Care
- Referred to COPD Pathway
- Referred to Cardiac Care Pathway
- Referred to Alcohol and Drug Pathway

As part of the audit we were provided with a schedule of pathways managed through CPAG. We were also provided with a list of pathways by each of the six Health Boards. We were unable to reconcile these and were therefore unable to verify that:

- There is a clear and consistent process for WAST and Health Boards to formally approve each pathway;
- Where a pathway is approved, there is a clear flowchart that has been made available and understood by WAST staff, including the crews and staff within the Clinical Contact Centres;
- Each pathway is underpinned by detailed methodology to enable evaluation and monitoring of its success in reducing conveyance to ED; and
- There is a process in place to review and identify pathways that are effective and should be considered for implementation at other Health Boards.

The Wales Audit Office Review of Emergency Ambulance Services Commissioning Arrangements report dated July 2017 stated '*The pattern of data is perhaps not surprising given that many Health Board changes, to provide alternative services that have the potential to reduce conveyance, have only been recently introduced and have not yet been fully tested by winter pressures. It will be important, however, for EASC and individual NHS bodies to look for positive changes in conveyance rates as part of their assurances that the five-step model is securing its intended benefits.*'

One of the key ways that handover delays can be managed is through reduced conveyance to ED. The cost in lost hours is well documented and investing in the implementation of alternative pathways should see improved handover performance. As there has been a recent restructure within the WAST Operations Team, having a more formalised procedure for the management and dissemination of pathways will assist in ensuring that alternative pathways are known and applied at all applicable times.

16

We were informed by the WAST Operations staff interviewed, that paramedics have not always been able to follow a pathway as the alternative location did not have capacity or resource to receive and treat the patient at the time. This is currently not well recorded and as such we could not audit this in any detail.

We also noted during our visits that the WAST crews have a pathways folder in the ambulance that should enable them to identify and follow the appropriate pathway. Again, we were unable to reconcile that all of the pathways were in the folder and overall we could not be confident that all staff were fully aware of them. In particular, if a crew conveyed across border to another Health Board Area it is unlikely that they would be aware of the local pathways. We were informed that tablet devices have recently been allocated to paramedics. This provides WAST with an opportunity, following software development, to provide an electronic tool of all the available pathways for paramedic's that could increase their ability to utilise a pathway and bypass conveyance to ED where appropriate.

We recommend that:

- WAST and Health Boards undertake a review of the governance arrangements for the identification and approval of all pathways, together with a consistent process for recording, disseminating and measuring outcomes.
- WAST ensures that any blocks or breaks that prevent the use of a conveyance pathway to bypass ED are recorded and management action is taken to address any issues.
- WAST investigates the opportunity of developing an electronic pathways tool to assist paramedics in following pathways to bypass conveyance to ED.

An escalation policy must be in place with safe levels of staffing. Staff of all grades should have clear lines of responsibility and accountability and an appropriate level of supervision, (e.g. training doctors, health care assistants and nurse practitioners).

Action 4: Safe, sustainable, staffing levels for emergency care, able to flex to meet demand, must be in place, with appropriate levels of supervision.

Each of the Health Boards we visited, and specifically those with major EDs, have undertaken exercises to analyse demand and capacity and to seek to staff the ED on a shift basis that aligns with predicted demand. We were informed that in some hospitals the level of staffing within the ED is fixed

16

and is based on the budget available for staffing the ED. However, Hospital Speciality Consultants / Registrars are called to the ED as required.

There is no statutory 'safe levels' of staffing for ED, unlike for wards and we were informed that there is no prescribed formula for calculating ideal staffing levels. We reviewed the nursing and medical staff rosters for a sample of seven days (Monday – Sunday), covering a seven-week period from August to October 2017. Review of the rosters confirmed staff of all grades and levels, for example, Qualified Nurses, Emergency Department Assistants, Senior Doctors and Junior Doctors. In addition, we noted that staff are assigned a responsibility for each shift e.g. Nurse in Charge, Ambulance Triage, Walk-in Triage, Majors, Minors etc. The hospitals visited had escalation plans in place that detailed the actions to be taken at different escalation levels and this included staff responsibilities. Further information on escalation plans is documented under Actions 7 and 8 of this report.

The Hospital Arrival Screen (HAS) requires the ED staff to record the 'late reason' for the handover exceeding 15 minutes (from a list of reason codes). One of the reasons is 'No Available Nurse or Medical Staff'. We reviewed a sample of the daily HAS data quality reports produced by the WAST Informatics Department for the sample period above and found that less than 4% of delays recorded were noted as being as a result of insufficient staffing as shown in Table 5 below:

TABLE 5:

	Audit Sample 7 days			Late Reason						
0-9% 10-19% 20%+	Hospital	Total Number of Conveyances	Total Late	No Beds Available	No Reason Provided	Patient had Complex Needs	No Available Trolley/Chair	No Available Nurse or Medical Staff	Patient Taken Direct to Ward	Handover to Ambulance Staff
TOTALS for ALL six Health Boards		4661	1980	658	604	271	278	74	41	54
Total % Late			39.07%	29.98%	27.60%	17.03%	15.30%	3.88%	3.63%	2.58%

Source: WAST Informatics Department

NB: The late reason was not provided for 27.6% of the instances and there could have been more instances where the delay was due to 'no available nurse or medical staff.' This has been analysed further under Action 9.

We were informed that staffing ED to meet demand can be difficult in some hospitals, especially out of hours, however, for the sample we tested and from the findings of the audit overall we did not conclude that hospital staffing is a significant contributing factor for handover delays. In addition, given that our internal audit report on Red Calls Response issued in August 2017 included a recommendation relating to WASTs staffing arrangements and the demand and capacity review, we have not performed further work on this area.

16

WAST and Health Board operational teams should meet weekly to review the demand for emergency care and plan any necessary measures to address it. The culture of care in the organisation is of the utmost importance in ensuring that prompt handover becomes business as usual in Health Boards. Health Board executive teams must ensure that the importance of avoiding delays at ambulance handover is effectively communicated to all staff by emphasising it visibly and repeatedly.

Action 5: Health Boards and WAST should meet weekly to manage emergency care flow. These meetings should ensure that care pathways that reflect the five step ambulance model used to commission ambulance services in Wales are in place.

Each of the Health Boards has meetings with WAST although their frequency varies. Managing delays in hospital handover is a daily activity that is monitored by the minute. There is constant communication and dialogue between WAST and the hospitals, aligned with escalation plans.

We were informed by each Health Board that they have a good partnership working arrangement with WAST and meetings occur daily, weekly or fortnightly, typically;

- Daily 11am conference call between all Health Boards, WAST and the Welsh Government.
- Daily bed management / patient flow hospital meetings ('huddles').
- Weekly or fortnightly meetings between ED staff and the WAST Area Operations Manager.

Whilst the frequency and attendance at meetings (both formal and informal) varies, the purpose is the same with hospital staff aware that patient flow is key in preventing handover delay and bed management forms a fundamental role. We requested minutes of these meetings but were not provided with them and concluded that many of these meetings are indeed not minuted.

As noted above, a conference call is held every day of the year at 11am with representatives from each Health Board, WAST and the Welsh Government (Emergency Care Policy and Performance). This call is principally to review each hospital's escalation status level as this impacts on ED handovers and if there are specific delay issues these can be addressed collectively.

We were informed at some hospitals that attendance at site meetings by a WAST representative was often limited by the availability of the Clinical

Team Leader (CTL). Other hospitals have a designated WAST Hospital Ambulance Liaison Officer (HALO) in place which results in better ongoing oversight of the handovers at the hospital. The feedback we received during our hospital visits was that most would value having a HALO as it provides more opportunity for WAST to liaise with the hospital staff to assist in managing hospital handovers.

During our visits, hospital staff expressed concern regarding the limited control they have over the paramedics, specifically the time they take to 'notify' and then 'clear' handovers. We observed some handovers which could have been completed more efficiently – this is reported in Action 9. Having a dedicated HALO in place, especially at hospitals with poor handover rates, could assist in managing the patient flow by ensuring that the 'notify' and 'clear' actions are consistently completed by crews to the expected standards. Other issues raised in this audit report would also benefit from having a WAST member of staff on site with good local knowledge and the ability to monitor and manage performance.

Whilst there is communication between WAST and Health Boards on operational matters there was little evidence of strategic direction and related forums. Such would assist in leading on and managing the issues of handover delays, conveyance, pathways, patient flow, HAS data quality and enable better uniformity and best practice sharing.

We recommend that:

- WAST identifies all meetings that are held between WAST and Health Boards at hospital, Health Board and national level and determines the need for less or more and how they are recorded (agendas, minutes, action plans). In particular, how strategic decision making and sharing of best practice is performed in respect of handover of care at Emergency Departments.
- WAST undertakes a cost benefit analysis on the potential efficiency gains that may be available through the HALO role. This could be trialled initially at those hospitals with the lowest handover rates to measure the impact it has on improving handover performance.

Action 6: Health Board executives must visibly and repeatedly communicate the importance of ambulance handover to all staff.

The escalation level of a Health Board, and its constituent parts, is communicated regularly with the Executive team, in particular the Chief Operating Officer. As a minimum this occurs between two and four times per day following the Site (Bed Management) Meetings but may be more frequent if required. Significant delays should be escalated to the Chief Operating Officer or Executive on call at the time they occurred and immediate actions agreed. During periods of prolonged pressure, the Chief

Operating Officer would typically convene extraordinary meetings to agree additional measures the hospital (and wider health and social care system) should take to recover the position and de-escalate.

We reviewed Board meeting minutes for each Health Board and found that delayed handovers are included in performance reports. It was clear that all Health Board executives are aware of the problem of handover delays and set targets and actions to reduce them. As noted in Action 1 above, we also reviewed the IMTPs for the six Health Boards and found that emergency care is included with reference to developing joined-up health and social care services. Whilst this is noted as a priority by all Health Boards, the AQI's over the past 12 months have shown little improvement in performance on handover delays. The only Health Boards that are near the 15-minute handover target of 100% are Cwm Taf University Health Board achieving almost 90% each month and Hywel Dda University Health Board achieving circa 80%.

Cwm Taf University Health Board's performance may be attributed to its project to reduce delays and improve the flow of patients across hospital, GP and community services. The 'Focus on Flow' project won the NHS Wales Improving Patient Safety Award 2014:

"A Cwm Taf University Health Board project to identify delays within its healthcare system and improve the flow of patients across hospital, primary care and community services is delivering better outcomes and experiences.

Overwhelming demands on the system, particularly in the accident and emergency department, was leading to delays in diagnosis and treatment, and patients staying in hospital for longer than necessary. It was also impacting on the ambulance service leading to delays in patients moving from the ambulance into hospital.

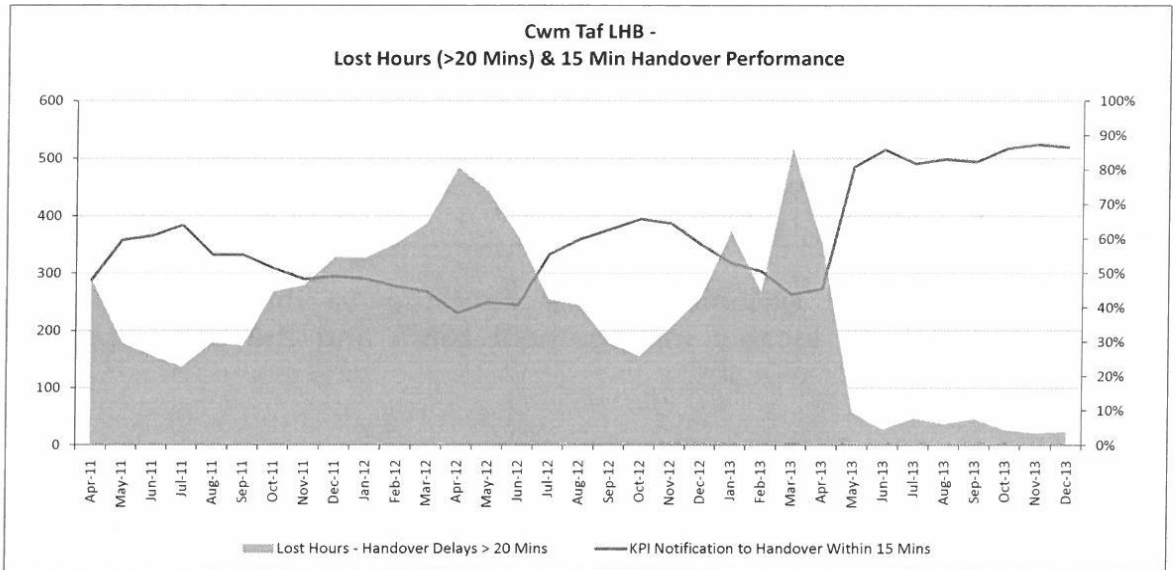
The 'Focus on Flow' project set about identifying blockages within the system and identifying how they could be improved. Staff concentrated on a number of changes including a zero tolerance of delays in handing patients over from ambulance to hospital, redirecting patients to minor injury units instead of accident and emergency, where appropriate, and improving social care support.

The health board also increased the number of short stay surgery beds, improved discharge times from hospital and introduced daily board rounds to ensure all staff are informed about next steps needed for individual patients.

As a result of these changes, levels of overwhelming demand on accident and emergency have decreased and more patients are handed over into hospital from an ambulance within the 15-minute target."

During this audit it was not possible to evaluate specifically how the 'zero tolerance' has made such a difference on handover performance but since it was introduced in May 2013 it has had a significant impact as shown in the graph below.

GRAPH 1:



Source: 'Focus on Flow' Update Report - Cwm Taf UHB Quality and Safety Committee Meeting 23 January 2014

It should be acknowledged that all of the Wales NHS Health Boards have undertaken projects and initiatives to improve unscheduled care and address patient flow. Many of these are currently in operation. What is clear from the AQI's is that the initiatives applied by Cwm Taf University Health Board have been very effective in respect of the impact on WAST and lost ambulance hours as a result of handover delays as shown in table 6 below.

TABLE 6:

Hospital LHB	KPI	Apr 17	May 17	Jun 17	Jul 17
All Wales	15 min Handover %*	58.40%	59.20%	58.90%	59.90%
	Lost Hours	3589.4	3832.1	3235.9	3341.7
Betsi Cadwaladr	15 min Handover %*	43.40%	44.40%	40.20%	40.40%
	Lost Hours	1645.4	1626.2	1393.7	1633.7
Hywel Dda	15 min Handover %*	80.00%	79.60%	79.00%	80.00%
	Lost Hours	156.3	144.9	141.4	130.3
Abertawe Bro Morgannwg	15 min Handover %*	52.10%	58.50%	54.40%	59.90%
	Lost Hours	759.4	650.8	722	523.9
Cardiff And Vale	15 min Handover %*	54.70%	51.00%	56.90%	63.90%
	Lost Hours	428.8	672.5	496.5	273.6

Cwm Taf	15 min Handover %*	84.90%	86.40%	88.00%	86.90%
	Lost Hours	48.7	44.3	33.8	36.2
Aneurin Bevan	15 min Handover %*	51.60%	50.90%	52.90%	46.00%
	Lost Hours	457.2	551.8	361.8	640.1
Out of Area	15 min Handover %*	46.90%	43.30%	46.50%	46.80%
	Lost Hours	93.6	141.6	86.6	103.8

Source: WAST Monthly Integrated Quality and Performance Report July 2017

It is surprising, given the transparency of this performance information over the past 3 years with each Health Board receiving the quarterly AQIs showing Health Board comparative data, that those lower performing Health Boards have not done more to emulate models of the higher performers, notably, Cwm Taf. We have recommended under Action 3 above that a process be put in place to review and identify processes that are effective and should be considered for implementation at other Health Boards.

We recommend that:

WAST and Health Boards evaluate the key factors adopted by Cwm Taf University Health Board that resulted in their handover performance improving from circa 50% to 90% since 2013 and work together to drive similar improvement.

WHC/2016/029 – Handover on Arrival:

Once the patients have arrived, handover should take place quickly. The Health Board and WAST should work together operationally in order to avoid any handover delay. WAST crews should not routinely be responsible for monitoring patients over prolonged periods outside A&E, and hospital clinicians should be responsible for overseeing the assessment of patients. If delays occur immediate action must be taken by the Health Board to resolve them. Where ambulances are delayed beyond 30 minutes the actions must include:

1. The WAST CCC and the hospital operational team must be notified immediately.
2. Senior hospital medical and nursing staff from all relevant specialities must attend the ED.
3. Hospital ED staff must ensure that any patient waiting more than 30 minutes has been assessed and moved immediately into the ED if there is a risk to patient safety.
4. WAST staff must ensure patient observations are repeated as required and any necessary treatment continued until admission to

the ED. Any patient who is seriously unwell, or whose condition deteriorates, should be moved to the ED.
5. Patients and their carers should be kept fully informed of the reason for any delay and the progress in resolving it.

Action 7: Hospital clinical staff must ensure that any patient waiting more than 30 minutes has been assessed and moved immediately into the hospital if there is a risk to patient safety.

It was apparent from our site visits that at every hospital there is full awareness (with use of the live data systems and liaison between the WAST crews and the hospital clinicians) of waiting times of patients. Depending on the acuteness of the patient need, they are moved in to the hospital as soon as there is capacity to do so.

Each Health Board has Local Escalation Action Plans (LEAP) that set out actions for the hospital and WAST at triggers over 15, 30, 45 and 60 minutes. The extract below is a typical example from a LEAP:

- Identify reason for delay in handover.
- Escalation to Nurse in Charge (NIC) and Site Manager.
- Ongoing review of patients to identify opportunities to sit out or move to discharge lounge.
- Ongoing review of patients delayed with crews to identify opportunities to release crews (i.e. potential to sit out).
- Move all patients awaiting discharge home who are suitable for the discharge lounge to the discharge lounge.
- Identify any patients on trollies awaiting ambulance transport who are not suitable for the discharge lounge. Escalate this to the site manager.
- Patient now held on ambulance and crews delayed >30 minutes.
- All patients delayed will be triaged and reviewed by a Senior ED Doctor.
- Utilise all available capacity in the department suitable for patients.
- Utilise all site beds – Site Manager.
- Utilise all ring fenced beds - Site Manager.
- Pre-empt to definite discharges with Senior Nurse support.
- Ongoing communication with senior manager regarding plans.
- Escalate any transport delays to senior manager.

WAST crews should not routinely be responsible for monitoring patients over prolonged periods outside A&E, and hospital clinicians should be responsible for overseeing the assessment of patients.

The University Hospital of Wales (UHW) was the only hospital of the 6 visited that did not undertake a face to face assessment of the patient before admission to the hospital. In all other cases the clinician carried out

16

an initial patient assessment in the back of the waiting ambulance as required. We were informed by staff at UHW that that the ambulance triage by ED clinicians is not one supported by the Royal College of Emergency Medicine and that whilst nurses do not enter the ambulance, the risk to patients is managed through the protocols and processes in place; a clinical assessment by the Majors Assessment Nurse (MAN) through communication with the paramedic.

The Welsh Government health circular clearly states that hospital ED staff must ensure that any patient waiting more than 30 minutes has been assessed.

TABLE 7:

September 2017	All Wales	ABM	AB	BCU	CV	CT	HD	OOA
Number of Handovers > 30 Minutes	3,752	677	527	1,684	457	16	391	177
Total Number of Handovers	19,914	3,580	3,048	4,631	2,920	2,651	3,084	775
% Handovers > 30 Minutes	18.84%	18.91%	17.29%	36.36%	15.65%	0.60%	12.68%	22.84%

Source: WAST Informatics Department

The current practice at the UHW is contrary to Point 3 of the Welsh Government guidance above. This is a conscious decision by the hospital, as outlined above, and results in greater responsibility on the paramedics to assess the patient condition and monitor that condition for over 30 minutes and sometimes several hours. There is also a missed opportunity for the ED clinician to undertake an assessment at an earlier stage that could have resulted in the patient being redirected, avoiding an unnecessary wait for the patient and lost hours to WAST.

We recommend that:

WAST seeks confirmation from Welsh Government regarding responsibility for undertaking a clinical assessment of patients prior to admittance to the ED.

Effective systems should be in place through the Escalation Policy to prevent ED exit block. Wards must increase their ability to pull patients from ED at times of high demand. This should be risk managed to ensure that patients are treated in a suitable clinically supervised area with appropriately qualified staff and in a suitable environment. The patient's safety is the utmost priority and any infection control, or any other risk, should be managed safely.

Action 8: Wards must increase their ability to pull patients safely from the ED at times of peak demand. If significant ambulance delays occur Health Boards must ensure that effective site escalation operates to allow ambulances to be released promptly.

16

As mentioned previously, every hospital has escalation plans and seeks to increase capacity in times of peak demand. The use of corridors is a contentious practice and is operated in some hospitals but not in most. The majority consider that it reduces patient dignity and privacy and lacks both the appropriate space and more so appropriate clinical observation and monitoring of the patient. Others feel that they can manage patients in corridors effectively, most noticeable in our sample the Royal Glamorgan hospital where some of the highest handover rates within 15 minutes are recorded. All of the hospitals seek to use appropriate space to increase capacity to meet demand as set out in their local escalation plans.

Automated e-mails are sent from WAST every 15 minutes which ensures that appropriate staff are aware of the current status of each patient and the need for escalation. It was noted that despite the Clinical Contact Centres receiving live information on the location of each ambulance and where they are queued outside EDs, ambulance crews are not advised to convey to an alternative hospital. We were informed that whilst conveyance across Health Boards can be agreed at Executive level this does not happen unless the hospital is at Escalation level 5. The main reason provided is that the patient care is considered best provided in their residential Health Board should they require admittance to the hospital or require other care services e.g. social care.

To verify that escalation procedures are undertaken we reviewed the HAS data for a sample of 7 days, expecting to see a significant increase in handover rates at the trigger points to indicate that further action had been escalated.

TABLE 8:

Health Board	<15mins	<30mins	<60mins		>15mins	>30mins	>60mins
AB	51.9%	83.4%	96.4%		48.1%	16.6%	3.6%
ABM	57.8%	77.4%	89.5%		42.2%	12.6%	10.5%
BCU	34.5%	62.4%	79.9%		65.5%	37.6%	20.1%
CT	89.2%	99.1%	100.0%		10.8%	0.09%	0%
CV	59.9%	84.2%	93.1%		40.1%	15.8%	6.9%
HD	73.2%	91.1%	97.3%		26.8%	8.9%	2.7%
Total	**61.1%**	**82.9%**	**92.7%**		**38.9%**	**17.1%**	**7.3%**

Source: WAST Informatics Department

Table 8 above shows that indeed the handover rates had improved significantly between 15, 30 and 60 minutes. We also reviewed whether the Health Boards and WAST had followed their escalation protocol which is recorded on the EMS Occurrence Logs. For our sample we obtained the logs and found evidence that bronze, silver and gold on call staff had been notified of the delay.

16

Action 9: An appropriate level of training is provided to paramedics and Emergency Department to support effective hospital handover.

All of the Health Board staff interviewed during our site visits felt that formal training on handovers was not necessary as the process for a routine handover to ED should be clearly understood.

- Ambulance is en route to the hospital. These ambulances can be identified by the hospital as they will have an 'Inbound' status on the HAS. The HAS also details the ETA of the Ambulance;
- Paramedic will inform that they have arrived at the hospital on the terminal on the ambulance. The status on the HAS will change from 'Inbound' to 'Arrived' which can again be seen on the HAS at the hospital;
- On arrival one paramedic will stay with the patient and one paramedic will enter the ED to inform the Nurse in Charge / Triage Nurse of their arrival so that the triage of the patient can commence;
- The paramedic must log into the HAS at the hospital to record that the ED has been notified of the ambulance's arrival. This action changes the status on the HAS from 'Arrived' to 'Notified' and is the point where the 15-minute handover target commences;
- Once the patient has been handed over to the hospital, either the Nurse in Charge or the Paramedic must login to the HAS to confirm that the patient has been handed over. This changes the status on the HAS from 'Notified' to 'Handover'; and
- If the handover was over 15 minutes the Nurse in Charge selects the appropriate 'late reason' from a drop down list in the HAS.

In respect of requiring training it was also highlighted that all staff in ED are qualified clinicians and that local escalation plans are in place to guide staff on the actions to take over delayed handovers. To test the process above, we obtained data for a sample of 7 days (Mon-Sun) over 7 weeks during September and October 2017. We reviewed the WAST HAS data quality audit reports and found that there was a significant number of missing entries for the notification as shown in Table 9.

TABLE 9 (Source: HAS Data Quality Audit Reports, September and October 2017):

	Data Totals for Sample 7 days over 7 weeks		
Health Board	Total Notifications	No Notification	% No Notification
AB	734	276	37.6%
ABM	761	238	31.3%
BCU	1135	472	41.6%
CT	541	193	35.7%
CV	678	186	27.4%
HD	642	149	23.2%
Totals	**4491**	**1514**	**33.7%**

Through discussion with paramedics and hospital clinicians (i.e. Nurse in Charge) we found some contradiction over the responsibility for completing the HAS handover entries. Some thought it was the responsibility of the other party, particularly when the entry had not been completed. Others felt it was the responsibility of both parties which had on occasions resulted in the paramedic finding the entry had already been made by the hospital. It was also found during observation at site visits that the point at which the paramedic updated the HAS varied. Some 'notified' as soon as they entered the ED and then notified the Nurse in Charge, others the other way around. Whilst this finding is mainly anecdotal it was apparent that the data is not as accurate as it would be if there was clear guidance and understanding on HAS roles and responsibilities and a consistent approach at all hospitals over exactly what point the paramedics or clinicians update the HAS.

We analysed HAS data covering a sample of 7 days (Mon-Sun) over 7 weeks in September and October 2017. A summary of our findings is in Table 5 on page 24 and also shown below.

TABLE 5:

	Audit Sample 7 days			Late Reason						
0-9% 10-19% 20%+	Hospital	Total Number of Conveyances	Total Late	No Beds Available	No Reason Provided	Patient had Complex Needs	No Available Trolley/Chair	No Available Nurse or Medical Staff	Patient Taken Direct to Ward	Handover to Ambulance Staff
TOTALS for ALL six Health Boards		4661	1980	658	604	271	278	74	41	54
Total % Late			39.07%	29.98%	27.60%	17.03%	15.30%	3.88%	3.63%	2.58%

Source: WAST Informatics Department

Across Wales our sample results found almost 30% of handover delays are due to no bed availability. The main hospitals affected in our test were:

- ABU – Neville Hall 33.6%, Royal Gwent 27.8%
- ABMU - Morriston 56.6%, Princess of Wales 39.6%
- BCU – Glan Clwyd 35.5%, Maelor 26.7%, Ysbyty Gwynedd 37.0%
- CVU – University Hospital Wales 24.7%
- HDU – Bronglais 33.3%, Glangwili 32.9%, Prince Phillip 65.4%

The Table also highlights that the late reason is not completed over 25% of the time. The main hospitals who did not complete a reason in our sample were:

- Royal Glamorgan 40.7%, Princess of Wales 30.2%, Maelor 61.6% and Bronglais 39.6%.

If this data was complete and accurate it would provide both WAST and Health Boards with information to assist in reducing delays.

We recommend that:

- WAST and Health Boards ensure that the roles and responsibilities for recording data on the HAS are clearly understood. This should be supported by clear guidelines and protocols to ensure that the data can be relied upon as fair and accurate with consistent application of the time recording for the notification and handover.
- The Health Boards and WAST undertake an assessment over the use of the 'late reason' data and where and how it provides management information that can assist in managing handover delays, e.g. addressing issues such as a lack of beds.

8. Summary of Recommendations

The audit findings, recommendations are detailed in Appendix A together with the management action plan and implementation timetable.

A summary of these recommendations by priority is outlined below.

Priority	H	M	L	Total
Number of recommendations	**3**	**4**	**1**	**8**

Finding 1 Patient care during handover delays	Risk
One of the key feedback improvement themes that has been identified by the WAST Quality, Safety and Patient Experience team is in regards to the provision of nutrition, hydration and continence when a patient experiences a significant delay and is held outside the ED. Although the majority of patients conveyed to ED are admitted within 60 minutes there are over 1,300 patients each month that wait in an ambulance for long periods. In order to address continence concerns WAST now participates with the All Wales Continence Bundle to ensure that pre-hospital patient care is included in their monitoring. The approach regarding the appropriate provision of continence, nutrition and hydration is currently informal and there are no standard operating procedures. Arrangements vary and it would assist ambulance crews if Health Boards had a clearer process in place, particularly at those hospitals that typically experience handover delays in excess of 60 minutes. During our site visits at EDs we observed instances where WAST staff were providing food and drink to patients from stock cupboards held at hospitals. In addition to nutrition, hydration and continence considerations, significant handover delays can lead to patients requiring pressure sore area care.	Safe and dignified care is not provided to patients during handover delays.
Recommendation 1	**Priority level**
We recommend that: • Health Boards undertake a review of the arrangements in place for the provision of continence, nutrition and hydration at each hospital to	**Low**

ensure safe and dignified care is provided to patients during handover delays. • Although handover delays should not occur, where they do Health Boards should maintain a formal record of continence, nutrition and hydration offered and declined or accepted by the patient to evidence that adequate care in these areas was provided at reasonable times.	
Management Response 1	**Responsible Officer/ Deadline**
Whilst WAST recognises the importance of hydration and nutrition as well as pressure area care for delayed patients we feel that this recommendation can only be address via the Nurse Directors at each Health Board. WAST's preference is that all patients are handed over within the agreed 15 minute timescale thus negating the need for these issues to be considered as part of a handover delay plan. *Awaiting Health Board response. Report will be updated once provided.*	*Awaiting Health Board response. Report will be updated once provided.*

Finding 2 Conveyance to ED	Risk
Ambulance Quality Indicators (AQI's) There are a number of AQIs that relate to conveyance including the '*number of incidents that resulted in non-conveyance to hospital*' under '*Step 4: Give Me Treatment*' and the '*number of 999 patients conveyed to hospital*', including analysis by type and also those conveyed to hospital outside of the local Health Board area, under '*Step 5: Take me to Hospital'*. The Wales Audit Office Review of Emergency Ambulance Services Commissioning Arrangements dated July 2017 highlighted improvement areas for the AQIs. There is recognition that these indicators are still developing and require further refining to ensure they demonstrate key data in a clear way. There are also opportunities to improve the presentation of some indicators so that they become more accessible and understandable to readers and make them more meaningful in understanding patient outcomes and patient experiences. Additionally, the report highlighted that EASC members are not yet fully recognising and making the most of the potential that this information holds to inform decisions for improving the quality of ambulance services for patients across Wales. It is recognised that it would not be appropriate to set a 'target' of reduced conveyance following 'See and Treat' as this could incentivise decision making to the detriment of the patient. However, there could be improved usage of the conveyance data that would enable analysis that should improve handover delays and reduce the cost of lost hours. For example, improved analysis of patients who were seen by the hospital clinician and released without requiring treatment, highlighting that the conveyance was not necessary or identifying patients that were conveyed to ED where an alternative pathway	Ambulance conveyance not being managed effectively by Health Boards and WAST resulting in patients being conveyed to ED inappropriately.

was more appropriate, also known as 'missed opportunities'. Further analysis would also identify if paramedics require training and development and ensure that all crews have the guidance and understanding to reduce conveyance to ED. **GP Referrals** During this audit there was a particular point raised by all of the Health Boards and by WAST regarding the impact on conveyance and peaks in attendance to ED that result in handover delays. GP referrals are unscheduled and occur between GP hours, typically 10am to 6pm which can contribute to bottlenecks outside hospitals. Furthermore, we were informed that the time lost during hospital handover delays, coupled with the way the WAST clinical model is designed to prioritise calls in line with their red, amber, green rating, mean that ambulance crews are often unable convey GP referrals to hospital within the relevant department's opening hours. This is due to GP referrals typically being classified as green priority and results in the patient not receiving timely and appropriate care. It was generally recognised that improvements could be made by having scheduled conveyance for GP referrals where appropriate.	
Recommendation 2	**Priority level**
We recommend that: • WAST, in conjunction with EASC, evaluates how it records, analyses and reports on conveyance and how this information is used to gain assurance that conveyance to ED is restricted to those cases where the presenting condition determines that the ED is the appropriate pathway for the patient. WAST should develop ways of identifying missed opportunities, for example, through undertaking sample audits across a	**High**

range of indexed conditions and comparing conveyance rates across Health Boards. • WAST and Health Boards undertake a project to investigate whether GP referrals could be scheduled, where the patient condition allows, so that the time of arrival at the ED is more likely to improve the patient experience by being aligned to the demand and capacity models of the hospital.	
Management Response 2	**Responsible Officer/ Deadline**
• The Chief Ambulance Services Commissioner is leading a project to identify 'missed opportunities' which will be reported via the Performance Delivery Group. • A trial of 'scheduling' GP admission calls is underway in the Aneurin Bevan University Health Board area (Royal Gwent). This initiative will be evaluated in Q2 2018. *Further responses may be provided by Health Boards. Report will then be updated.*	Assistant Director of Planning and Performance August 2018 Assistant Director of Ambulance Response / Assistant Director of Clinical Contact Centres and Hear and Treat August 2018 *Further responses may be provided by Health Boards. Report will then be updated.*

Finding 3 Pathways to bypass ED	Risk
As part of the audit we were provided with a schedule of pathways managed through the Clinical Pathways Approval & Appraisal Group (CPAG). We were also provided with a list of pathways by each of the six Health Boards. We were unable to reconcile these and were therefore unable to verify that: • There is a clear and consistent process for WAST and Health Boards to formally approve each pathway; • Where a pathway is approved, there is a clear flowchart that has been made available and understood by WAST staff, including the crews and staff within the Clinical Contact Centres; • Each pathway is underpinned by detailed methodology to enable evaluation and monitoring of its success in reducing conveyance to ED; and • There is a process in place to review and identify pathways that are effective and should be considered for implementation at other Health Boards. We were informed by the WAST Operations staff interviewed, that paramedics have not always been able to follow a pathway as the alternative location did not have capacity or resource to receive and treat the patient at the time. This is currently not well recorded and as such we could not audit this in any detail. We also noted during our visits that the WAST crews have a pathways folder in the ambulance that should enable them to identify and follow the appropriate pathway. Again, we were unable to reconcile that all of the pathways were in the folder and overall we could not be confident that all staff were fully aware of them. In particular, if a crew conveyed across border to	Pathways for emergency care that bypass the ED are not communicated, shared and understood.

another Health Board Area it is unlikely that they would be aware of the local pathways. We were informed that tablet devices have recently been allocated to paramedics. This provides WAST with an opportunity, with software development, to provide an electronic tool of all the available pathways for paramedic's that could increase their ability to utilise a pathway and bypass conveyance to ED where appropriate.	
Recommendation 3	**Priority level**
We recommend that: • WAST and Health Boards undertake a review of the governance arrangements for the identification and approval of all pathways, together with a consistent process for recording, disseminating and measuring outcomes. • WAST ensures that any blocks or breaks that prevent the use of a conveyance pathway to bypass ED are recorded and management action is taken to address any issues. • WAST investigates the opportunity of developing an electronic pathways tool to assist paramedics in following pathways to bypass conveyance to ED.	**High**
Management Response 3	**Responsible Officer/ Deadline**
• Pathway approval, development, recording and dissemination will be co-ordinated via the Performance Delivery Group chaired by the Chief Ambulance Services Commissioner.	Chief Ambulance Services Commissioner /

Action Plan

• The HALO audit underway now will identify failed pathways. This will report in Q2 2018. The Chief Ambulance Services Commissioner's team have published, via the National Unscheduled Care Programme Board, a number of best practice unscheduled care measures. Within this is the need to capture opportunities for patients to have been diverted to the community rather than taken to ED. WAST have responded to this work stating that our view is that ED data would be better used as the source for these missed opportunity. • The Medical Director is chairing a development group for the Electronic Patient Clinical Record which will encompass this. *Further responses may be provided by Health Boards, particularly for the second part of this recommendation. Report will then be updated.*	Assistant Director of Planning and Performance August 2018 Assistant Director of Paramedicine August 2018 *Further responses may be provided by Health Boards, particularly for the second part of this recommendation. Report will then be updated.*

Finding 4 HALO Role	Risk
Each of the Health Boards has meetings with WAST although their frequency varies. Managing delays in hospital handover is a daily activity that is monitored by the minute. There is constant communication and dialogue between WAST and the hospitals, aligned with escalation plans. We were informed by each Health Board that they have a good partnership working arrangement with WAST and meetings occur daily, weekly or fortnightly, typically; • Daily 11am conference call between all Health Boards, WAST and the Welsh Government. • Daily bed management / patient flow hospital meetings ('huddles'). • Weekly or fortnightly meetings between ED staff and the WAST Area Operations Manager. Whilst the frequency and attendance at meetings (both formal and informal) varies, the purpose is the same with hospital staff aware that patient flow is key in preventing handover delay and bed management forms a fundamental role. We requested minutes of these meetings but were not provided with them and concluded that many of these meetings are indeed not minuted. We were informed at some hospitals that attendance at site meetings by a WAST representative was often limited by the availability of the Clinical Team Leader (CTL). Other hospitals have a designated WAST Hospital Ambulance Liaison Officer (HALO) in place which results in better ongoing oversight of the handovers at the hospital. The feedback we received during our hospital visits was that most would value having a HALO as it provides more opportunity for WAST to liaise with the hospital staff to assist in managing hospital handovers.	Ineffective meetings between staff at WAST and Health Boards to manage emergency care flow. This could lead to poor decision-making negatively impacting WAST and Health Boards ability to reduce handover delays and patient health.

Action Plan

Recommendation 4	Priority level
We recommend that WAST undertakes a cost benefit analysis on the potential efficiency gains that may be available through the HALO role. This could be trialled initially at those hospitals with the lowest handover rates to measure the impact it has on improving handover performance.	**Medium**
Management Response 4	**Responsible Officer/ Deadline**
Using Winter pressure monies, HALO cover has been established at the seven worst performing sites for handover delay. This cover will run until 31 March 2018 and will then be evaluated.	Assistant Director of Ambulance Response / Chief Ambulance Services Commissioner April 2018

Finding 5 Strategic forums	Risk
Whilst there is communication between WAST and Health Boards on operational matters, as highlighted in finding 4 above, there was little evidence of strategic direction and related forums. Such would assist in leading on and managing the issues of handover delays, conveyance, pathways, patient flow, HAS data quality and enable better uniformity and best practice sharing.	Opportunities to address All Wales issues and seek to develop consistent approaches may be missed.
Recommendation 5	**Priority level**
We recommend that WAST identifies all meetings that are held between WAST and Health Boards at hospital, Health Board and national level and determines the need for less or more and how they are recorded (agendas, minutes, action plans). In particular, how strategic decision making and sharing of best practice is performed in respect of handover of care at Emergency Departments.	**Medium**
Management Response 5	**Responsible Officer/ Deadline**
This activity will be mapped out by the Planning and Performance team with a view to streamlining and ensuring strategic direction making and sharing of best practice is achieved. *Further responses may be provided by Health Boards. Report will then be updated.*	Assistant Director of Planning and Performance May 2018 *Further responses may be provided by Health Boards. Report will then be updated.*

Finding 6 Patient flow initiatives	Risk
We reviewed Board meeting minutes for each Health Board and found that delayed handovers are included in performance reports. It was clear that all Health Board executives are aware of the problem of handover delays and set targets and actions to reduce them. As noted in Action 1 above, we have also reviewed the IMTP's for the six Health Boards and found that emergency care is included with reference to developing joined-up health and social care services. Whilst this is noted as a priority by all Health Boards, the AQI's over the past 12 months have shown little improvement in performance on handover delays. The only Health Boards that are near the 15-minute handover target of 100% are Cwm Taf University Health Board achieving almost 90% each month and Hywel Dda University Health Board achieving circa 80%. Cwm Taf University Health Board's performance may be attributed to its project to reduce delays and improve the flow of patients across hospital, GP and community services. The 'Focus on Flow' project won the NHS Wales Improving Patient Safety Award 2014. It should be acknowledged that all of the Wales NHS Health Boards have undertaken projects and initiatives to improve unscheduled care and address patient flow. Many of these are currently in operation. What is clear from the AQI's is that the initiatives applied by Cwm Taf University Health Board have been very effective in respect of the impact on WAST and lost ambulance hours as a result of handover delays.	Opportunities for sharing best practice that reduces handover delays may be missed resulting in lost hours.

It is surprising, given the transparency of this performance information over the past 3 years with each Health Board receiving the quarterly AQIs showing Health Board comparative data, that those lower performing Health Boards have not done more to emulate models of the higher performers, notably, Cwm Taf.	
Recommendation 6	**Priority level**
We recommend that WAST and Health Boards evaluate the key factors adopted by Cwm Taf University Health Board that resulted in their handover performance improving from circa 50% to 90% since 2013 and work together to drive similar improvement.	**Medium**
Management Response 6	**Responsible Officer/ Deadline**
This work must be driven centrally via the National Unscheduled Care Programme Board and the Performance Delivery Group chaired by the Chief Ambulance Services Commissioner. *Further responses may be provided by Health Boards, the National Unscheduled Care Programme Board and the Performance Delivery Group. Report will then be updated.*	Chief Ambulance Services Commissioner August 2018 *Further responses may be provided by Health Boards, the National Unscheduled Care Programme Board and the Performance Delivery Group. Report will then be updated.*

Finding 7 Delayed handover clinical triage	Risk
The Welsh Government health circular clearly states that *"WAST crews should not routinely be responsible for monitoring patients over prolonged periods outside A&E, and hospital clinicians should be responsible for overseeing the assessment of patients."* The University Hospital of Wales (UHW) was the only hospital of the 6 visited that did not undertake a face to face assessment of the patient before admission to the hospital. In all other cases the clinician carried out an initial patient assessment in the back of the waiting ambulance as required. We were informed by staff at UHW that that the ambulance triage by ED clinicians is not one supported by the Royal College of Emergency Medicine and that whilst nurses do not enter the ambulance, the risk to patients is managed through the protocols and processes in place; a clinical assessment by the Majors Assessment Nurse (MAN) through communication with the paramedic. The current practice at the UHW is contrary to Point 3 of the Welsh Government guidance above. This is a conscious decision by the hospital, as outlined above, and results in greater responsibility on the paramedics to assess the patient condition and monitor that condition for over 30 minutes and sometimes several hours. There is also a missed opportunity for the ED clinician to undertake an assessment at an earlier stage that could have resulted in the patient being redirected, avoiding an unnecessary wait for the patient and lost hours to WAST.	Patients are not clinically assessed resulting in them coming to harm. There is also a missed opportunity for the ED clinician to undertake an assessment at an earlier stage that could have resulted in the patient being redirected, avoiding an unnecessary wait for the patient and lost hours to WAST.

Action Plan

Recommendation 7	Priority level
We recommend that WAST seeks confirmation from Welsh Government regarding responsibility for undertaking a clinical assessment of patients prior to admittance to the ED.	**High**
Management Response 7	**Responsible Officer/ Deadline**
The National Unscheduled Care Programme Board has confirmed that the expectation is that this Welsh Health Circular is complied with. *Further responses may be provided by Health Boards, Cardiff and Vale University Health Board in particular. Report will then be updated.*	Completed. *Further responses may be provided by Health Boards, Cardiff and Vale University Health Board in particular. Report will then be updated.*

Finding 8 HAS Data	Risk
Through discussion with paramedics and hospital clinicians (i.e. Nurse in Charge) we found some contradiction over the responsibility for completing the HAS handover entries. Some thought it was the responsibility of the other party, particularly when the entry had not been completed. Others felt it was the responsibility of both parties which had on occasions resulted in the paramedic finding the entry had already been made by the hospital. It was also found during observation at site visits that the point at which the paramedic updated the HAS varied. Some 'notified' as soon as they entered the ED and then notified the Nurse in Charge, others the other way around. Whilst this finding is mainly anecdotal it was apparent that the data is not as accurate as it would be if there was clear guidance and understanding on HAS roles and responsibilities and a consistent approach at all hospitals over exactly what point the paramedics or clinicians update the HAS. We analysed HAS data covering a sample of 7 days (Mon-Sun) over 7 weeks in September and October 2017. The analysis highlighted that the late reason is not completed over 25% of the time. If this data was complete and accurate it would provide both WAST and Health Boards with information to assist in reducing delays.	Incomplete and inaccurate data could undermine the quality of the management information reported. This could lead to poor decision-making negatively impacting WAST and Health Boards ability to reduce handover delays and patient health.
Recommendation 8	**Priority level**
We recommend that WAST and Health Boards: • WAST and Health Boards ensure that the roles and responsibilities for recording data on the HAS are clearly understood. This should be supported by clear guidelines and protocols to ensure that the data can	**Medium**

be relied upon as fair and accurate with consistent application of the time recording for the notification and handover. • The Health Boards and WAST undertake an assessment over the use of the 'late reason' data and where and how it provides management information that can assist in managing handover delays, e.g. addressing issues such as a lack of beds.	
Management Response 8	**Responsible Officer/ Deadline**
• HAS Guidance to be recirculated to WAST staff. • An audit of 'late reason' date will be undertaken and findings used to inform future action plan. *Further responses may be provided by Health Boards. Report will then be updated.*	Assistant Director of Clinical Contact Centres and Hear and Treat August 2018 Head of Health Informatics / Assistant Director of Clinical Contact Centres and Hear and Treat August 2018 *Further responses may be provided by Health Boards. Report will then be updated.*

Summary of Health Board IMTPs integration with WAST

Organisation	Joint Priorities	Health Board/Trust actively engaged on priority
Abertawe Bro Morgannwg	1) 111 pathfinder, including Pre-pathfinder initiatives 2) Working together to improve hospital handover (in line with guidance) 3) NEPTS BC implementation Pathways implementation: Mental Health / Early Adopters / Acute GP (Swansea) / Falls vehicle (Swansea) / help point plus (Swansea) / end of life (all wales work)	1) 111 ongoing engagement with the Health Board 2) Handover ongoing engagement 3) NEPTS minimal engagement 4) Pathways ongoing engagement except for End of Life
Hywel Dda	1) Collaborative AP development pilot with primary care partners and GPOOH services 2) Mid Wales Health Collaborative 3) Joint Performance action plan 4) 111 Pathfinder - Carmarthen 5) NEPTS BC implementation 6) Pathways implementation: Stroke / end of life (all wales work) 7) Retention of dedicated ambulance vehicle (DAV) Withybush	1) Joint interviews with two APs appointed - target date of go live early April 16 2) WAST supporting the collaborative at both public events and through the work streams 3) Action plan agreed, implemented and kept under regular review and refinement. 4) Locality Manager part of implementation group 5) Engagement 6) Stroke pathway agreed 7) Ongoing discussions with Health Board to make this service part of core business.
Aneurin Bevan	1) Working together to improve hospital handover (in line with guidance) 2) Development of new model for unplanned care - Code Zero RED AMBER Release of EA's to support patients in community when delays impact 3) SCCC Joint partnership project (hyper acute stroke, ENT, etc.) 4) NEPTS BC implementation 5) Pathways implementation: Mental Health / neck of femur / Falls / end of life (all wales work) / Community Nursing 24 hour project	1) Joint WAST and AB weekly meeting and partnership work with HALO 2) SOP shared with AB and control, request implemented as required with DGH's. 3) Continued WAST engagement with AB 4) Active engagement – proposed pilot live for AB early April. 5) Joint Falls service working well with weekly conference with Almanac, Community nurse 24/7 live 29th Feb

Betsi Cadwaladr	1) Alcohol treatment centre in Wrexham 2) NEPTS BC implementation 3) Pathways implementation: Mental Health / district nurse / MIU / Falls / end of life (all wales work) / interface with GPOOH and clinical support CCC (local to BCU area) 4) BCU acute service re-configuration 5) Working together to improve hospital handover and patient experience through improved performance (in line with guidance)	1) Project completed in partnership with Health Board and others 2) Engagement 3) Pathways ongoing engagement 4) Actively engaged on project teams/board 5) Actively engaged
Cardiff & Vale	1) Alcohol treatment centre 2) Development of new model for unplanned care - Code Zero RED AMBER Release of EA's to support patients in community when delays impact 3) Working together to improve hospital handover (in line with guidance) 4) NEPTS BC implementation also PCS transition from Whitchurch to Lansdowne 5) Pathways implementation: Falls / end of life (all wales work) / emergency obs and Gynae / Ambulatory care / Barry MIU Pathway / Cardiac stemi 6) Strategic estates Planning pending substantial road network potential changes at UHW	1) Joint working with external budget removed 2) Joint meetings in process 3) Joint Process Mapping 4) Regular joint meetings ongoing 5) Some pathways already in place or being developed 6) Joint engagement with ARC development
Cwm Taf	1) Implementation of South Wales plan inc. diagnostic centre, paeds, obs &neo 2) Optimising use of paramedic pathfinder 3) Evaluation of Cwm Taf Explorer 4) NEPTS BC implementation 5) Pathways implementation: Mental Health / MIU / fractured neck of femur / Falls / end of life (all wales work) / community integrated assessment service 6) Acute medicine model whereby pathways have been developed and agreed with WAST for patients going to Royal Glamorgan Hospital.	1) WAST attends all meetings 2) MD and P Care lead involved 3) Equal partners 4) Engagement 5) Ongoing work – regular meets to develop and improve/tweak 6) Ongoing monthly clinical meetings

Powys	1) Meaningful and joint engagement in Future Fit Programme 2) Mid Wales Collaborative – focus on exploring modes for community, new model for Bronglais 3) NEPTS BC implementation	1) Option appraisal being reconsidered, assistant head of Ops in discussion. 2) Supporting public meetings and work streams 3) Minimal involvement

Source: WAST IMTP 2016/17-2018/19 Appendix 5

Audit Assurance Ratings

 **Substantial assurance** - The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

 **Reasonable assurance** - The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

 **Limited assurance -** The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.

 **No Assurance** - The Board has **no assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Action is required to address the whole control framework in this area with **high impact on residual risk** exposure until resolved

Prioritisation of Recommendations

In order to assist management in using our reports, we categorise our recommendations according to their level of priority as follows.

Priority Level	Explanation	Management action
High	Poor key control design OR widespread non-compliance with key controls. PLUS Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in control design OR limited non-compliance with established controls. PLUS Some risk to achievement of a system objective.	Within One Month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. These are 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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Audit

The audit was undertaken using a risk-based auditing methodology. An evaluation was undertaken in relation to priority areas established after discussion and agreement with WAST. Following interviews with relevant personnel and a review of key documents, files and computer data, an evaluation was made against applicable policies procedures and regulatory requirements and guidance as appropriate.

Internal control, no matter how well designed and operated, can provide only reasonable and not absolute assurance regarding the achievement of an organisation’s objectives. The likelihood of achievement is affected by limitations inherent in all internal control systems. These include the possibility of poor judgement in decision-making, human error, control processes being deliberately circumvented by employees and others, management overriding controls and the occurrence of unforeseeable circumstances.

Where a control objective has not been achieved, or where it is viewed that improvements to the current internal control systems can be attained, recommendations have been made that if implemented, should ensure that the control objectives are realised/ strengthened in future.

A basic aim is to provide proactive advice, identifying good practice and any systems weaknesses for management consideration.

Responsibilities

Responsibilities of management and internal auditors:

It is management's responsibility to develop and maintain sound systems of risk management, internal control and governance and for the prevention and detection of irregularities and fraud. Internal audit work should not be seen as a substitute for management's responsibilities for the design and operation of these systems.

We plan our work so that we have a reasonable expectation of detecting significant control weaknesses and, if detected, we may carry out additional work directed towards identification of fraud or other irregularities. However, internal audit procedures alone, even when carried out with due professional care, cannot ensure fraud will be detected. The organisation's Local Counter Fraud Officer should provide support for these processes.

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Cardiff and Vale University Health Board

Progress against findings from the Human Tissue Authority (HTA) Inspection of UHW

Final Internal Audit Report

2017/18

NHS Wales Shared Services Partnership

Audit and Assurance Services

17.1

Contents **Page**

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Auditor/s:	Ian Virgill (Deputy Head of Internal Audit)
	Lucy Jugessur (Principal Internal Auditor)
Executive sign off:	Steve Curry, Chief Operating Officer
Distribution:	Mike Bourne, CD&T Clinical Board Director
	Matt Temby, Director of Operations
	Clive Morgan, Assistant Director of Therapies
	Scott Gable, Cellular Pathology Service Manager
Committee:	Audit Committee

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

1. Introduction and Background

Our review of the progress made against the findings from the Human Tissue Authority (HTA) inspection of UHW was completed in line with the 2017/18 Internal Audit plan for Cardiff and Vale University Health Board (the UHB).

The HTA carried out a site inspection of the UHW mortuary and Cellular Pathology Laboratory on the 9th and 10th August 2017 in order to establish the level of compliance with HTA licensing standards.

The subsequent HTA site inspection report, published on 8th November 2017, highlighted a total of 26 shortfalls (3 critical, 14 major and 9 minor). The report also required that the UHB replace the Designated Individual (DI).

The UHB was required to submit a completed Corrective and Preventative Action Plan (CAPA) to the HTA within 14 days of receipt of the final report.

The HTA has assessed the establishment as suitable to be licensed for the activities specified, subject to a suitable DI being instated and corrective and preventative actions being implemented to meet the shortfalls identified during the inspection.

The relevant lead Executive Director for the review is the Chief Operating Officer.

2. Scope and Objectives

The objective of our review was to evaluate and determine the adequacy of the systems and controls in place for addressing the findings of the HTA site inspection report, in order to provide assurance to the Health Board's Audit Committee that risks material to the achievement of the system's objectives were managed appropriately.

The main purpose of our review was to establish if appropriate actions were being taken by the Health Board to address the shortfalls identified following the HTA inspection.

The areas that this review sought to provide assurance on were:

- The UHB has developed and submitted an appropriate CAPA action plan to address the findings of the HTA site inspection report, within the required timescales;
- The agreed actions are being effectively implemented in line with the planned timescales; and
- Effective processes are in place for monitoring, recording and reporting progress against the action plan, both within the Health Board and to the HTA.

3. Associated Risks

The potential risks considered in this review were as follows:

- The Health Board may lose its HTA license; and
- Progress is not effectively reported.

OPINION AND KEY FINDINGS

4. Overall Assurance Opinion

We are required to provide an opinion as to the adequacy and effectiveness of the system of internal control under review. The opinion is based on the work performed as set out in the scope and objectives within this report. An overall assurance rating is provided describing the effectiveness of the system of internal control in place to manage the identified risks associated with the objectives covered in this review.

The overall level of assurance that can be assigned to a review is dependent on the severity of the findings as applied against the specific review objectives and should therefore be considered in that context.

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with progress against the HTA findings is **Substantial assurance.**

RATING	INDICATOR	DEFINITION
Substantial Assurance		The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

The Health Board produced a Corrective and Preventative Action (CAPA) plan to address the findings from the HTA inspection and this was agreed with the HTA.

From the total 26 required actions, 13 were assessed as completed by the HTA on the 12 December 2017. At the time of the review the other 13 actions had been submitted to the HTA on the 12th February 2018 and the Health Board was awaiting confirmation as to whether they were assessed as complete. Review of a sample of these actions identified that in all cases appropriate documentation was available to confirm that the actions were complete.

Audit have assessed the review as substantial assurance as a considerable amount of work has been undertaken to ensure that the required actions

17.1

have been effectively implemented. In addition, effective processes have been put in place for monitoring the action plan as a Human Tissue Authority Inspection "Gold Command" Management Group was established and the actions and any updates were reviewed within this forum. Furthermore, following these meetings, a paper was taken to the Management Executive to provide an update of progress against the action plan. In addition, an update was provided to the Board on the 30th November 2017 and it was agreed that the outcome would be reported to the Board at the meeting in April 2018 to undertake a lessons learned review.

A HTA Licence Compliance Group has been established to develop and maintain HTA compliance performance indicators and monitor on-going compliance issues and has met on three occasions to date. However it is noted that the terms of reference for the Group remain in draft.

5. Assurance Summary

The summary of assurance given against the individual objectives is described in the table below:

Assurance Summary					
1	The Health Board may lose its HTA licence				✓
2	Progress is not effectively reported				✓

** The above ratings are not necessarily given equal weighting when generating the audit opinion.*

Design of Systems/Controls

The findings from the review have highlighted no issues that are classified as weakness in the system control/design for HTA Findings.

Operation of System/Controls

The findings from the review have highlighted one issue that is classified as a weakness in the operation of the designed system/control for HTA Findings.

6. Summary of Audit Findings

The key findings are reported in the Management Action Plan.

Risk: The Health Board may lose its HTA licence

The following areas of good practice were noted:

- A Corrective and Preventative Action (CAPA) plan has been produced by the Health Board and this has been approved by the HTA. The CAPA is updated and progress is recorded on it as actions are completed. Supporting documentation is maintained to provide appropriate evidence that the actions have been completed.
- There were deadline dates for completion of the corrective and preventative actions and the UHB has complied with these dates to confirm that the actions have been implemented. In some circumstances further information has been requested and this has been forwarded to the HTA.
- A more detailed HTA Inspection Corrective and Preventative Action plan has been produced for internal use by the Health Board and this is updated as actions are undertaken.
- There is an Action tracking document confirming the Standard, action, submission due date and actual submission date.
- A HTA project plan and GANTT chart has been produced which was established following the issues identified by the HTA inspection and a further process mapping exercise that was carried out. The project plan details the required tasks to ensure on-going licence issues are effectively managed and the employees that will be responsible for completing them.

There were no significant findings identified under this risk.

Risk: Progress is not effectively reported

The following areas of good practice were noted:

- At the time of the Audit it was evident that all actions from the agreed CAPA plan had been completed and these had been submitted to the HTA by the 12 February 2018. There is however a section of one of the actions for HTA Standard GQ3(a) that has yet to be submitted but will be submitted on the 16 April 2018 which has been agreed with the HTA.
- There were 13 actions that were sent to the HTA on the 12 February 2018 confirming that they had been completed but the HTA had yet to advise whether these had been assessed as complete. Audit reviewed a sample of 5 of these actions to ascertain if the appropriate supporting documentation was available. For all 5 of the actions reviewed, appropriate documentation was available to confirm that they had been completed.

- A Human Tissue Authority Inspection "Gold Command" Management Group was established and the Group reviewed the action plan and discussed specific actions to confirm the activity that had been undertaken on these actions.
- Following from the Gold Command one of the members provided a paper to the Management Executive providing an update of current actions. In addition, the HTA report and updates have been provided to the Board.
- A HTA Compliance Group has been established in order to ensure that on-going issues with the HTA regulation and Standards are effectively monitored and addressed. The group has met on three occasions to date although the Terms of Reference have not yet been formally agreed.

There were no significant findings identified under this risk.

7. Summary of Recommendations

The audit findings, recommendations are detailed in Appendix A together with the management action plan and implementation timetable.

A summary of these recommendations by priority is outlined below.

Priority	H	M	L	Total
Number of recommendations	**0**	**0**	**1**	**1**

17.1

Finding - ISS.1 - HTA Licence Compliance Group (Operating effectiveness)	Risk
A HTA Licence Compliance Group has been established and the terms of reference confirm that group will receive all "Corrective and Preventative Action plans and monitor the timeliness of close out remedial actions. The group will be the primary forum for identifying and developing action plans for the resolution HTA compliance issues. The group will own the action plans and accountable to the Designated Individual for ensuring that they are progressed." The Group has met on three occasions to date. It was however identified that the terms of reference of the Group remain in draft.	Progress is not effectively reported.
Recommendation	**Priority level**
Management must ensure that the terms of reference of the HTA Licence Compliance Group are formally agreed and that the Group effectively operates as planned.	**Low**
Management Response	**Responsible Officer/ Deadline**
The Human Tissue Authority compliance group is currently running in parallel to HTA Gold command. The terms of reference for the HTA compliance group have been positively reviewed by the HTA and added to the agenda of the next HTA compliance group (22nd May 2018) for ratification and acceptance ready for seamless transition between the two governance groups.	Scott Gable 22nd May 2018

Appendix B - Assurance opinion and action plan risk rating

Audit Assurance Ratings

 **Substantial assurance** - The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

 **Reasonable assurance** - The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

 **Limited assurance -** The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.

 **No assurance** - The Board can take **no assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **high impact on residual risk** exposure until resolved.

Prioritisation of Recommendations

In order to assist management in using our reports, we categorise our recommendations according to their level of priority as follows.

Priority Level	Explanation	Management action
High	Poor key control design OR widespread non-compliance with key controls. PLUS Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in control design OR limited non-compliance with established controls. PLUS Some risk to achievement of a system objective.	Within One Month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. These are generally issues of good practice for management consideration.	Within Three Months*

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

17.1

Action plan on Deloitte Financial Governance Review

Final Internal Audit Report

April 2018

NHS Wales Shared Services Partnership

Audit and Assurance Services

Contents **Page**

Review reference:	C&V-1718-43
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Final report issued:	10th April 2018
Auditor/s:	Ian Virgill Johanna Butt
Executive sign off:	Peter Welsh, Director of Corporate Governance
Distribution:	Chris Lewis, Deputy Director of Finance
Committee:	Audit Committee

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

1. Introduction and Background

Our review of the progress made against the Action Plan prepared to address the recommendations made in the Deloitte review of financial governance was completed in line with the 2017/18 Internal Audit plan for Cardiff and Vale University Health Board (the UHB).

The independent financial governance review of Cardiff and Vale University Health Board was carried out by Deloitte LLP against a scope set out in a contract with Welsh Government dated 2nd March 2017. Deloitte undertook their review between March and May 2017. The outcome was presented to Welsh Government and the Health Board in early July 2017.

The Health Board has produced an action plan to address the recommendations from the report. This was presented to the Board Meeting during September 2017. The Finance Committee is responsible for monitoring progress against the action plan and providing the Board with appropriate assurances.

The relevant lead Executive Director for the review is the Director of Corporate Governance.

2. Scope and Objectives

The objective of our review was to evaluate and determine the adequacy of the systems and controls in place for reporting progress against the agreed actions, in order to provide assurance to the Health Board's Audit Committee that risks material to the achievement of the system's objectives are managed appropriately.

The main purpose of our review was to establish if the reported improvements being made by the Health Board are occurring as stated to enable completion and closure of the agreed actions.

The areas this review sought to provide assurance on were:

- the UHB has appropriate processes in place to monitor and report on the progress towards the implementation of agreed actions;
- the reported level of progress against the planned actions is an accurate reflection of improvements implemented; and
- the agreed actions are being effectively implemented in line with planned timescales.

3. Associated Risks

The potential risk considered in this review was as follows:

- identified actions may not be effectively implemented

OPINION AND KEY FINDINGS

4. Overall Assurance Opinion

We are required to provide an opinion as to the adequacy and effectiveness of the system of internal control under review. The opinion is based on the work performed as set out in the scope and objectives within this report. An overall assurance rating is provided describing the effectiveness of the system of internal control in place to manage the identified risks associated with the objectives covered in this review.

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with the Action plan on Deloitte Financial Governance Review is **Substantial Assurance**.

The overall level of assurance that can be assigned to a review is dependent on the severity of the findings as applied against the specific review objectives and should therefore be considered in that context.

RATING	INDICATOR	DEFINITION
Substantial assurance		The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

The Health Board has made good progress towards implementing the agreed management actions following the 'Deloitte' Report on Financial Governance within the Health Board.

An Action Plan has been produced and this incorporates agreed actions to address all recommendations made. The action plan and associated management actions were agreed by the Board at its September 2017 meeting. Progress against this Action Plan is reported to the Finance Committee.

In general, we found reporting of progress against the 22 management actions to be appropriate. However, we did note that the current stated timescale for all actions to be fully implemented by the end of March 2018 may not be realistic.

The 'Deloitte' report highlighted seven priority recommendations which we would consider the Health Board should focus on implementing. The 22 recommendations made in the Report are detailed in **Appendix C** of this report and the Priority Recommendations are indicated.

5. Assurance Summary

The summary of assurance given against the individual objectives is described in the table below:

Assurance Summary					
1	Identified actions may not be effectively implemented				✓

** The above ratings are not necessarily given equal weighting when generating the audit opinion.*

Design of Systems/Controls

The findings from the review have highlighted no issues that are classified as weakness in the system control/design for Action plan on Deloitte Financial Governance Review.

Operation of System/Controls

The findings from the review have highlighted two issues that are classified as weakness in the operation of the designed system/control for Action plan on Deloitte Financial Governance Review.

6. Summary of Audit Findings

The key findings are reported in the Management Action Plan.

Risk 1: Identified actions may not be effectively implemented.

The following areas of good practice were noted:

- The Health Board has produced an Action Plan and this accurately includes all 22 recommendations made in the Welsh Government commissioned 'Deloitte' Report on the Health Board's Financial Governance;
- Roles and Responsibilities have been assigned to implement all the agreed actions and these are detailed on the Action Plan; and
- The Action Plan is monitored by the Finance Committee and all Executive Leads with responsibility for implementing the agreed actions are members of the Finance Committee which ensures that progress against implementing the actions can be appropriately monitored.

The following findings were noted:

- We reviewed the Action Plan and note that where the 'Status' is reported as 'In Progress' a timescale has been included for implementation of the agreed actions. However, review of these timescales implies that all actions will be implemented by March 2018 which appears unrealistic due to the level of work required to fully

implement the actions in the report and the longer-term nature of some of the actions.

7. Summary of Recommendations

The audit findings, recommendations are detailed in Appendix A together with the management action plan and implementation timetable.

A summary of these recommendations by priority is outlined below.

Priority	H	M	L	Total
Number of recommendations	**0**	**1**	**1**	**2**

Finding 1 – Timescales for Implementation (Operating effectiveness)	Risk
Review of the timescales for implementing the agreed actions, as detailed on the Action Plan, indicates that they will all be fully implemented by April 2018 at the latest. We consider this may be unrealistic given the longer-term nature of some of the agreed actions. For example: **Recommendation 13** - *Determine future planning function required in the organisation to both develop an approved IMTP, with balanced financial plan, and deliver its implementation*. Management Action – *Strengthen planning function to enable additional finance planning capacity. Review of Corporate resources being undertaken in October 2017* The Action Plan details an implementation date of March 2018. **Recommendation 14** - *Determine the future PMO function, including focus, skills and capabilities, establishing a function that will act as a critical enabler for implementation of the IMTP and financial recovery at increased pace*. Management Action – Review to be implemented and completed by end of October 2017. For discussion with the Chief Executive. The Action Plan details an implementation date of March 2018. **Recommendation 15** - *Develop an enhanced financial strategy taking account of expected demand, capacity, service, corporate and wider transformational changes (short, medium and longer term)*. Management Action – Will be incorporate into an integrated improved IMTP process. The Action Plan details an implementation date of March 2018.	Identified actions may not be effectively implemented.

17.2

Recommendation 1	Priority level
The Health Board should ensure that the Action Plan details realistic timescales for implementing the agreed actions.	**Medium**
Management Response 1	**Responsible Officer/ Deadline**
A further progress report will be taken to the April meeting of the Finance Committee and any actions not implemented by then will be reassessed and revisions made to the timescale for implementation.	Chris Lewis / May 2018

Finding 2 - Action Plan - Reported Status (Operating effectiveness)	Risk
The Action Plan detailed the following agreed action as being 'Complete', however, from our review of audit evidence provided we would consider the status to be 'In Progress' rather than 'Complete'. **Recommendation 5:** The Deloitte Report recommended that: *Update the terms of reference of the Finance Committee to ensure that the Board Chair is not a member or the Chair of this committee, and all committee Terms of Reference to state that the Board Chair should attend each committee on a rolling basis.* The agreed management action stated: *To be reviewed by end of October 2017 when new Independent Members identified. This will include review of Committee Membership including Chair of this Committee.*	Identified actions may not be effectively implemented.

17.2

We reviewed the revised Terms of Reference (ToR) for the Finance Committee and note that they still make reference to the Chair of the Board as being Chair of the Finance Committee. However, we acknowledge from our review of recent minutes to the Finance Committee that the Independent Member for Finance is now the Chair of the Finance Committee. Additionally the recommendation states that the Chair of the Board should not be a member of the Finance Committee but should attend meetings on a rolling basis. Our review of the Finance Committee ToR confirms that *s.6 Membership* details "Three Independent Members of the Board" but does not specifically detail that this should exclude the Chair of the Board.	
Recommendation 2	**Priority level**
The Health Board should ensure that the reported status recorded on the action plan accurately reflects the actual progress made towards implementing the agreed actions.	**Low**
Management Response 2	**Responsible Officer/ Deadline**
The Terms of Reference of the Finance Committee will be amended to reflect agreed changes.	Chris Lewis / May 2018

Appendix B - Assurance opinion and action plan risk rating

Audit Assurance Ratings

 **Substantial assurance** - The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

 **Reasonable assurance** - The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

 **Limited assurance -** The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.

 **No assurance** - The Board can take **no assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **high impact on residual risk** exposure until resolved.

Prioritisation of Recommendations

In order to assist management in using our reports, we categorise our recommendations according to their level of priority as follows.

Priority Level	Explanation	Management action
High	Poor key control design OR widespread non-compliance with key controls. PLUS Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in control design OR limited non-compliance with established controls. PLUS Some risk to achievement of a system objective.	Within One Month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. These are generally issues of good practice for management consideration.	Within Three Months*

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

17.2

Appendix C - Deloitte 'Welsh Government – Financial Governance Review – Final Report' Recommendations for Cardiff and Vale University Health Board:

	Recommendation	Priority
R1	Implement an Executive Director team development programme to focus on further developing an effective team.	✓
R2	Consider the appropriateness of the current Executive Director responsibilities for Informatics and Information Technology.	
R3	Ensure there is allocated time within the current Board development programme to provide training and support to interpret financial management information, particularly for the new Independent Members.	✓
R4	Introduce monthly Board meetings in addition to bi-monthly board development sessions to provide an opportunity for Board Members to receive and challenge assurance reports, particularly from the Finance Committee.	
R5	Update the terms of reference of the Finance Committee to ensure that the Board Chair is not a member or the Chair of this committee, and all committee terms of reference to state that the Board Chair should attend each committee on a rolling basis.	
R6	Improve the committee reporting process to Board by ensuring the assurances or gaps in assurance are clearly drawn out from committee minutes, and co-locate the committee minutes/Executive Summary with the relevant Executive Director report.	
R7	Address areas for development identified within the Board and Finance Committee finance reports, such as inclusion of the underlying financial position, increased insight driving narrative, and greater integration of financial, operational performance and Cost Improvement Programme (CIP) information.	✓
R8	Develop more detailed budget setting guidance, supporting increased transparency in budget allocations to Clinical Boards, directorates and cost centres and strengthened ownership for delivery. This should include more direct linkage between expenditure budgets and activity and productivity targets.	
R9	Introduce a formal budget sign-off process at Clinical Board and directorate level, supporting increased understanding of budget allocations and more explicit ownership for delivery.	
R10	Consider simplification of the range of cost reduction programmes, articulating and communicating the objectives of individual initiatives and their interrelationship across the organisation.	
R11	Investigate and assess cross-cutting and transformational cost reduction opportunities, including identification of underpinning initiatives and quantification of financial impact. Prioritise initiatives and develop plans for implementation,	✓

	Recommendation	Priority
	including mechanisms to support and incentivise cross Clinical Board implementation at pace.	
R12	Define future finance function focus, required skills and capabilities, to allow the function to act as a key enabler for implementation of the IMTP and financial recovery at pace.	
R13	Determine future planning function required in the organisation to both develop an approved IMTP, with balanced financial plan, and deliver its implementation.	✓
R14	Determine the future PMO function, including focus, skills and capabilities, establishing a function that will act as a critical enabler for implementation of the IMTP and financial recovery at increased pace.	
R15	Develop an enhanced financial strategy taking account of expected demand, capacity, service, corporate and wider transformational changes (short, medium and longer term).	
R16	Ensure regular Board level scrutiny of financial risks within the 2017-18 financial plan, and actions in place to mitigate these.	✓
R17	Create opportunities for Clinical Board leadership teams to share information to ensure that good practice can be shared widely. The Executive Directors have a role to play in this as part of their oversight of the operational structures.	
R18	Ensure that there is a coordinated approach to leadership development for the Clinical Board and Clinical Directorate leadership team, including arrangements for specific finance focused training.	✓
R19	Clarify the key trigger point(s) for a Clinical Board to be placed into protected administration, and ensure that all CB leadership teams understand this.	
R20	Ensure the Clinical Board performance review meetings are both challenging and supportive, and focused on clear, timely actions to address areas of concern.	
R21	Use the opportunity of the new CEO to re-consider the focus of the Hospital Services Management Board to ensure that it fulfils its role as the key forum to oversee all aspects of operational delivery.	
R22	Improve the quality of Clinical Board performance information, including drilling down to directorate level metrics with a supporting narrative.	

Cardiff and Vale University Health Board

Pilot Model Ward Review

Final Internal Audit Report

2017/18

NHS Wales Shared Services Partnership

Audit and Assurance Services

Contents **Page**

Review reference:	C&V-1718-38
Report status:	Final Internal Audit Report
Fieldwork commencement:	14th September 2017
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Draft report issued:	8th January 2017
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Final report issued:	21st March 2018
Auditor/s:	Ian Virgill - Deputy Head of Internal Audit Murray Gard - Principal Auditor
Executive sign off:	Abigail Harris, Executive Director of Planning
Distribution:	Geoff Walsh - Director of Capital, Estates & Facilities Judyth Jenkins – Head of Dietetics Lee Wyatt – Head of Facilities David Lewis – Head of Finance
Committee:	Audit Committee

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

1. Introduction and Background

The review of the Pilot Model Ward project was completed in line with the 2017/18 Internal Audit Plan. The relevant lead Executive Director for the review is the Director of Planning.

Food provision in hospital is a vital part of patient's clinical care. There is substantial clinical evidence that good nutrition supports a patient's recovery, their immediate and longer term health and wellbeing and their quality of life. More importantly good nutrition and hydration can reduce the length of stay in hospital and help the NHS make best use of its resources.

To further improve the Nutritional Care provided, the Health Board carried out a "Pilot Model Ward" project. The project involved a co-ordinated and multidisciplinary approach to food, fluid and nutritional care to deliver on the health goals. The project took the form of a pilot running over a 6-week period during May and June 2017 and involving wards East 2 at University Hospital Llandough (UHL) and A4 at University Hospital of Wales (UHW).

A change in practice is required to fully implement the Welsh Government Food and Fluid Standards 2011, Health and Care standards, the WAO report on Hospital Catering and Patient Nutrition 2010, 2015, and the Public Accounts Committee Report March 2017 and to meet the actions outlined in the UHB Patient Nutrition, Hydration and Catering Experience Management action plan 2016/17.

2. Scope and Objectives

The overall objective of the internal audit was to evaluate and determine the adequacy of the systems and controls in place within the Health Board for the Pilot Model Ward project, to provide assurance to the Health Board's Audit Committee that risks to the achievement of the system's objectives are managed appropriately.

The purpose of the audit was to establish if the Pilot Model Ward project was appropriately planned and implemented and the outcomes were effectively assessed and met the objectives of the project

The areas that the audit sought to provide assurance on were:

- The project scope and objectives were appropriately set in relation to the relevant nutrition and hydration standards and UHB Action Plan;
- A Project Initiation Document (PID) or other appropriate report was produced detailing the scope and objectives of the project and the planned timescale;
- The project was subject to appropriate Health Board approval before it commenced;

- An appropriate project group was established with clearly defined roles and responsibilities;
- An appropriate project plan was produced detailing the key stages of the project, target completion dates and responsible officers;
- The project was subject to appropriate on-going monitoring to ensure effective delivery and any issues were appropriately identified and escalated in a timely manner; and
- Appropriate measures were implemented to assess the effectiveness of the project in delivering the planned objectives and the outcomes were effectively recorded and reported.

3. Associated Risks

The potential risks considered in this review were as follows:

- The project scope and objectives are not appropriate to meet the planned outcomes;
- The project progresses without appropriate approval; and
- The project fails to deliver the planned outcomes.

OPINION AND KEY FINDINGS

4. Overall Assurance Opinion

We are required to provide an opinion as to the adequacy and effectiveness of the system of internal control under review. The opinion is based on the work performed as set out in the scope and objectives within this report. An overall assurance rating is provided describing the effectiveness of the system of internal control in place to manage the identified risks associated with the objectives covered in this review.

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with the Pilot Model Ward is **Reasonable assurance**.

The overall level of assurance that can be assigned to a review is dependent on the severity of the findings as applied against the specific review objectives and should therefore be considered in that context.

RATING	INDICATOR	DEFINITION
Reasonable assurance		The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with **low to moderate impact on residual risk** exposure until resolved.

The pilot model ward project was managed appropriately given the size and scope of the project, however potential improvements have been identified if the project was to be expanded.

The review has highlighted that there was effective leadership throughout the project. There was also positive engagement with clinical and operational staff to gain appropriate buy in for results to be realised. This was handled well, through inter departmental collaboration and ongoing communication throughout the pilot.

Constructive collaboration was also noted with external providers for the electronic system which was supplied on a trial basis and with Unison who provided monies to support the pilot.

During the review it was also pleasing to note the positive feedback that was received from both the clinical and Facilities staff who participated in the pilot and those affected by the change.

Positive outcomes for patients were noted through client satisfaction surveys; however one outcome with regards to patient flow could not be quantified due to the length of the pilot.

A costing exercise was undertaken to highlight the financial outcomes associated with reduced waste, increased staff costs etc. These costs have been extrapolated across 19 medical wards to identify the costs of expanding the pilot, however, these are yet to be formally agreed by the UHB.

A formal report on the outcomes of the pilot has been drafted, and the financial implications will need to be incorporated and a full report communicated to senior management.

5. Assurance Summary

The summary of assurance given against the individual objectives is described in the table below:

Assurance Summary					
1	The project scope and objectives are not appropriate to meet the planned outcomes			✓	
2	The project progresses without appropriate approval				✓
3	The project fails to deliver the planned outcomes			✓	

17.3

** The above ratings are not necessarily given equal weighting when generating the audit opinion.*

Design of Systems/Controls

The findings from the review have highlighted no issues that are classified as weakness in the system control/design for the Pilot Model Ward review.

Operation of System/Controls

The findings from the review have highlighted five issues that are classified as weakness in the operation controls for the Pilot Model Ward review.

6. Summary of Audit Findings

The key findings are reported in the Management Action Plan.

RISK: The project scope and objectives are not appropriate to meet the planned outcomes.

We identified the following areas of good practice:

- The Health Board responded to the Welsh Government Food and Fluid Standards 2011, Health and Care standards, the Welsh Audit Office report on Hospital Catering and Patient Nutrition 2010, 2015, and the Public Accounts Committee Report March 2017 by establishing a Patient Nutrition, Hydration & Catering Experience Management Action Plan that was presented to the Nutrition & Catering Steering Group.
- An Inter disciplinary project team was established to address issues outlined in the plan, that would ensure that the project was patient focused, followed the patient journey of care and ensured a comprehensive and co-ordinated nutritional care service was provided.
- The team had membership from; clinicians, facilities, patient experience etc.
- Meetings were held prior to the project beginning with discussions around planning the routines on the wards, engagement with staff etc. These meetings were for professional groups to consider and devise profession specific outcomes to ensure ownership of the measure. It is not good practise to pre determine measures without direct involvement of the staff at the operational interface.
- A project outline document was established and endorsed by the team.

- Roadshows on both hospital sites and a poster campaign for both staff and patients /carers were undertaken in the clinical areas to highlight and engage with staff and stakeholders from the outset.
- Training was also undertaken with staff where appropriate. This focused on facilities staff where the biggest service change was going to take place, although no formal evidence was supplied to confirm who attended.

We identified no significant findings in relation to this risk:

RISK: The project progresses without appropriate approval.

We identified the following areas of good practice:

- Approval was sought from the multidisciplinary team, including the Medicine Clinical Board, Corporate Nursing, Patient experience team including volunteers, Facilities team, Therapy team within CD&T Clinical Board and the UHB Nutrition and Catering Steering committee chaired by the Executive Director of Public Health.
- Following visits were undertaken by the Medical Director, the Chairman and the Interim Chief Executive, and it was at the request of the Interim Chief Executive, the project was extended until the results of the evaluation could be established. This was agreed by the Director of Capital, Estates & Facilities, but caveated that the pilot would end July 2017, due to cost pressures on the Facilities budget.

We identified no significant findings in relation to this risk:

RISK: The project fails to deliver the planned outcomes.

We identified the following areas of good practice:

- The benefits of implementing the pilot model for nutrition and hydration practises to the wards on a patient's basis are positive, understood and can be evidenced e.g.;
  1. Food and drink surveys were completed on both wards before and during the pilot with the results showing a positive trend for food quality, temperature, quality and encouragement to move from their beds for mealtimes;
  2. Reduction in the use of nutritional supplements and laxatives;
  3. Reduction in food waste and.
  4. An increase in fluid consumption.

We identified one significant findings in relation to this risk:

- The ongoing cost and resource implications of expanding the project require further scrutiny to understand their full implications and the required level of support.

17.3

7. Summary of Recommendations

The audit findings, recommendations are detailed in Appendix A together with the management action plan and implementation timetable.

A summary of these recommendations by priority is outlined below.

Priority	H	M	L	Total
Number of recommendations	**1**	**-**	**4**	**5**

Finding 1 – Financial Outcomes (Operating effectiveness)	Risk
Outcomes have been measured and robustly documented throughout the pilot, however the following is noted; Due to the duration of the pilot, outcomes relating to a reduction in length of stay as a result of improved nutrition and hydration were not definitive due to a range of variables and the length of the pilot project. A costing exercise to determine the financial implications had been undertaken (November 2017) by facilities (Finance) and the results showed a net realised cost associated within both wards (over a 52-week period) of circa £49K per ward. This was the full cost for all additional services that was undertaken, however, the auditor was informed that services may be curtailed due to low take up or unaffordability and this will have a positive impact on reducing costs. It is also hoped that economies of scale will be produced if the pilot was expanded i.e. staff working across multiple wards therefore reducing the staffing costs. It should be noted that the set up costs during the above pilot were subsidised via union donations, negotiations with providers etc. Subsequently, an additional costing exercise for the potential roll out across the 19 medical wards, showed a realised cost of circa £1.6m. The costs associated with Estates and Facilities is £931,665 and dietetic costs £676,367. However, these costs have not taken into account any cost benefits of the project reduction in services or economies of scale due to spreading resources including staffing resources and skill mix. It should also be noted that overhead costs associated with; IT installation, training, ongoing maintenance have not been included within this expansion of the pilot.	The project fails to deliver the planned outcomes.

17.3

Recommendation	Priority level
The costing exercise for the potential roll out should be re-examined, agreed by all parties and formally reported to senior management.	**High**
Management Response	**Responsible Officer/ Deadline**
As this was a clear pilot and proof of concept. Outcomes were genuinely not known. We had agreed "success" criteria, which, we met for patients eating and drinking more. (Being hydrated and had improved nutritional status) This was always the main aim. The third one was improvement in patient flow. This could not be quantified over a period of 6 weeks. Only after the pilot could we see what happened and start to look at outcomes for further development and detailed costing. Agree however all parties to evaluate costings going forward and formally presented to senior management. Evaluating costings has proved challenging due to difficulties in obtaining patient level costings for a range of procedures and a lack of data for example total number of infections in venflons.	Head of Nutrition & Dietetics / Head of Facilities / Head of Commercial Services / Medicine Deputy Director of Nursing April 18

Finding 2 – Project Objectives (Operating Effectiveness)	Risk
Noting the original size of the project (6-week concept trial), a brief project outline had been produced which set improvement requirements and also outcome measures. However, it was not clear from the project outline how or when the costing of the project / outcomes would take place. This assessment could highlight areas where financial efficiencies could take place.	The project scope and objectives are not appropriate to meet the planned outcomes.
Recommendation	**Priority level**
For future projects the plans for financial costing should be more detailed within the project outline.	**Low**
Management Response	**Responsible Officer/ Deadline**
As this was a clear pilot and proof of concept. Costings were genuinely not known. We had agreed "success" criteria, which, we met for patients eating and drinking more. (Being hydrated and had improved nutritional status) This was always the main aim. The third one was improvement in patient flow. This could not be quantified over a period of 6 weeks (which was discussed). Only after the pilot, could we see what happened during this period and start to look at costs for further development and detailed costing for the elements the teams felt worthwhile keeping as part of the model. We changed and tweaked aspects of the model each week to ensure we made efficient use of resource whilst maximising patient experience and matched our success criteria. Only after a review following completion could we accurately sit down and look at	Head of Nutrition & Dietetics / Head of Facilities / Head of Commercial Services / Medicine Deputy Director of Nursing

17.3

lessons learnt and see what aspects we keep going forward and how much these elements would cost. Action – Team therefore note the recommendation for any future projects.	

Finding 3 – Project Team (Operating Effectiveness)	Risk
Project team meetings were held prior to the project beginning, with discussions around planning the routines on the wards, engagement with staff etc. However, from a review of the minutes supplied, finance specialists had not been included. There were also no formal meetings during the operational phase, however ongoing written feedback was supplied, initially on a daily basis but subsequently weekly as the project progressed. There were also no defined terms of reference for this team that would effectively show the roles and responsibilities. Noting the timescales involved with this project (6-week concept study), this was acceptable. However, if the project was to be expanded, additional governance and project management controls will need to be established.	The project scope and objectives are not appropriate to meet the planned outcomes.
Recommendation	**Priority level**
For future projects a defined terms of reference that identifies membership, frequency of meetings, roles and responsibilities will be incorporated from the outset.	**Low**

Management Response	Responsible Officer/ Deadline
Agreed for applicable future projects.	Head of Nutrition & Dietetics / Head of Facilities / Head of Commercial Services / Medicine Deputy Director of Nursing

Finding 4 – Project Plan (Operating Effectiveness)	Risk
The Model ward project plan was produced and was last updated 7/4/2017 and the project was due to originally finish 18/6/2017. The plan identified the scope/aim, comments, responsible officer, target date, completion date. However, since then this document has not been updated. It was also identified that the actions for "define measures and explore measurement proxies" and "potential evaluation measures" remained unfilled. There was also no representation or allocation of actions to Finance colleagues within the plan.	The project scope and objectives are not appropriate to meet the planned outcomes.
Recommendation	**Priority level**
For future projects of this nature the project plan should be scrutinised more frequently and Finance colleagues should be engaged.	**Low**

Management Response	Responsible Officer/ Deadline
Agreed for applicable future projects.	Head of Nutrition & Dietetics / Head of Facilities / Head of Commercial Services / Medicine Deputy Director of Nursing

Finding 5 - Standard Operating Procedures (Operating effectiveness)	Risk
Capturing lessons learned is an integral part of every project and serves several purposes i.e. it serves as a valuable tool for use at similar projects or expansion of the same project. Lessons learned should be noted throughout the project lifecycle and reviewed at the closure of individual projects. However, the only evidence of lessons learned was found within the draft executive summary report and details within this was limited. An example of a lessons learned structure could be:	The project fails to deliver the planned outcomes.

Category	Issue Name	Problem/Success	Impact	Recommendation

Recommendation	Priority level
If this project was to be expanded, a more structured approach to lessons learned would add value.	**Low**

17.3

Management Response	Responsible Officer/ Deadline
The project took a 'lessons learned' and amendments were made 'live' to the project as it progressed. Informal meetings were held with staff at ward level daily, and then weekly to discuss how things were progressing and make amendments as the project progressed to refine the model.This is evidenced by e mails to all the MDT group. We acknowledge the decision making process could have been documented perhaps through a diary or minutes to allow greater transparency. We would welcome a Wales NHS Lessons Learnt document as a template to perform these lessons learnt and would fill this out for any applicable future projects. As this was a pilot and proof of concept at the operational interface, teams involved were achieving real change within their day jobs, no project resources were available to formally conduct this as a formal project that would have forced this approach. However Team note for any change, a more structured project approach may be needed and resources sort before any trials or proof of concept undertaken in the future.	Head of Nutrition & Dietetics / Head of Facilities / Head of Commercial Services / Medicine Deputy Director of Nursing

Appendix B - Assurance opinion and action plan risk rating

Audit Assurance Ratings

 **Substantial assurance** - The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

 **Reasonable assurance** - The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

 **Limited assurance -** The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.

 **No assurance** - The Board can take **no assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **high impact on residual risk** exposure until resolved.

Prioritisation of Recommendations

In order to assist management in using our reports, we categorise our recommendations according to their level of priority as follows.

Priority Level	Explanation	Management action
High	Poor key control design OR widespread non-compliance with key controls. PLUS Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in control design OR limited non-compliance with established controls. PLUS Some risk to achievement of a system objective.	Within One Month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. These are generally issues of good practice for management consideration.	Within Three Months*

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

17.3

IM&T
Server Virtualisation

FINAL INTERNAL AUDIT REPORT
2017/18

Cardiff & Vale University Health Board

Private and Confidential

NHS Wales Shared Services Partnership

Audit and Assurance Service

17.4

CONTENTS

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Auditors:	Martyn Lewis

Executive sign off: Director of Therapies
Distribution:

Committee: Audit Committee

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

Please note:

This audit report has been prepared for internal use only. Audit & Assurance Services reports are prepared, in accordance with the Service Strategy and Terms of Reference, approved by the Audit Committee.

Audit reports are prepared by the staff of the NHS Wales Shared Services Partnership – Audit and Assurance Services, and addressed to Independent Members or officers including those designated as Accountable Officer. They are prepared for the sole use of the C&V University Health Board and no responsibility is taken by the Audit and Assurance Services Internal Auditors to any director or officer in their individual capacity, or to any third party.

1. Introduction and Background

In accordance with the 2017/2018 internal audit plan, a review of server virtualisation was undertaken. The assignment originates from the internal audit plan and the subsequent report will be submitted to the Audit Committee.

The relevant lead Executive Director for the assignment is the Director of Therapies.

Virtualisation is the concept of using software to simulate a physical server. This allows many different systems to be run on a single physical server and can lead to increased efficiencies in service provision and enhanced continuity capabilities.

2. Scope and Objectives

The objective of the audit is to evaluate and determine the adequacy of the systems and controls in place for the management of server virtualisation, in order to provide reasonable assurance to the Health Board Audit Committee that risks material to the achievement of system objectives are managed appropriately.

The purpose of the review is to provide assurance that the virtualisation infrastructure is appropriately set up, secure and that benefits are maximised.

The main areas that the review will seek to provide assurance on are:

- The virtual architecture is appropriately set up to allow for greater efficiency and continuity;
- Access to the hypervisor and virtual machines is appropriately controlled;
- The UHB maximises the benefits gained from virtualisation.

3. Associated Risks

The potential risks considered in the review are as follows:

I. The UHB does not maximise the benefits from virtualisation.
II. Loss of a higher number of systems due to physical server failure.
III. Unauthorised access to information / data.
IV. Failure of the UHB to comply with licence requirements.

OPINION AND KEY FINDINGS

4. Overall Assurance Opinion

We are required to provide an opinion as to the adequacy and effectiveness of the system of internal control under review. The opinion is based on the work performed as set out in the scope and objectives within this report.

An overall assurance rating is provided describing the effectiveness of the system of internal control in place to manage the identified risks associated with the objectives covered in this review.

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with server virtualisation is **Reasonable Assurance**.

RATING	INDICATOR	DEFINITION
Reasonable Assurance		The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

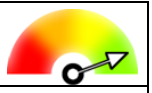
The UHB utilises virtualisation as a first choice for its servers. This increases the utilisation rate of the hardware and increases the organisations resilience. The virtual environment is well managed and kept secure with segregated network and good access controls.

The physical hardware is appropriately secure and protected and the UHB ensures that it is licence compliant.

The main weaknesses relate to the small size of the team with knowledge of the virtual environment which introduces a lack of resilience and an overreliance to a very limited number of staff. This is exacerbated as Standard Operating Procedures (SOPs) for patching and creating virtual machines (VMs) are not in place.

5. Assurance Summary

The summary of assurance given against the individual objectives is described in the table below:

Assurance Summary					
1	*The UHB does not maximise the benefits from virtualisation.*				✓
2	*Loss of a higher number of systems due to physical server failure.*			✓	
3	*Unauthorised access to information / data.*				✓
4	*Failure of the UHB to comply with licence requirements.*				✓

Design of Systems/Controls

The findings from the review have highlighted no issues that are classified as weaknesses in the system control/design for server virtualisation.

Operation of System/Controls

The findings from the review have highlighted five issues that are classified as weakness in the operation of the designed system/control for server virtualisation.

These are identified in the management action plan as (O).

6. Summary of Audit Findings

The key findings are reported in the section below with full details in the Management Action Plan under Appendix A.

Risk: The UHB does not maximise the benefits from virtualisation.

The following area of good practice was noted:

- Virtualisation has brought benefits in terms of greater resilience, more efficient use of hardware and ease of provisioning.

There were no significant findings under this risk area.

17.4

RISK: Loss of a higher number of systems due to physical server failure.

The following areas of good practice were noted:

- the ESXi hosts are updated and patched to a current / secure level;
- the architecture of the virtual environment is resilient;
- there are appropriate physical controls in place to protect the virtual environment;
- templates are used for VM creation and these are patched;
- logging is activated, including monitoring root access;
- no triggered alarms were identified at cluster or VM level;
- snapshots are used before configuration changes;
- backups are undertaken appropriately; and
- there is a BCP/DR plan for the IM&T which is regularly reviewed.

The following significant findings were noted:

- There are weaknesses regarding the resilience of the server team and the virtual environment. The team responsible for managing the virtual environment is very small, with knowledge concentrated in a limited number of staff.
- Although the ESXi hosts are currently patched and up to date, there is no formal SOP for patching these, and patching is done on an ad-hoc / infrequent basis.
- VMs are created from pre created template, however there is no SOP for this process. Given that there are only 2 people who create VMs this leaves the UHB at risk in the event of loss of staff, as any replacements couldn't easily pick up the role.

Risk: Unauthorised access to information / data.

The following areas of good practice were noted:

- there is good password control over access to the virtual environment;
- the virtual environment is protected by firewall;
- roles are appropriately controlled within the virtual environment;

- all management of the virtual environment is done via the management server; and
- the virtual environment is segregated from the rest of the network.

There were no significant findings under this risk area.

Risk: Failure of the UHB to comply with licence requirements.

The following areas of good practice were noted:

- there has been a recent review to assess and ensure compliance with Microsoft licencing; and
- As part of the process for considering virtualisation for new systems / upgrades, the relevant departments are asked to ensure that their system will be licence compliant in a virtual environment.

There were no significant findings under this risk area.

7. Summary of Recommendations

The audit findings, recommendations are detailed in Appendix A together with the management action plan and implementation timetable.

A summary of these recommendations by priority is outlined below.

Priority	H	M	L	Total
Number of Recommendations	**1**	**2**	**2**	**5**

Finding 1 Resilience	Risk
There are weaknesses regarding the resilience of the server team and the virtual environment. The team responsible for managing the virtual environment is very small, with knowledge concentrated in a limited number of staff. Although the wider IT team can provide support on an on-going basis the UHB is at risk should any significant event occur when the key staff members are absent. (O)	Loss of a higher number of systems due to physical server failure.
Recommendation 1	**Priority level**
The UHB should consider widening the pool of staff with the skills to manage the virtual environment by: - recruitment; and - up skilling existing staff and providing protected time to develop the skills.	**High**
Management Response 1	**Responsible Officer/ Deadline**
The IT Department will review potential opportunities for recruitment and training and provide an update on potential for progress.	P Clee / N Lewis 6 Months.

Finding 2 Patching	Risk
Although the ESXi hosts are currently patched and up to date, there is no formal SOP for patching these, and patching is done on an ad-hoc / infrequent basis. This is partly due to the small size of the team and the lack of a test environment which would allow for verification that the updates are safe / stable. This introduces the risk of a significant weakness being unpatched in the future. (O)	Loss of a higher number of systems due to physical server failure.
Recommendation 2	**Priority level**
A formal SOP should be developed setting out the basis for patching / updating ESXi hosts and the mechanism for doing this. Consideration should be given to providing a test environment.	**Medium**
Management Response 2	**Responsible Officer/ Deadline**
Agreed	P. Clee / N.Lewis Deadline – 6

Finding 3 VM Creation	Risk
VMs are created from pre created template, however there is no SOP for this process. Given that there are only 2 people who create VMs this leaves the UHB at risk in the event of loss of staff, as any replacements couldn't easily pick up the role. (O)	Loss of a higher number of systems due to physical server failure.
Recommendation 3	**Priority level**
A SOP for VM creation should be developed, setting out the process and the location of the templates.	**Medium**
Management Response 3	**Responsible Officer/ Deadline**
Agreed	P. Clee / N.Lewis Deadline – 6 Months
Finding 4 Networking	**Risk**
The UHB is not presently complying with recommended minimum configuration for VSphere as there is no separate management network on a separate adapter. (O)	Unauthorised access to information / data.

Recommendation 4	Priority level
A separate network adapter should be installed for the management network.	Low
Management Response 4	**Responsible Officer/ Deadline**
The documented recommendation for a separate Management Network dates back to the origins of Virtual Infrastructure (more than a decade ago) when network capabilities were more limited. These limitations no longer apply and hence provide no performance advantage. Implementing a separate management network into existing infrastructure (to improve security for example) will require reconfiguration of the whole underlying infrastructure. This activity will create a level of risk, and resource demand, that will outweigh any likely advantage gained	P Clee / N Lewis Completed
Finding 5 Functionality	**Risk**
The UHB is not fully utilising the full functionality provided by the virtual environment, with VMotion and High Availability not being used, this means that the moving of virtual machines is done manually. The reasons for not using these are: - feeling that moving vms may fail, however this mostly happens when vms are not configured properly (in particular being set to unlimited resource use). - licensing costs. (O)	The UHB does not maximise the benefits from virtualisation.

Recommendation 5	Priority level
The UHB should fully investigate the possibility of datacentre licencing. Should licensing costs be acceptable the use of VMotion and High Availability should be considered, with VMs configured accordingly.	**Low**
Management Response 5	**Responsible Officer/ Deadline**
The UHB has investigated the licence requirements and costs associated with VMotion and High Availability (HA). Licence costs associated with HA for database based systems within the Health Board will incur additional costs in orders of many hundreds of thousands of pounds (potentially in to the millions) over and above the currently incurred costs. The Health Board prioritises it's spend based on highest priorities first and this does not include HA on database based systems. Other servers within the HB utilise a mix of Data Centre and Single Licence on a considered basis – ergo where HA may be useful Data Centre is used.	P Clee / N Lewis Completed

Server Virtualisation

Cardiff and Vale University Health Board

Audit Assurance Ratings

 **Substantial assurance** - The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

 **Reasonable assurance** - The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

 **Limited assurance -** The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.

 **No Assurance** - The Board has **no assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Action is required to address the whole control framework in this area with **high impact on residual risk** exposure until resolved

Prioritisation of Recommendations

In order to assist management in using our reports, we categorise our recommendations according to their level of priority as follows.

Priority Level	Explanation	Management action
High	Poor key control design OR widespread non-compliance with key controls. PLUS Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in control design OR limited non-compliance with established controls. PLUS Some risk to achievement of a system objective.	Within One Month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. These are generally issues of good practice for management consideration.	Within Three Months*

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

Cardiff and Vale University Health Board

Organisational Values

Final Internal Audit Report

2017/18

NHS Wales Shared Services Partnership

Audit and Assurance Services

Contents **Page**

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Executive sign off:	Martin Driscoll, Director of Workforce & OD
Distribution:	Julie Casley, Assistant Director of Workforce & OD Emma Thomas, Senior Manager for Leadership, Management and Development
Committee:	Audit Committee

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

1. Introduction and Background

The review of Organisational Values was completed in line with the 2017/18 Internal Audit Plan.

The relevant lead Executive Director for the review is the Director of Workforce and Organisational Development.

2. Scope and Objectives

The overall objective of the review was to evaluate and determine the adequacy of the systems and controls in place within the Health Board for the management of organisational values, in order to provide assurance to the Health Board's Audit Committee that risks to the achievement of the system's objectives were managed appropriately.

The purpose of the audit was to establish if the Health Board has developed an appropriate set of organisational values and these are effectively embedded across the organisation.

The areas that the audit sought to provide assurance on were:

- The Health Board has undertaken a robust and effective process to develop an appropriate set of organisational values;
- The developed organisational values are effectively linked to the Health Boards strategy and key organisational objectives;
- The values are also effectively linked to other key organisational processes and developments including recruitment, PADRs, education & training, policies and frameworks;
- Robust plans are in place for the effective embedding of the values throughout the organisation including within individual Clinical Boards; and
- Plans are in place to introduce an effective process for measuring the knowledge and application of the value across the Health Board.

3. Associated Risks

The potential risks considered in the review were as follows:

- Organisational values are not appropriately developed; and
- Organisational values are not effectively embedded throughout the organisation.

OPINION AND KEY FINDINGS

4. Overall Assurance Opinion

We are required to provide an opinion as to the adequacy and effectiveness of the system of internal control under review. The opinion is based on the work performed as set out in the scope and objectives within this report. An overall assurance rating is provided describing the effectiveness of the system of internal control in place to manage the identified risks associated with the objectives covered in this review.

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with the Organisational Values is **Reasonable assurance**.

The overall level of assurance that can be assigned to a review is dependent on the severity of the findings as applied against the specific review objectives and should therefore be considered in that context.

Reasonable assurance		The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with **low to moderate impact on residual risk** exposure until resolved.

The review has identified that there was an appropriate process undertaken to develop the organisational values, with managers, staff, patients and carers contributing to their development.

There is a UHB wide Staff Engagement Strategic Framework in place and one of the key enablers is a "strong set of organisational values." There were Clinical Board Staff Engagement Plans in place detailing the planned actions to embed the organisational values within the Clinical Boards.

Staff are required to show evidence of how they have incorporated the original 6 values within their working practice when they carry out their PADRs. New starters are made aware of the values through the Corporate Induction Programme. Going forward it has been agreed that the values will be incorporated in the recruitment process as applicants will have to provide evidence of compliance with the values.

The Chief Executive has however only recently formally signed up to the organisational values. This means that whilst the Health Board and Clinical Boards have made some good initial progress with raising awareness of the values, they have not yet implemented plans to ensure that the values are fully embedded across the organisation.

5. Assurance Summary

The summary of assurance given against the individual objectives is described in the table below:

Assurance Summary					
1	Organisational values are not appropriately developed				✓
2	Organisational values are not effectively embedded throughout the organisation			✓	

** The above ratings are not necessarily given equal weighting when generating the audit opinion.*

Design of Systems/Controls

The findings from the review have highlighted two issues that are classified as weakness in the system control/design for Organisational Values.

Operation of System/Controls

The findings from the review have highlighted one issue that is classified as a weakness in the operation of the designed system/control for Organisational Values.

6. Summary of Audit Findings

The key findings are reported in the Management Action Plan.

Risk 1: Organisational values are not appropriately developed

The following areas of good practice were noted:

- The UHB developed a 'Values into Action' programme which included a number of presentations and workshops to various groups including managers, staff, patients and carers. There were 3,000 contributions which fed into the production of an updated values framework that included a revised list of four values; kind and caring, respectful, trusted teamwork and personal responsibility & integrity.
- There is a UHB Communications and Engagement Plan in place detailing the next phase of the 'Values into Action' project.
- A Staff Engagement Strategic Framework 2017-2020 is in place and its objective is to ensure that the Health Board is engaging with staff to enable the Health Board to be a good place to work. A Staff Engagement

Action Plan 2017/18 is included within the document and one of the key enablers is a "strong set of organisational values".

- There is an 'Our Values into Action' Reference Group in place to oversee the development and implementation of the values.
- 'Shaping Our Future Wellbeing Strategy 2015-2025' confirms the Strategy for the Health Board and details the original 6 values of the Health Board and how they are linked to the patients, staff service users etc.
- The original six values are included within the PADR and the reviewee has to confirm how they have incorporated values into their working practice. The PADR documentation is in the process of being updated for the end of January 2018 to include the four new values.
- There is a "Train the Trainer" training programme scheduled for the end of March, which will provide an insight into the interview skills required to incorporate the values.
- The organisational values are included within the corporate induction.

The following significant findings were noted:

- There is a project plan for the Communications Plan detailing the dates when specific objectives should be accomplished and a number of these dates have failed to be achieved.

Risk 2: Organisational values are not effectively embedded throughout the organisation

The following areas of good practice were noted:

- The organisational values have been discussed within the Local Partnership Forum and to the Stakeholder Reference Group.
- A Values in Action Reference Group is in place which includes staff from HR, Learning & Education Development, Nursing, Medical Staff, Finance and staff from the Clinical Boards. "Values Momentum" was an agenda item within the Group and included discussing staff knowledge of the values.
- The Chief Executive formally signed up to the Organisational values pledge in January 2018.
- The Surgery Clinical Board have bi monthly Staff Engagement Meetings which include Directorate Managers, Lead Nurses etc. There are actions from the meetings confirming how staff engagement is embedded within the Clinical Board. There is a Surgery Staff Engagement Plan in place detailing the key enablers for organisational values and the actions to achieve these.
- The Head of Workforce and Organisational Development within the Specialist Services Clinical Board undertakes a Values into Action presentation to Clinical Board staff. A Specialist Services Clinical Board

Engagement Plan is in place confirming the actions in place to embed organisational values within the Clinical Board.

- Organisational values are included within day to day meetings within the Clinical Diagnostics and Therapeutics Clinical Board. There is a draft Staff Engagement Plan in place for the Clinical Board that requires formal approval. Following approval, it has been agreed that the Directorates of the Clinical Board will produce their own individual Engagement Plans.

The following significant findings were noted:

- Robust plans are not yet in place to ensure that the organisational values fully embedded across the organisation and within the Clinical Boards.

7. Summary of Recommendations

The audit findings, recommendations are detailed in Appendix A together with the management action plan and implementation timetable.

A summary of these recommendations by priority is outlined below.

Priority	H	M	L	Total
Number of recommendations	**0**	**2**	**1**	**3**

Finding - Communications Plan (Operating effectiveness)	Risk
There is a Communications and Engagement Plan in place detailing the next phase of the 'Values into Action' project. There is a project plan within the Communications Plan detailing the dates when objectives should be accomplished and it is evident that these dates have not always been achieved and subsequently the values have not been communicated throughout the Health Board. However, there have been a number of changes within the Health Board's Executive team which has delayed the values being formally issued.	Organisational values are not appropriately developed
Recommendation	**Priority level**
Management should review the Communications Plan and revise the dates of the objectives within it. Management must then ensure that progress against the revised plan is effectively monitored and reported so that the actions are completed within the revised timescales.	**Medium**
Management Response	**Responsible Officer/ Deadline**
The communications and engagement plan has been revised and updated for 2018 with clear objectives and realistic timelines moving forwards. The Values into Action category at the Staff Recognition Awards recognised staff across the organisation who had demonstrated the behaviours of 'Values into Action'. Our new LED-led communications plan includes roadshows at our hospital sites, introduction of the values into all leadership programme and a planned stream of news throughout the year.	Emma Thomas, Senior Manager for Leadership, Management and Development - Complete

Finding - Embedding the organisational values (Operating effectiveness)	Risk
It was evident from the review that the Health Board and Clinical Boards have made some good initial progress towards communicating and raising awareness of the organisational values. However, there are no formal plans in place to ensure the values are fully embedded as the Health Board had been waiting for the formal sign-off of the pledge.	Organisational values are not effectively embedded throughout the organisation
Recommendation	**Priority level**
Management within the Health Board and Clinical Boards should ensure that robust plans are developed and implemented in order to fully embed the organisational values.	**Medium**
Management Response	**Responsible Officer/ Deadline**
Chief Executive has signed the Formal Pledge and has publicised this via CAV-News in March 2018. Values Boards explaining the behaviours have been designed and are currently being printed to be placed on walls at entrances to hospital sites. Briefing packs containing both electronic and hard copy materials are to be sent to managers and distributed through all leadership and management training from April 2018. Values Based Recruitment (VBR) training was undertaken in one clinical board (PCIC) in March with other boards and staff groups to follow in a structured roll out over the next 6 months. Values based PADR training is also being developed and will follow the roll out of VBR to be completed by 31 Dec 2018. Time has been allocated on Corporate induction and all Leadership and Management programmes to discuss values. Roadshow stands and social media publicity are also planned during 2018.	Emma Thomas, Senior Manager for Leadership, Management and Development – 31/12/18

Finding - Measuring embedding of organisational values (Control design)	Risk
It has been agreed that there will be surveys undertaken after a period of time of the values being in place to assess whether they have been effectively embedded within the Health Board. Currently however, there are no formal plans in place detailing how this will be undertaken and how to measure the level to which the values have been embedded within the Health Board.	Organisational values are not effectively embedded throughout the organisation
Recommendation	**Priority level**
Management need to ensure that there are appropriate measures such as satisfaction surveys and staff surveys in place to assess whether the organisational values have been embedded adequately within the UHB.	**Low**
Management Response	**Responsible Officer/ Deadline**
Some measure of the organisational values will be collected via the All Wales staff survey which will be carried out in June 2018. Pulse surveys will be planned to be carried out during roadshows to monitor the awareness of Values across the Health Board and any progression.	Emma Thomas, Senior Manager for Leadership, Management and Development – 30/06/18

Appendix B - Assurance opinion and action plan risk rating

Audit Assurance Ratings

 **Substantial assurance** - The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

 **Reasonable assurance** - The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

 **Limited assurance -** The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.

 **No assurance** - The Board can take **no assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **high impact on residual risk** exposure until resolved.

Prioritisation of Recommendations

In order to assist management in using our reports, we categorise our recommendations according to their level of priority as follows.

Priority Level	Explanation	Management action
High	Poor key control design OR widespread non-compliance with key controls. PLUS Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in control design OR limited non-compliance with established controls. PLUS Some risk to achievement of a system objective.	Within One Month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. These are generally issues of good practice for management consideration.	Within Three Months*

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

17.5

Cardiff and Vale University Health Board

Wellbeing of Future Generations Act

Final Internal Audit Report

2017/18

NHS Wales Shared Services Partnership

Audit and Assurance Services

Contents **Page**

Review reference:	C&V-1718-07
Report status:	Final Internal Audit Report
Fieldwork commencement:	8th February 2018
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Auditor/s:	Ian Virgill, Johanna Butt
Executive sign off:	Sharon Hopkins, Executive Director of Public Health
Distribution:	Fiona Kinghorn, Deputy Director of Public Health Anne Wei, Strategic Partnerships & Planning Manager
Committee:	Audit Committee

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

1. Introduction and Background

The review of the UHB's preparations for the Wellbeing of Future Generations (Wales) Act 2015 (the WFGA or the Act) was completed in line with the 2017-18 Internal Audit Plan for Cardiff and Vale University Health Board (the UHB).

The relevant lead Executive Director for this review is the Executive Director of Public Health.

2. Scope and Objectives

The overall objective of the review was to evaluate and determine the adequacy of the systems and controls in place within the Health Board to ensure it is preparing to implement its obligations under the WFGA, in order to provide assurance to the Health Board's Audit Committee that risks material to the achievement of the system's objectives are managed appropriately.

The areas that the review sought to provide assurance on were:

- The UHB is adequately preparing to meet its obligations under the Act;
- To establish whether the UHB has set out its requirements, including publishing its Well-being Objectives and the required supporting statement required by the Act;
- Reporting and monitoring arrangements have been established;
- Staff/services are aware of the requirements of the WFGA; and
- The Health Board is appropriately represented and participates at the Public Service Board(s) (the PSBs) of which it is a member, and is informed of developments.

3. Associated Risks

The potential risks considered in this review were as follows:

- The UHB has not adequately prepared to meet its obligations under the Act;
- The UHB has not set out its requirements to ensure it meets its obligations under the Act; and
- The UHB is not participating in partnership with others as required at the Public Service Boards.

OPINION AND KEY FINDINGS

4. Overall Assurance Opinion

We are required to provide an opinion as to the adequacy and effectiveness of the system of internal control under review. The opinion is based on the work performed as set out in the scope and objectives within this report. An overall assurance rating is provided describing the effectiveness of the system of internal control in place to manage the identified risks associated with the objectives covered in this review.

The level of assurance given as to the effectiveness of the system of internal control in place to manage the risks associated with the Wellbeing of Future Generations Act is **Reasonable assurance**.

The overall level of assurance that can be assigned to a review is dependent on the severity of the findings as applied against the specific review objectives and should therefore be considered in that context.

RATING	INDICATOR	DEFINITION
Reasonable assurance		The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with **low to moderate impact on residual risk** exposure until resolved.

The level of assurance given takes account of where we would reasonably expect the Health Board to be at this early stage in the process of implementation.

The Health Board has made reasonable progress in preparing to meet its obligations under the Wellbeing of Future Generations Act (WFGA). This has included the emerging WFG Act informing the development of the Health Board's strategic objectives set out in Shaping Our future Wellbeing, mapping the Health Board's strategic objectives against the WFGA wellbeing goals and agreeing these objectives as the organisation's wellbeing objectives, which have been published on the Health Board's internet site. These objectives are clearly highlighted within the Health Board's IMTP and the Health Board has also completed a headline mapping of delivery of its wellbeing objectives against the WFGA wellbeing goals.

A WFG Steering Group is in place with representatives from a cross section of the Health Board at a suitably senior level. However, the recently drafted Terms of Reference (ToR) for the group require approval. The Health Board has identified the recently appointed Vice Chair of the

17.6

Board as the 'WFG Champion'. However, the roles and responsibilities of the champion had not been formalised and agreed at the time of the audit review.

The Health Board is appropriately represented and attends all meetings of the applicable Public Service Boards (PSB), namely the Cardiff PSB and the Vale of Glamorgan PSB.

However, further work is required to ensure that the requirements of the WFGA are fully embedded within the Health Board, including communicating the requirements/ obligations under the Act to all staff within the Health Board and developing an approach to demonstrate how the Health Board intends to embed the requirements of the Act through its IMTP.

5. Assurance Summary

The summary of assurance given against the individual risks is described in the table below:

Assurance Summary					
1	Preparation to meet obligations under the Act			✓	
2	Requirements set out to ensure obligations met			✓	
3	Participating in partnership as required at PSBs				✓

** The above ratings are not necessarily given equal weighting when generating the audit opinion.*

Design of Systems/Controls

The findings from the review have highlighted four issues that are classified as weakness in the system control/design for Wellbeing Objectives.

Operation of System/Controls

The findings from the review have highlighted one issue that is classified as weakness in the operation of the designed system/control for Wellbeing Objectives.

6. Summary of Audit Findings

The key findings are reported in the Management Action Plan.

Risk 1: The UHB has not adequately prepared to meet its obligations under the Act.

The following areas of good practice were noted under this risk:

- The development of the Health Board's Shaping Our Future Wellbeing Strategy and associated strategic objectives was informed by the emerging WFG Act. These strategic objectives were mapped against the national wellbeing goals, and were agreed as the organisation's wellbeing objectives, which have been published on the Health Board's internet site by the key date of 1 April 2017. These objectives are clearly highlighted within the Health Board's IMTP.
- The Health Board's Strategic Objectives which, are also the Health Board's Wellbeing Objectives, were developed following consultation with staff, the people who use the Health Board's services and partner organisations to help shape the Health Board's strategic direction. As such the development of the wellbeing objectives were in line with the WFGA five ways of working.
- The Health Board's Wellbeing Objectives are detailed within its IMTP which is in line with the guidance issued which advises that sustainable development should not be treated as an add-on, instead, it should be included within the Corporate Plan / Strategy.
- The Health Board has responded and provided evidence to the 'Wales Audit Office - Year One Commentary: Call for Evidence' detailing the progress made to date.
- In October 17 the Health Board responded and provided a status report to Andrew Goodall as a result of his requesting that all Health Board's and Trust's provide a status report, following the Future Generations Commissioner's report on 'Well-being in Wales: Planning today for a better tomorrow - Learning from the Well-being Assessments 2017'.
- The Health Board has carried out a mapping exercise to highlight individual projects/ programmes and how they contribute to the WFG wellbeing goals and the five ways of working and these have been linked on the WFG internet page.

The following findings were noted under this risk:

- The Health Board has not developed an Action Plan detailing how it proposes to embed its obligations in respect of the WFGA within the Health Board or documented any time-frames or responsibility for implementation of its obligations under the Act; and
- The Health Board has a dedicated WFG internet page. However, review of the page shows that it is not very concise and does not provide clarity on how the Health Board intends to achieve its

17.6

wellbeing objectives or what the expectations are of staff in respect of the Act.

Risk 2: The UHB has not set out its requirements to ensure it meets its obligations under the Act.

The following areas of good practice were noted under this risk:

- The Health Board has published its wellbeing objectives as part of its IMTP for 2017-18 which have been linked on the Health Board's internet site.
- The Health Board has established a WFG Steering Group and the group is well attended and meets on a quarterly basis to discuss progress in respect of the WFGA as evidence from review of minutes for all meetings held in 2017.
- Review of papers presented to the Management Executive Group and Board confirms that the group are provided with updates on progress to date in respect of the WFGA. Review of audit evidence provided during our review confirms that the updates are an accurate reflection of progress to date.
- The Health Board has carried out a Leadership Baseline Assessment to gauge awareness of the Act and to help shape the future thinking in respect of the WFGA. The baseline assessment was based on the learning adapted from the Welsh Local Government Association (WLGA) Early Adopters' Programme with Local Authorities and National Parks.
- The Staff Recognition Awards for 2018 included a category 'Acting Today for a Better Tomorrow' - being the proposed tag line used by the Health Board for the WFGA. Review of the flyer confirmed that the WFGA five ways of working and the seven wellbeing goals were highlighted within the category narrative.
- Review of the minutes and papers to the Workforce and Organisational Development (WOD) Senior Management team meeting held in May 2017 confirms that an awareness raising session was held which included the WFGA short animation of 'Megan's Life' and a presentation on the Health Board's journey so far.

The following findings were noted under this risk:

- The Health Board has established a WFG Steering Group. However the Terms of Reference (ToR) of the group had only recently been drafted and had not been approved at the time of the audit review.
- The recently appointed Vice Chair of the Board has been identified as the WFG Champion for the Health Board. However, at the time of our review the role and responsibility of the WFG champion had not been formalised and approved.
- The Health Board has not communicated its obligations under the WFGA to all staff within the Health Board. As a result we have not

carried out a survey of staff to gauge their awareness / understanding of the WFGA.

Risk 3: The UHB is not participating in partnership with other as required at Public Service Boards (PSBs).

The following areas of good practice were noted:

- The Health Board is a statutory member of the Cardiff PSB and the Vale of Glamorgan PSB. We reviewed all minutes since January 2017 to the date of the audit which confirmed that the Health Board has been appropriately represented at all meetings held in 2017.

We did not identify any findings under this risk.

7. Summary of Recommendations

The audit findings, recommendations are detailed in Appendix A together with the management action plan and implementation timetable.

A summary of these recommendations by priority is outlined below.

Priority	H	M	L	Total
Number of recommendations	**0**	**5**	**0**	**5**

17.6

Finding 1 - Lack of Action Plan (Control design)	Risk
We were informed that the Health Board has not developed an Action Plan detailing the key priorities and actions required to fully embed the obligation of the WFGA within the Health Board.	The UHB has not adequately prepared to meet its obligations under the Act.
Recommendation	**Priority level**
The Health Board/ Management should produce an Action Plan to provide a cohesive approach on how it plans to embed the obligations of the Act within the Health Board. The Action Plan should detail/include columns for: • The Key priorities required to embed the WFGA obligations within the Health Board; • The Actions required to achieve the key priority; • The responsibility for each of the actions; • The target date for implementation; and • The status of implementing the action. The WFG Steering Group would be the appropriate forum for monitoring any progress against the Action Plan.	**Medium**

Management Response	Responsible Officer/ Deadline
The Steering Group agreed the need to develop an Action Plan at its meeting on 12 March 2018. A task and finish group is being established to develop a first draft to discuss with the wider group at the next meeting of the Steering Group on 4 June 2018.	Deputy Director of Public Health/draft by 4 June.

Finding 2 - WFG Steering Group - ToR (Control design)	Risk
The Health Board has established a WFG Steering Group. However, at the time of the audit, the Terms of Reference for the group had only recently been developed and had not been approved.	The UHB has not set out its requirements to ensure it meets its obligations under the Act.
Recommendation	**Priority level**
The Terms of Reference for the WFG Steering Group should be formalised and appropriately approved.	**Medium**
Management Response	**Responsible Officer/ Deadline**
Draft Terms of Reference were discussed at the meeting of the Steering Group on 12 March 2018 and amendments agreed. Final draft ToR to be submitted to HSMB for sign-off.	Deputy Director of Public Health/HSMB in May 2018.

17.6

Finding 3 - WFG Champion Role (Control design)	Risk
The Health Board has identified the newly appointed Vice Chair of the Board as the Health Board's 'WFG Champion'. However, at the time of our review the Health Board had only discussed ideas around what they envisage the role and responsibility of the WFG Champion to be.	The UHB has not set out its requirements to ensure it meets its obligations under the Act.
Recommendation	**Priority level**
The Health Board should formalise and approve the role and responsibility of the 'WFG Champion'.	**Medium**
Management Response	**Responsible Officer/ Deadline**
A draft WFG Champion role was discussed at the Steering Group on 12 March. Final role description to be agreed between the Chair of the Steering Group, Vice Chair, Chair and Board's Director of Governance.	Deputy Director of Public Health/end April 2018.

Finding 4 - Health Board wide communication (Operating effectiveness)	Risk
The Health Board has not communicated its obligations in respect of the WFGA to all staff. However, we acknowledge that the Health Board has carried out a baseline assessment of the Board and Leadership Team to gauge the Health Board's awareness of the Act and has attended a Workforce and Organisational Development Team Meeting to provide a presentation on the Act.	The UHB has not adequately prepared to meet its obligations under the Act.
Recommendation	**Priority level**
The Health Board must ensure that its obligations in respect of the Act are appropriately communicated to all staff within the Health Board. We recommend that the Health Board develop a communications plan, which could be included within an Action Plan, to ensure that there is a cohesive approach to disseminating its obligations under the Act.	**Medium**
Management Response	**Responsible Officer/ Deadline**
The Chair of the Steering Group met with UHB Director Communications and the UHB Engagement Lead in March to discuss the approach to raising awareness within the UHB. Draft Communications Plan to be brought to the next Steering Group on 4 June.	Director of Communications and Engagement/4 June 2018

17.6

Finding 5 - Health Board WFG Intranet Site (Control design)	Risk
We reviewed the Health Board's designated WFG Internet page and note that it does not fully reflect the work undertaken by the Health Board to date. For example, the Health Board have mapped their wellbeing objectives to the WFGA wellbeing goals. However, whilst the internet page lists the wellbeing objectives it does noes not detail how these objectives align to the WFGA wellbeing goals. Additionally, it is not clear from the internet page how the Health Board intends to meet its wellbeing objectives. However, we acknowledge that the Health Board has identified and linked projects that it currently undertakes that align with the WFGA wellbeing goals.	The UHB has not adequately prepared to meet its obligations under the Act. The UHB has not set its requirements to ensure it meets its obligations under the Act.
Recommendation	**Priority level**
The Health Board should update their WFG internet page to ensure that it provides clear and cohesive information on the Health Board's responsibility in respect of the WFGA including how the Health Board's wellbeing objectives align to the WFGA wellbeing goals including how the Health Board intends to meet its wellbeing objectives. The Public Health Wales (PHW) internet pages which clearly present the Trust's obligations under the WFGA and the work undertaken towards meeting these objectives. We consider the PHW pages relating to the WFGA to be a good exemplar of a well presented site. Link to relevant pages can be found on: http://www.wales.nhs.uk/sitesplus/888/page/89658	**Medium**

17.6

Management Response	Responsible Officer/ Deadline
UHB WFG Internet page to be updated to reflect the recommendations.	Engagement Lead/ end April 2018

Appendix B - Assurance opinion and action plan risk rating

Audit Assurance Ratings

 **Substantial assurance** - The Board can take **substantial assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Few matters require attention and are compliance or advisory in nature with **low impact on residual risk** exposure.

 **Reasonable assurance** - The Board can take **reasonable assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. Some matters require management attention in control design or compliance with low to **moderate impact on residual risk** exposure until resolved.

 **Limited assurance -** The Board can take **limited assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **moderate impact on residual risk** exposure until resolved.

 **No assurance** - The Board can take **no assurance** that arrangements to secure governance, risk management and internal control, within those areas under review, are suitably designed and applied effectively. More significant matters require management attention with **high impact on residual risk** exposure until resolved.

Prioritisation of Recommendations

In order to assist management in using our reports, we categorise our recommendations according to their level of priority as follows.

Priority Level	Explanation	Management action
High	Poor key control design OR widespread non-compliance with key controls. PLUS Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in control design OR limited non-compliance with established controls. PLUS Some risk to achievement of a system objective.	Within One Month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. These are generally issues of good practice for management consideration.	Within Three Months*

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

17.6