

Water Safety Follow-up – Withybush General Hospital

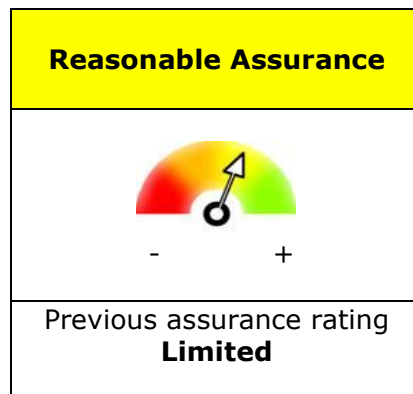
Final Audit Report

2019/20

Hywel Dda University Health Board

NHS Wales Shared Services Partnership

Audit and Assurance Services



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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.

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1. Introduction and Background

An initial audit of safe water management arrangements was undertaken at Glangwili & Prince Phillip Hospitals in April 2019 that provided **limited assurance**.

A follow-up of the agreed audit recommendations was therefore requested, at the May 2019 audit committee, together with a request for additional sampling at another UHB site (i.e. Withybush Hospital).

The results of these audits were published in October 2019, providing **limited assurance** in relation to the Withybush Hospital site.

Accordingly, at the October 2019 audit committee, this additional follow up review was commissioned (to be progressed during Quarter 4 2019/20).

2. Scope and Objectives

The review sought to provide the University Health Board with assurance that issues and risks identified at the initial Withybush Water Safety audit (issued October 2019) have been adequately considered and addressed.

This follow up review was progressed through obtaining evidence in support of each item, demonstrating sufficient action had been taken to address each recommendation.

3. Associated Risks

There is a potential risk that management did not have processes in place to appropriately implement agreed audit recommendations to mitigate the risk to/ of:

- Patient Safety;
- Prosecution / criminal negligence;
- Adverse publicity;
- Breach of regulations / Approved Code of Practice;
- Fines and defence costs;
- Ineffective / inappropriate governance arrangements;
- Ineffective / ill-informed management; and
- Ineffective risk control.

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.

Whilst not fully implemented, it was evident that considerable work had commenced to address the key risks outlined at the prior audit report. Accordingly, four of the priority ratings of the October 2019 audit have been adjusted to reflect reduced risk exposure from actions taken (including the two high priority recommendations - see **Section 5** for reassessed ratings).

It is also important to recognise that the prior audit highlighted that, while no cases of legionella related illness were reported in the prior twelve months at Withybush Hospital, eleven suspect / significant legionella water samples were reported. The current audit found legionella testing to confirm **no legionella** present within current samples. This is reflective of considerable work undertaken by the Estates team, as led by the Responsible Person (Water), to address key issues (notably removal of dead legs etc. from the pipework configuration).

In the relatively short period of time between the original audit and this follow up exercise, positive actions have been demonstrated. Noting the same, a **reasonable assurance** has been determined.

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 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 position as concluded at the October 2019 report was as follows:

Priority	H	M	L	Total
Number of recommendations	2	7	2	11

The previous report included two high priority recommendations as follows:

- It was recommended that the file of water services drawings should be kept up to date (identifying risk factors). A full set of drawings has now been completed showing pipework configuration, thereby significantly enhancing the control environment. All risk factors within the configuration have also been identified, with the exception of those areas requiring invasive works. It is acknowledged that until those areas are addressed, full compliance with Health Technical Memorandum (HTM) cannot be achieved. It has been agreed that that pipework labelling will be included for all new schemes and major alterations which involve changes/ modifications to our hot and cold water pipework infrastructure and that a phase pipework labelling/ insulation improvement scheme to the existing infrastructure (where feasible), will be implemented. Alongside efforts to remove those risks, zero legionella readings have been reported in the period. Noting this, while not meeting the full requirements of HTM04-01 (Part B), the risk has been re-assessed as medium and is recognised as partially addressed (**recommendation 5**).
- The prior audit identified the need for a location specific risk assessment in accordance with the WHTM / HSE requirements. This had yet to be completed, however management are seeking capital funding for 2020/21 to commission external advisors to complete the risk assessment (and is programmed to commence in June 2020). In the interim, we were advised that management actions in reducing incidences of significant legionella findings within the water supply have been significantly directed by the 2016 report. Noting these outcomes and assurances relating to the programmed 2020 risk assessment, we have re-assessed this priority rating as medium (**recommendation 9**).

Of the remaining actions, the following two issues have been substantially addressed, and accordingly the priority has been reassessed based on the actions remaining:

- The reporting arrangements have been revised to include the substantial majority of suggested inclusions, and is now in accordance with the spirit of the recommendation. However, the reporting did not include:

- response times and demonstrating compliance with Planned Preventative Maintenance targets;
- reporting against target coverage for the showerhead replacement programme; and
- quarterly/ six monthly management audits.

Accordingly, while the risk rating has been re-assessed the recommendation remains only partially addressed (**recommendation 2**); and

- the substantive majority of external review recommendations have now been actioned (notably over 90% of the recommendations of Welsh Water, and 73% of those of the Authorised Engineer). This is in context of cyclical reviews, where recommendations are addressed on an on-going basis. Noting the significant progress made, the priority rating associated with this recommendation has been adjusted accordingly (**recommendation 11**).

While we were able to close the medium priority recommendation relating to specification of the UHB approach to pipework labelling, we have raised an additional low priority recommendation as the action taken does not adequately define the approach to labelling existing accessible pipework (ref **Appendix A recommendation 6**).

The current position may therefore be summarised as:

Priority	H	M	L	Total
Total recommendations	-	7	5*	12
Closed	-	4	2	6
Partially addressed	-	2	2	4
Outstanding	-	1	1*	2

* Note these include an additional recommendation raised – see recommendation 6.

A revised indicative implementation timetable is included at **Appendix A**, recognising that the majority of UHB staff will be fully focused on responding to COVID-19 and this will dominate the agenda for the foreseeable future.

Status of Previously Agreed Management Actions (October 2019 Audit – Limited Assurance)

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
5	Management should address recommendation 2 of the 2015 Withybush Hospital site survey (in accordance with WHTM 04) i.e. that <i>“controls are implemented to ensure that the file of drawings is kept specific risks can be added, up to date.”</i>	<p>Partially addressed</p> <p>Example water services diagrams have been provided from the updated set (now advised as complete). These drawings are to act as a basis for appending risk factors to inform the risk assessment and remedial works e.g. TMV’s, proximity of hot and cold pipes, flow straighteners (as required by WHTM 04).</p> <p>WHTM 04-01 states the requirement for:</p> <p><i>“accurate as-fitted drawings.. that will assist in identifying any potential problems with poor hot water circulation and cold water <u>dead-legs</u> where flow to infrequently used outlets can be low”</i> and that <i>“identify all key components in the installations, for example water meters, cisterns, filtration equipment (where fitted), calorifiers, and the location of isolating</i></p>	<p>Agreed</p> <p>Detailed schematic drawings have now been produced and received by the HB.</p> <p>They will be used to support the ongoing management of water safety for the site.</p> <p>They will be continually reviewed and kept up to date by the RP for water.</p> <p>Management will now use these drawings to address risks on site.</p> <p>They will be used to support the 2020 site legionella risk assessment, scheduled for August 2020.</p>	<p>Head of Operational Facilities Management</p> <p>August 2020</p>	<p>Medium</p> <p>(Previously High)</p>

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
		<p><i>valves in the systems.” (Part B 6.80/81)</i></p> <p>and that:</p> <p><i>“The risk assessor(s) should be given access to competent assistance from the client. This may be in the form of as-fitted drawings and schematic diagrams” to enable “engineering assessment of water systems”.</i></p> <p>It is appreciated that as full identification may involve invasive works, this would be updated over time, and as issues become apparent.</p> <p>It is also appreciated that this is also in context of considerable work addressing identified issues with the result that the hospital currently has clear legionella readings.</p> <p>The updated set of drawings do not currently show risk factors (i.e. as fitted).</p>			

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
		The risk rating of this recommendation has been amended accordingly to reflect the above actions.			
9	Location specific risk assessments should be accurately informed in relation to the infrastructure / configuration in accordance with the WHTM / HSE requirements.	<p>Outstanding</p> <p>The application for funding to commission this assessment is acknowledged. The priority rating has been re-assessed in the context of the additional mitigations of updated drawings, and risk reduction referenced above.</p>	<p>Agreed</p> <p>The 2020 legionella site risk assessment is now being programmed for commencement in August 2020.</p> <p>The new as fitted drawings will now support this assessment in greater detail.</p>	<p>Head of Operational Facilities Management</p> <p>September 2020</p>	<p>Medium</p> <p>(Previously High)</p>
2	a) Reports should be presented to the Water Safety Group to provide it with appropriate assurances, and to facilitate scrutiny in accordance with its role (including flushing, maintenance,	<p>Partially addressed</p> <p>A comprehensive overview report to the Water Safety Group was evidenced (including assurances that certain elements were being enhanced) e.g.</p> <ul style="list-style-type: none"> the Planned Preventative Maintenance report, will summarise response times (demonstrating compliance with 	<p>Agreed</p> <p>Comprehensive reporting is now being provided and will be enhanced in accordance with the audit recommendation.</p> <p>This will incorporate a significant amount of additional information and content, thus offering improved levels of</p>	<p>Head of Operational Facilities Management</p> <p>July 2020</p>	<p>Low</p> <p>(Previously Medium)</p>

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
	management audit, summary test findings, and purification / remedial works).	<p>targets - as per Section 6 of the Water Safety Plan); and</p> <ul style="list-style-type: none"> the showerhead replacement programme is to report against target coverage. <p>While, quarterly / six monthly management audits were not reported in accordance with procedures, the risk rating has been re-assessed based on the recommendation being substantially addressed by enhanced reporting.</p>	assurance to the Water Safety Group (WSG) and to the HB.		
	b) Reporting of infrequently used outlets should include nil declarations.	b) Closed	c) Agreed – Management agree that this action is closed.	N/A	N/A
3	Commissioning records should be available locally including design risk	<p>Partially addressed</p> <p>The following were evidenced:</p> <ul style="list-style-type: none"> contractor assessment; 	<p>Agreed</p> <p>All future works will now incorporate a formal design risk assessment to identify any</p>	Head of Operational Facilities Management	Medium

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
	assessment and performance testing.	<ul style="list-style-type: none"> • agreement of the design; • agreed drawings; and • biological test results, including legionella testing and chlorination. <p>The Water Safety Plan requires assessment of the design by the “<i>appointed Capital and Operational RP (Water) and/or the Authorising Engineer (Water), and a representative of Infection Prevention Control</i>”.</p> <p>While drawings were provided by the scheme engineer, no written risk assessment commentary was provided by the relevant parties, in accordance with the Pro forma Appendices C & D of the Water Safety Plan.</p>	<p>inherent risks as part of the scheme. This process will commence immediately.</p> <p>All commissioning records will be available locally by the RP water.</p>	At future schemes	
4	(a) Records of inspections should be retained in accordance with HTM 04-01 Part B.	<p>a) Closed</p> <p>Retention of a range of key records was evidenced.</p>	a) Agreed.	N/A	N/A

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
	(b) Relevant inspections should be reported at appropriate intervals to the Water Safety Group.	(b) Closed Reporting of inspections now forms part of reporting to the Water Safety Group.	b) Agreed	N/A	N/A
6	The Water Safety Plan should be updated to accurately reflect requirements and the UHB's approach to pipework labelling.	Closed Management have now clarified the UHB approach to pipework labelling jointly at the revised Water Safety Plan, and in the management response.	Agreed	N/A	N/A
		Additional observation Finding 6 of the October 2019 audit noted that labelling of pipework: <i>"should be maintained on an ongoing basis in refurbished / new build areas and in accessible areas such as plant rooms (as separately required by WHTM04)".</i>	A complete site review will now commence to establish what areas of the site are accessible, in order to complete the labelling of pipework within 2020/21 financial year.		Low

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
		<p>The revised Water Safety Plan (as of November 2019) states that there should be:</p> <p><i>“Clear labelling of pipework in new installations and major refurbishment.”</i></p> <p>i.e. does not make explicit reference to existing accessible pipework.</p> <p>For completeness we have therefore raised an additional recommendation:</p> <p><u>Additional recommendation</u></p> <p>For clarity, the Water Safety Plan should additionally specify policy relating to pipework labelling in accessible areas such as plant rooms (in accordance with HTM 04, and findings of the October 2019 audit).</p> <p><u>Responsibility & timescale</u></p> <p>Head of Operational Facilities Management</p> <p>July 2020</p>	<p>Agreed</p> <p>The Withybush General Hospital Water Safety Plan (WSP) has been changed to incorporate the need to label accessible pipework.</p>		

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
7	Management should review the cost / benefit of an enhanced BMS provision.	Closed A quotation was obtained in September 2019 to add additional sensors to pipework which stated the benefits to include, emailed alerts and emailed reports. Management are considering the same and will report the outcome to the WSG.	Agreed	N/A	N/A
10	Accepted risks should be reported at the approval of risk assessments.	Closed Accepted risks were evidenced within the most recent Water Safety Group report.	Agreed – water risks were tabled at WSG.	N/A	N/A
11	Management should confirm that agreed recommendations of external reviews have been actioned, including those of; a) Welsh Water (infringement notices);	Partially addressed a) Partially addressed These are now substantially actioned. Completion is now reported as: <ul style="list-style-type: none"> • Showerheads is 98% • Dead-end removal is 90% • Tap Alterations is 94% • Pipework Alterations is 100% 	Agreed a) Management can confirm that the recommendations it has received from the Welsh Water Infringement Notices have been tracked and actioned accordingly.	Head of Operational Facilities Management October 2020	Low (Previously Medium)

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
	b) the Authorised Engineer; and c) site survey risk assessment.	<ul style="list-style-type: none"> Ball valve Replacement is 100% (supporting information additionally provided). b) Partially addressed NWSSP: Specialist Estates Services tracker states 73% of actions from April 2019 have been actioned, these largely relate to the "low" risk / priority items. Only 14 of the 37 "high" recommendations have been actioned (38%). (Only 3 of these "high" priority recommendations are stated to await resource / capital).	b) Authorising Engineer Audit Actions – All outstanding actions will be addressed by October 2020. Actions were subject to addressing staff shortages (HTM Gap Analysis), which has now been concluded.		

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
		<p>c) Partially addressed</p> <p>We were advised that the majority of recommendations from 2016 have been actioned, subject to confirmation at the 2020 risk assessment (see item 9 above).</p> <p>We recognise that the above action status will have been superseded (e.g. in the case of NWSSP:SES recommendations being the position as of April 2019). Accordingly the changed position as advised by management is noted. It is also noted that that such are the extent of recommendations at such technical reviews that a number of issues will typically be outstanding at any point in time. Additionally noting active reporting, there is evidence that management are actively addressing the same, and the risk rating has been amended accordingly.</p>	<p>c) Management have now programmed a commencement date for the 2020 legionella risk assessment at the site with consultants. This will be programmed for August 2020.</p> <p>On receipt of the report, the findings will be reviewed carefully to prioritise any actions that require addressing.</p> <p>Actions will also be tracked and presented at the WSG for reporting.</p>		

Ref	Agreed Recommendation	Action/Status	Management comment	Revised Timescale / Responsibility	Revised Priority Rating
1	<p>Within the Water Safety Plan, management should strengthen the:</p> <p>(a) definition of elevated levels;</p> <p>(b) response times for infrastructure works;</p> <p>(c) definition of infrequently used outlets; and</p> <p>(d) clarification of durations of flushing.</p>	<p>Closed</p> <p>A revised Water Safety Plan containing recommended inclusions was approved by the Water Safety Group on 13th December 2019.</p>	<p>Agreed – Management agree that this action is closed</p>	N/A	N/A
8	<p>Flushing responsibilities should be clarified.</p>	<p>Closed</p> <p>Clarification via global emails evidenced.</p>	<p>Agreed – Management agreed that this action is closed</p>	N/A	N/A

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.