

Reinforced Autoclaved Aerated Concrete Programme – Withybush General Hospital

Final Internal Audit Report

June 2024

Hywel Dda University Health Board



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Audit and Assurance Services conform with all Public Sector Internal Audit Standards as validated through the external quality assessment undertaken by the Chartered Institute of Public Finance & Accountancy in April 2023.

Acknowledgement

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

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Executive Summary

Purpose

Reinforced Autoclaved Aerated Concrete (RAAC) is a form of lightweight concrete used in construction in many buildings between the 1950s and 1990s and has only recently been identified as posing a significant risk to the structural internally of buildings.

A specialist structural engineer was appointed by NHS Wales Shared Services Partnership (NWSSP) during 2022/23 to identify any immediate intervention works required at Witybush General Hospital (WGH) due to the deterioration of RAAC planks within multiple areas of the hospital.

A separate audit review concluded that the command-and-control structures enacted following the UHBs declaration of an internal major incident were appropriate – see WGH RAAC Internal Major Incident Report issued March 2024 (providing reasonable assurance).

The current audit sought to evaluate the arrangements in place to manage the project/programme of works to mitigate the risks associated with the presence of RAAC.

Overview

During August 2023, Welsh Government approved £12.8m of capital funding for works to mitigate P1 and P2 planks (critical and high-risk respectively) across both 2023/24 & 2024/25 financial years.

Regular and ongoing reporting was evident at multiple UHB committees including: the Board, Health and Safety Committee, Strategic Development and Operational Services Committee etc. There had also been regular communication with Welsh Government on the progression of the programme of works and the associated cashflow position.

The sample of 2023/24 projects that formed part of the wider RAAC programme had been completed on programme and within established budgets.

The UHB established a procurement strategy reflecting the pace required to address the issue, targeting the UHB’s local framework for appointing contractors. The UHB had actively engaged with Audit and Assurance surrounding the principles of this contract strategy prior to implementation.

Matters arising concerning areas for refinement and further development, such as the development of a

Report Classification

Substantial



Few matters require attention and are compliance or advisory in nature.

Low impact on residual risk exposure.

Assurance Summary

Assurance objectives	Assurance
1 Project Delivery	Substantial
2 Governance	Reasonable
3 Approvals	Substantial
4 Procurement	Substantial

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

Key Matters Arising

Key Matters Arising	Assurance Objective	Priority
1 Active reporting of snags, defects etc. was required.	1	Low
2 A project/programme risk register was required.	2	Medium
3 Standardisation of internal reporting was required.	2	Medium

project/programme risk register and increased project performance information have been noted (see **Appendix A**).

An overall **substantial** assurance has been determined due to the positive controls in place to progress the projects/programme of works at pace. However, given the potential risk, this programme requires close monitoring, and a further audit review has been agreed as a part of the 2024/25 internal audit plan.

1. Introduction

- 1.1 The audit forms a part of the 2023/24 Internal Audit Plan agreed with Hywel Dda University Health Board (*'the UHB'*).
- 1.2 Reinforced Autoclaved Aerated Concrete (RAAC) is a material used in construction in many buildings between the 1960s and 1990s. Its presence has been confirmed in a range of National Health Service (NHS) properties across the United Kingdom (UK) and includes Withybush General Hospital. RAAC is predominantly found as precast panels in roofs, flat roofs, and occasionally in floors and walls.
- 1.3 During August 2023, a programme of surveys was undertaken at Withybush General Hospital (WGH) to determine the condition of concrete roof planks in ward areas at the hospital site in Haverfordwest.
- 1.4 The potential risks considered within the current review were as follows:
 - Appropriate funding may not be in place.
 - Effective governance arrangements are not defined.
 - Performance in addressing identified priorities may not be monitored, potentially impacting organisational objectives.

2. Detailed Audit Findings

- 2.1 Our detailed audit findings are set out below. All matters arising and the related recommendations and management actions are detailed in **Appendix A**.

Project Performance: Summary of the achievement of the project's key delivery objectives (time, cost, and quality).

- 2.2 At this audit, when assessing progress against the original delivery objectives, the following was evidenced.

Time

- 2.3 Throughout the project/programme progression, monthly updates were submitted to and reviewed at the task and finish groups, formerly referred to as the Bronze Command. One such update, denoted as AP12 and dated 7th March 2024, underscored the steady advancement and completion of works within the established programme i.e. Emergency Propping Work completed September 2023, wards 7, 9 and 12 were reopened December 2023, ward 11 reopened January 2024 and ward 10 reopened March 2024.
- 2.4 There remained extensive work to be undertaken on the ground floor at WGH e.g. at Outpatient Departments A and B and the Physiotherapy Department (which was currently in use and being temporarily supported with props).
- 2.5 These updates served as checkpoints, ensuring that the project/programme remained on course and aligned with its overarching objectives e.g. the project/programme is on target to be fully complete by March 2025.

Cost

Welsh Government approved an overall funding envelope of £12.8m for both 2023/24 & 2024/25 financial years, with the March 2024 financial report highlighting the following:

Budget	Spend
Overall Budget 2023/24	£6,531,997
Forecast Spend 2023/24	£6,531,997
Projected Spend 2024/25	£6,267,419
Projected Overall Total	£12,802,416

- 2.6 At the time of the report, the programme remained on budget and in accordance with the initial funding approval. Nevertheless, continued monitoring and reporting will be essential to promptly identify any deviations. This proactive approach will help ensure that any discrepancies are swiftly identified, allowing for timely adjustments, and maintaining financial stability throughout the project's delivery.

Quality

- 2.7 The UHB had directly appointed a supervisor to undertake ongoing quality reviews of the work carried out by the appointed contractor. However, the level of performance information being provided through to the task and finish group (previously Bronze Command) required enhancement (see **MA1**). It was noted that this level of detail was being considered within the technical management team.
- 2.8 A barcode monitoring system for the weekly inspection of the ceiling props was established in November 2023. Weekly reports had been provided to management and submitted as part of the (now) task and finish group meetings (previously Bronze Command). Any issues identified as part of the inspection were rectified promptly.
- 2.9 We noted that the scheduled works and approved funding will only cover remediation repairs to P1 and P2 planks (critical and high-risk respectively). The amber risk planks and green risk planks are outside of the scope of the current programme but will require regular inspection (initially every 12 months). This should be reviewed following the first inspection undertaken. In addition, the UHB need to be mindful that as any further national research is undertaken on the management of RAAC planks this may require a change to the routine inspection processes.
- 2.10 The regular inspections will be disruptive going forward and the UHB have been advised by the specialist structural engineers that further deterioration of RAAC planks should be expected and therefore further (future) costs may be incurred.

Also, given the concerns on the structural stability of RAAC planks any future maintenance that requires access to these areas will be challenging.

- 2.11 Whilst no significant issues were identified in relation to time and cost, we have raised an issue surrounding the content of the supervisor's report: however, this was not material to reduce the opinion. Accordingly **substantial assurance** has been determined in relation to the current project delivery.
- 2.12 The following sections of the report further outline the key observations that have contributed to the above – matters which require management attention, with low to moderate impact on residual risk exposure until resolved.

Governance - *To obtain assurance that adequate governance arrangements have been applied at the project, including e.g., project specific governance arrangements, integration with existing UHB structures, accountability to Welsh Government.*

- 2.13 Command-and-control structures were promptly established following the UHB triggering an internal major incident (IMI) in August 2023 i.e.
- Gold Command
 - Silver Command
 - Bronze Command (two operational groups - estates/facilities and service/operations).

Terms of Reference were established for all groups and minutes demonstrated good attendance by appropriate UHB personnel.

- 2.14 In January 2024, de-escalation took place where an updated structure was implemented i.e.
- Silver command reporting to Gold became the RAAC Control Group reporting to the Executive Team
 - Bronze Command became two task and finish groups (estates/facilities and service/operations).

Updated terms of reference for the task and finish groups were approved by the RAAC control group during Quarter 4 2023/24.

- 2.15 Action logs were maintained by all groups and reviewed at each meeting as a standing agenda item. The actions were clear and assigned to leads. The process of how decisions were logged by the various groups was raised at the WGH RAAC Internal Major Incident Report issued separately in March 2024 (providing reasonable assurance) and has not been duplicated as part of this report.
- 2.16 In terms of the project/programme governance arrangements for major capital spend, these are usually documented within a Project Execution Plan (PEP). However, due to the pace at which the individual projects had been initiated and the individual sampled contracts being less than £1m, the UHB applied their internal capital procedures that documented items such as roles and responsibilities, appointments, confirmation certificates etc. Subsequent to the

audit, PEPs have been produced for each of the three elements of work being progressed during 2024/25 noting these contracts would be more than £1m.

- 2.17 The UHB had established a corporate risk surrounding RAAC during 2023 (Risk ID 1382), recognising the potential significant impact RAAC may have on the UHB's activities. The risk was agreed for de-escalation at Executive Risk Group in October 2023 and submitted to the Board in January 2024. However, no programme risk register was in place for the ongoing management of uncertainties within the project programme (see **MA2**).
- 2.18 There had been multiple update reports associated with the RAAC position provided to various Committees within the UHB (including the Board, Health and Safety Committee, Strategic Development and Operational Services Committee) noting the seriousness of RAAC and potential impact to the UHB's operational activities. However, reporting to Capital Sub-Committee was not to the same standard/ detail as that provided for other projects - and did not follow the template reporting used for other projects (see **MA3**).
- 2.19 Monthly meetings/updates had also been held with the Welsh Government during 2023/24 to discuss the RAAC programme and the ongoing cashflow position (recognising the fast-track nature of the works).
- 2.20 Recognising the need to act at pace to deliver the RAAC remedial works, **reasonable assurance** has been determined in relation to the governance arrangements observed.

Approvals - to obtain assurance that effective mechanisms were in place internally and with Welsh Government.

- 2.21 Following the establishment of the command-and-control structures (to reflect the UHB's declaration of an Internal Major Incident), Welsh Government approved funding totalling £12,800,000 (29th August 2023) – countersigned by the Chief Executive and Director of Finance on the 31st August 2023 and 6th September 2023 respectively. The pace of approval highlighted the intent of the UHB with support of the Welsh Government to mitigate the RAAC situation in a timely manner.
- 2.22 A sample of 10 construction contracts (totalling £5,338,731) from the RAAC project/programme were reviewed. All contracts had been executed in a timely manner and were approved in line with the UHB's scheme of delegation.
- 2.23 External advisers had been procured through the Welsh Procurement Alliance Framework, with approval noted through the UHB's Financial Control Group (September 2023). This meeting was attended by multiple executives including: the Director of Strategy and Planning, Director of Finance and Chief Executive.
- 2.24 Noting the necessity for works to begin at pace and the associated timely approval process, **substantial assurance** has been provided in relation to approvals.

Procurement - Appropriate arrangements were in place for items such as the contractor procurement methodology, contract execution etc.

- 2.25 A detailed procurement strategy was developed by the UHB, noting the need to act at pace to enable remedial works to be taken within the RAAC affected areas at WGH.
- 2.26 The UHB and Swansea Bay University Health Board had established a local framework to appoint suitably qualified construction contractors for minor/intermediate and major works across the south-west Wales region. The framework can deliver construction projects up to £2m separated into different lots according to financial value i.e. projects up to £200k and projects from £200k - £2m (net construction works value threshold).
- 2.27 All contracts sampled were below the £2m threshold; with all contractors reviewed included on the framework and within the appropriate lots. Utilising this framework reduced potentially long lead times associated with a traditional tendering route.
- 2.28 The 10 main contractor contracts sampled were aligned to the procurement strategy, were executed under seal, included insurance liability of £5m, a defect liability of 12 months and a performance guarantee bond where contracts exceeded £200k.
- 2.29 The UHB had appointed external advisers to act as consultants during the project lifecycle i.e. Cost Advisers, Structural Engineers, Supervisors etc. These advisers had been procured via the Welsh Procurement Alliance Framework on a direct award allowable under the framework terms and condition. This framework provides standard framework terms and conditions but also allows for alternative forms of professional services contracts to be negotiated by both parties. However, noting the need to appoint at pace, the standard framework conditions were understandably applied. For any future lettings from this framework, the UHB should undertake an evaluation of the advantages/disadvantages of utilising the available professional services contracts, the associated impact on programme and potential risks/ benefits of each alternative.
- 2.30 Whilst noting the necessity for works to begin at pace, **substantial assurance** has been provided in relation to approvals.

Appendix A: Management Action Plan

Matter Arising 1: Supervisor’s Role – Performance Information (Operation)		Impact
<p>The UHB had appointed an external company via the Welsh Procurement Alliance Framework to undertake the Supervisor role, to provide expert knowledge and assistance from the outset of the programme. The Supervisor visited the site on a regular basis (weekly) and provided formal reports to management, including photographs that identified progress and areas where works were still required.</p> <p>The Supervisor operated a defects management tool (SnagR) which was a live portal where defects/observations raised could be viewed by the design team and contractor. However, the formal management reports lacked this detail/ Additionally, there had been no ongoing reporting on these activities to the task and finish group (previously Bronze Command). Consequently, the ability to proactively monitor/ manage the contractors’ performance in rectifying issues was restricted.</p>		<p>Potential risk that:</p> <ul style="list-style-type: none"> The UHB may incur time prolongation and increased costs due to snagging not being rectified in a timely manner.
Recommendations		Priority
1	Highlight reports should be provided to the task and finish groups associated with the activities of the Supervisor, with any pertinent issues highlighted.	Low
Agreed Management Action		Target Date
1	Agreed – Update reports will be provided to the Task and Finish Group.	July 2024
		Responsible Officer
		Rob Elliott – Director of Estates, Facilities and Capital Management.

Matter Arising 2: Governance Arrangements – Risk Register (Design)		Impact
<p>A project/ programme risk register is a tool for managing uncertainties and enhancing the likelihood of success for capital projects, by enabling proactive risk identification, assessment, mitigation, and monitoring throughout the project lifecycle.</p> <p>There was no ongoing programme (operational) risk register in place for this RAAC programme of works. By having a clear understanding of potential risks, the various task and finish groups and other UHB committees would be able to develop proactive measures to reduce the likelihood or impact of adverse events.</p> <p>A well-maintained risk register also serves as a communication tool for stakeholders, providing transparency regarding potential risks and actions being taken to address them. As the programme progresses, this would be additionally important as the UHB had de-escalated the corporate risk associated with RAAC during 2023/24. Following the conclusion of the audit fieldwork, management had established risk registers for the individual projects that form the remaining elements of the programme (to be delivered during 2024/25). Proactive monitoring of these risks will be key to understanding any emerging risks that may need to be highlighted through the UHBs risk management processes.</p>		<p>Potential risk of:</p> <ul style="list-style-type: none"> Risks are not captured to ensure appropriate mitigation or escalation through the UHBs risk management processes.
Recommendations		Priority
2	<p>The UHB should establish a risk reporting arrangement for the remaining elements of the RAAC programme that clearly interlinks with the UHBs established risk management processes.</p>	<p>Medium</p>
Agreed Management Action		Target Date
		Responsible Officer






2	Agreed - Construction risk registers will be in place for the remaining elements of the works. A capital highlight report (including risks, time, cost etc) will be supplied to the Task and Finish Group.	July 2024	Rob Elliott - Director of Estates, Facilities and Capital Management.
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Matter Arising 3: Reporting Arrangements – Standardisation (Operation)		Impact	
<p>Frequent reporting was identified within the UHB’s governance structures due the seriousness of the RAAC situation and impacts of the UHB’s activities, including multiple reports during 2023/24 to:</p> <ul style="list-style-type: none"> • The Board. • Health and Safety Committee. • Strategic Development and Operation Services Committee. • Capital Sub – Committee. <p>However, the regular reporting to the Capital Sub-Committee and Strategic Development and Operation Service Committee was more focussed on the programme and not standardised in the same manner as other capital projects i.e. there was no RAG rating within the capital project update section, nor a full highlight report being received.</p>		<p>Potential risk of:</p> <ul style="list-style-type: none"> • Monitoring arrangement not being aligned to UHBs standards. 	
Recommendations		Priority	
3	The programme reporting arrangements should follow the established standardised approach to reporting within the Capital Sub-Committee papers.	Medium	
Agreed Management Action		Target Date	Responsible Officer
3	Agreed – An updated highlight report will be prepared by Estates and included for submission within the Capital Sub-Committee Governance Update paper.	August 2024	Rob Elliott – Director of Estates, Facilities and Capital Management.

Appendix B: Assurance opinion and action plan risk rating

Audit Assurance Ratings

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

	Substantial assurance	Few matters require attention and are compliance or advisory in nature. Low impact on residual risk exposure.
	Reasonable assurance	Some matters require management attention in control design or compliance. Low to moderate impact on residual risk exposure until resolved.
	Limited assurance	More significant matters require management attention. Moderate impact on residual risk exposure until resolved.
	Unsatisfactory assurance	Action is required to address the whole control framework in this area. High impact on residual risk exposure until resolved.
	Assurance not applicable	Given to reviews and support provided to management which form part of the internal audit plan, to which the assurance definitions are not appropriate. These reviews are still relevant to the evidence base upon which the overall opinion is formed.

Prioritisation of Recommendations

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

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

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



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Client Organisation	Hywel Dda University Health Board
Audit title	WG - H RAAC Programme
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Auditor(s)	Murray Gard

I would be very grateful if you would please take a moment to complete the below questionnaire which will enable us to ensure that we provide a high quality service. Feedback will also be also reflected within our key performance information reported to the Audit Committee.

	QUERY (enter "X" alongside)	Yes	No	Partially	n/a	Any further comments
1	Engagement & Communication Were you satisfied with the way the audit team engaged with you and colleagues?					
2	Professionalism Was the audit conducted in a positive, professional manner and respectful of your work commitments?					
3	Report Was the work reported in a clear, constructive way?					
4	Impact Was the audit beneficial eg providing assurance regarding current arrangements, or supporting improvements?					

**What words would you use to describe the audit service you have received?
Please feel free to enter up to six words into the boxes below:**

If you have any additional comments or suggestions, please add them below:

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Form Completed by	
Date	

Thank you very much for taking time to complete this questionnaire. Please return by email: huw.richards@wales.nhs.uk or post: **Huw Richards, Deputy Director (SSU), NWSSP Audit & Assurance, Floor 3, Companies House, Crown Way, Cardiff, CF14 3UB**
Alternatively, please feel free to call me on: **029 2090 5312**