

Waste Management Final Internal Audit Report

February 2022

Hywel Dda University Health Board

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

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Executive Summary

Purpose

The audit was undertaken to assess the UHB’s compliance with relevant waste management legislation and guidance, and progress towards agreed national and local waste reduction targets.

Overview

Reasonable assurance has been determined in this area. Early action to address the issues raised at this review would provide an improved opinion at future reports/follow up reviews.

A number of areas of good practice have been evidenced during the audit, which reflect the efforts of the Environment Team in the management of waste within the UHB. This is particularly notable recognising the significant challenges faced by Estates & Facilities in the last two years in responding to the Covid pandemic. The UHB has also recently achieved ISO 14001 reaccreditation.

We acknowledge the continuing clinical waste disposal capacity and performance issues (NHS Wales-wide), which are outside of the direct control of the UHB.

We also acknowledge the limited space available at certain UHB sites (e.g. Withybush), which inevitably restricts waste management practices in areas such as full source segregation to support recycling etc., but recognise the work being undertaken to address the same.

The matters requiring management attention include:

- The reporting to relevant forum(s) of a need for wider training delivery in respect of environmental awareness/recycling, to support the achievement of national / UHB targets; and
- The reminding of relevant staff groups of the importance of correct bin labelling, and the consistent provision of offensive (tiger-waste) bins in appropriate areas to ensure compliance with WHTM 07-01.

Other recommendations are within the detail of the report.

Report Classification

Reasonable



Some matters require management attention in control design or compliance.

Low to moderate impact on residual risk exposure until resolved.

Assurance summary¹

Assurance objectives	Assurance
1 Policy & Procedures	Substantial
2 Governance & Management	Reasonable
3 Contractual Arrangements	Reasonable
4 Operational Practice	Reasonable
5 Monitoring & Reporting	Substantial

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

Matters Arising		Assurance Objective	Control Design or Operation	Recommendation Priority
1	Documented Governance Structure	2	Operation	Low
2	Training	2	Operation	Medium
3	Operational Practices	4	Operation	Medium

1. Introduction

- 1.1 The Welsh Health Technical Memorandum (WHTM) 07-01: '*Safe Management of Healthcare Waste*' provides a framework for best practice waste management, to help healthcare organisations meet legislative requirements as well as identify opportunities to improve waste minimisation and reduce the associated environmental and carbon impacts of managing waste.
- 1.2 Effective waste management also requires compliance with the requirements of various regulatory regimes, including environment and waste, controlled drugs, infection control, health and safety and transport.
- 1.3 Noting that waste arising from Covid-19 patients is designated as infectious clinical waste, specific guidance has additionally been developed in the last year to assist the same i.e. '*Covid-19 waste management standard operating procedure*'.
- 1.4 The Welsh Government's waste reduction targets were set out in its '*Towards Zero Waste*' strategy, first published in 2010 – with a target of 70% recycling / recovery rate by 2025, and for all waste to be recycled by 2050.
- 1.5 This audit assessed Hywel Dda University Health Board's (the UHB) compliance with the relevant legislation and guidance, and progress towards agreed national and local waste reduction targets.
- 1.6 The potential risks considered in the review were as follows:
 - Safety of UHB staff, patients, visitors and contractors.
 - Environmental damage.
 - Non-compliance with legislation, risking financial penalties or prosecution.
 - Failure to achieve mandated waste reduction targets.
 - Reputational damage associated with negative publicity.
 - Failure to achieve value for money for the UHB.

2. Detailed Audit Findings

- 2.1 In undertaking this audit and presenting the findings within this report, we acknowledge the significant challenges faced by the UHB and its Estates & Facilities and Hotel Services teams during the last two years in responding to the Covid pandemic. These challenges have impacted waste management in a number of areas including performance of the clinical waste contract, delivery of waste training and operational compliance with established processes. Despite this unprecedented situation, the audit has identified minimal areas for management action (as set out below), which management have assured will be straight forward to address as the UHB moves out of the pandemic and returns to business as usual.

Policy & Procedures: To ensure an appropriate Waste Management Policy and supporting procedures were in place.

- 2.2 The UHB's Waste Management Policy was in date at the time of the current review, approved by the People, Planning & Performance Assurance Committee in October 2020. The document was comprehensive (excepting **MA1** regarding documented Executive responsibility) and in accordance with WHTM 07-01 requirements.
- 2.3 The UHB had also developed a range of supporting procedural documents, providing detailed guidance on waste management practices, in line with WHTM 07-01. Documents were available to all staff on the UHB's Environment Team intranet page.
- 2.4 Recognising the above, **substantial assurance** has been determined.

Governance & Management: To ensure an appropriate governance structure was operating, budgets were appropriately monitored, risks recorded, monitored and escalated, and training appropriately delivered.

- 2.5 The Director of Operations has designated responsibility for waste management within the UHB, with the Director of Capital, Estates & Facilities designated as the operational lead. Noting the same, the Executive lead (and associated responsibilities) were not defined within the Waste Policy (**MA1**).
- 2.6 Board-level Committee responsibility was defined within the Waste Policy as the People, Planning & Performance Assurance Committee, however this had recently changed to the Strategic Development and Operational Delivery Committee. The Capital, Estates & IM&T Sub-Committee holds ownership responsibility for waste management, with operational issues managed via Locality Waste Management Sub-Groups. A comprehensive terms of reference was in place for the Sub-Groups, however this required updating to reflect recent governance structure changes (**MA1**).
- 2.7 Budget and risk management arrangements were operating appropriately. Whilst noting the additional pressures on the management of clinical waste during the Covid pandemic, both budget and risks were managed within existing operational remits and / or available Covid recovery monies.
- 2.8 Management have developed a training matrix to identify waste training requirements and record training delivery – with clinical waste and general waste / recycling awareness training delivered to targeted staff groups to date. Work was also ongoing to develop a clinical waste e-learning package, to increase the reach of clinical waste training. Recognising this good practice to date, opportunities for the wider delivery of general waste/recycling awareness training across the UHB should be investigated, to support the achievement of UHB/national waste reduction targets (**MA2**).
- 2.9 Noting the above, **reasonable assurance** has been determined in this area.

Contractual arrangements: Assurance that waste contracts have been appropriately procured and were monitored against agreed performance targets. That appropriate controls operated in the payment of invoices.

- 2.10 The UHB's contractual arrangements for clinical waste (at both permanent sites and mass vaccination centres) were centrally procured and managed by NWSSP Procurement

Services as part of a wider consortium of NHS Wales organisations. Contracts had recently been extended with the existing providers.

- 2.11 General waste/recycling and confidential waste services had been procured via national frameworks. The UHB is planning to join the forthcoming All-Wales contract for general waste and recycling arrangements, which is scheduled to be tendered by NWSSP Procurement Services in 2022.
- 2.12 Contract awards complied with the UHB's Standing Financial Instructions and relevant Procurement Regulations, including exemptions relating to Covid-19 where necessary.
- 2.13 Clinical waste contract performance (including delivery against KPIs) is monitored at the All-Wales Clinical Waste Consortium. There had been an increased focus on performance during the last 18 months, to manage the service through the Covid pandemic. Continuing issues (NHS Wales-wide) with capacity and performance, which fall outside the agreed performance targets, were being discussed between the key parties at the time of review, with the potential for financial penalties to be imposed under the contract.
- 2.14 No adverse performance issues had been reported at the other waste contracts operating within the UHB.
- 2.15 Robust controls were also observed in the payment of invoices, to ensure payments were based on accurate charges and made in a timely manner.
- 2.16 **Reasonable assurance** has been determined, recognising the ongoing challenges associated with significant increase in clinical waste requiring removal, associated with the ongoing Covid-19 pandemic.

Operational Practice: A review of operational arrangements in key areas such as segregation, storage, safe handling, transfer etc. and associated record keeping, to assess compliance with the UHB's policy and procedures, WHTM 07-01 and relevant legislation. A review of waste reduction initiatives pursued by the Trust.

- 2.17 Operational practice was reviewed through a site visit to Glangwili General Hospital. The visit incorporated a review of waste management arrangements in areas including main entrances, wards, waiting areas, canteens and the external waste compound.
- 2.18 Good practice was observed in a number of areas reviewed, including:
 - The appropriate provision of suitably located bins and storage areas to safely dispose of waste;
 - Appropriate frequency of removal of waste from source to central holding areas, to prevent build-up of waste;
 - A well organised and secure waste compound; and
 - Appropriate labelling and packaging of waste in accordance with WHTM 07-01 requirements.
- 2.19 Whilst recognising these areas of good practice at Glangwili Hospital, management recognise that the space available at some other sites, for example Withybush (noting the other sites have not been visited for this audit) currently restricts waste management practices in areas such as full source segregation to support recycling.
- 2.20 It was noted also noted at Glangwili that there were some examples of mis-labelled bins in one ward visited, which may lead to the incorrect segregation of clinical waste (**MA3**).

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- 2.21 For a sample reviewed, waste consignment notes had been completed correctly and retained for the required period.
- 2.22 Clinical waste volumes increased significantly across NHS Wales (including at the UHB) during the Covid pandemic, due to the inclusion of Personal Protective Equipment (PPE) etc. as infectious clinical waste. NWSSP: Specialist Estates Services (SES) have published updated guidance (*'Covid-19 waste management standard operating procedure,'* June 2021) stating that organisations should comply with the requirements of WHTM 07-01 i.e. disposal of non-infectious PPE in the domestic or offensive waste streams where appropriate. Whilst offensive (tiger-stripe) waste bins had been appropriately provided in the ward areas visited at Glangwili Hospital, there were none available in the public areas observed, including main entrances, outpatient or waiting areas. Management also advised that the approach to offensive waste bin provision varies by site, with variances in approach between local Hotel Services teams, rather than a consistent UHB-wide approach being agreed (**MA3**).
- 2.23 Whilst the Covid pandemic has inevitably adversely impacted on the volume of required waste disposal within the UHB, a range of initiatives were evidenced to reduce waste and increase recycling rates (currently focused on improving source segregation at Wityhush Hospital – see above). The UHB has developed a Waste Management Action Plan (2022-2030), to support the Waste Management Policy, to meet regulatory requirements and support the achievement of national 'zero waste' targets going forward. The forthcoming All-Wales tender for a general waste and recycling contract is also expected to improve recycling rates, noting restrictions in the capacity for full segregation offered by the current contractor.
- 2.24 Noting the above, **reasonable assurance** has been determined in this area.
- Monitoring & Reporting:** That adequate arrangements were in place to record, monitor and report waste management activities, including incidents, compliance audits, costs and performance against agreed targets. That reporting was appropriately directed at both operational and executive level.
- 2.25 Appropriate arrangements had been determined for the recording and investigation of waste-related incidents. Only one incident had been recorded in the last three years (in June 2020, in relation to the non-collection of clinical waste from a GP Surgery), which had been appropriately investigated.
- 2.26 The UHB participates in a number of waste-related audits each year, including
- ISO14001 Environmental System external audit (at the draft report meeting, it was confirmed that following the recent ISO14001 audit, the UHB have achieved re-accreditation for 2021/22, with no non-conformities identified at the sites examined);
 - Clinical Waste Pre-Acceptance audits (reviewing the segregation and handling of clinical waste on Trust premises); and
 - Annual internal environmental audits (encompassing waste management).
- 2.27 The undertaking of audits in line with the required frequency, and the monitoring of actions taken in respect of recommendations made, was appropriately managed via the Audit Schedule & Tracker document. The actioning of recommendations is also monitored at the Locality Operational Waste Management Sub-Groups and reported to the Operational Performance Delivery forum.
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- 2.28 In addition to the above, wider robust reporting mechanisms were operating, including:
- Reporting to, and monitoring of waste performance and compliance, at the quarterly Waste Management Sub-Group meetings;
 - Reporting to the Operational Performance Delivery meetings on audit recommendations and actions;
 - Monthly Key Issues Report to the Director of Capital, Estates & Facilities, including a summary on waste management activities;
 - Annual reporting of the ISO14001 environmental management review to the Capital, Estates & IM&T Sub-Committee;
 - The annual Sustainability Report (including performance data) included within the UHB's Annual Report (noting that for 2020/21 the inclusion has not been required by Welsh Government); and
 - Exception reporting to Executives where significant issues have arisen.
- 2.29 Noting the above, **substantial assurance** has been determined in this area.

Appendix A: Management Action Plan

Matter Arising 1: Governance structure (Operation)	Impact
<p>The UHB’s waste management governance structure was defined within the terms of reference for the Operational Waste Management Sub-Groups, as follows:</p> <ul style="list-style-type: none"> • Business, Planning and Performance Assurance Committee (noting this was replaced by the Strategic Development and Operational Delivery Committee during 2021); • Capital, Estates & IM&T Sub-Committee; • Environmental Management Group; and • Locality Operational Waste Management Sub-Groups. <p>Management advised however that the Environmental Management Group no longer meets. Recognising also that the responsible Committee has recently changed, the terms of reference would benefit from updating to reflect current governance arrangements.</p> <p>It was also noted that, whilst the Waste Policy detailed the Director of Capital, Estates & Facilities as the operational lead for waste management, it did not define the Executive Lead with overarching responsibility.</p>	<p>Potential risk of:</p> <ul style="list-style-type: none"> • Insufficient clarity over current governance responsibilities.
Recommendations	Priority
<p>1.1.a The Operational Waste Management Sub-Groups’ terms of reference should be updated to reflect current governance arrangements.</p> <p>1.1.b The Waste Policy should be updated (at its next review) to define the Executive Lead for waste management.</p>	<p style="text-align: center;">Low</p>

Agreed Management Action	Target Date	Responsible Officer
1.1.a Update, circulate and obtain sign off from the Waste Management Group that amendment reflects current TOR.	1.1.a April 2022	Senior Environmental Officer
1.1.b Update the Waste Policy during next review (due 2023) with Exec Lead.	1.1.b October 2023	

Matter Arising 2: Training (Operation)	Impact
<p>WHTM 07.01 (6.33) highlights the importance of waste management training:</p> <p><i>"A policy for the safe management of healthcare waste cannot be effective unless it is applied carefully, consistently and universally. This requires that all healthcare staff should be aware of the policy/procedures and that the policy is implemented by trained and competent people;"</i> and</p> <p><i>"A training record will readily enable line managers to identify members of staff who are not receiving the appropriate level of training, and where such training should be focused."</i></p> <p>An 'Environmental Training Matrix' has been prepared by the Environment Team, identifying key categories of training (clinical waste, environmental awareness, spillage), and mapping training delivery against targeted staff groups. Clinical waste training, for example, has to date been delivered to Domestic, Porters and Infection Control, with environmental awareness training encompassing senior staff (to director level) and specific groups, such as Health & Safety. The Environment Team have also sought to raise recycling awareness at Withybush Hospital in the last year, as part of a wider ongoing recycling initiative.</p> <p>Clinical waste training has also been delivered to all clinical staff via the mandatory Infection Control induction module, and to specific clinical departments by the Environment Team where waste mis-segregation has been identified during routine pre-acceptance audits. Management are currently working with the UHB's clinical waste contractor to develop an e-learning package, which will further increase the reach of clinical waste training.</p> <p>Recognising this good practice to date, a wider reach of environmental awareness / recycling training would support the achievement of UHB/national waste reduction targets and the UHB's Waste Strategy. Management advised that consideration is being given to the provision of online recycling / environmental awareness training materials, and that environmental awareness training will also form part of the decarbonisation strategy, currently in development.</p>	<p>Potential risk of:</p> <ul style="list-style-type: none"> • Non-compliance with established UHB waste management procedures & operational requirements; • Reduced ability to achieve UHB / national waste reduction / recycling targets.

Recommendations		Priority
2.1 Management should engage with appropriate departments / forums to present the benefits of wider awareness/recycling training across the UHB.		Medium
Agreed Management Action	Target Date	Responsible Officer
2.1 This action requires input from the Corporate Training team as cannot be delivered by the Environmental Team alone as outlined during the audit process, although the Environment team will provide full support to developing the modules specific to this training. We will bring this to the attention of the Health Board's Corporate Training Team and seek support for this to be added to the mandatory training modules operating within the Health Board. We will need to update as a future action on how this is delivered in future by the Corporate Training Team.	March 2022 (referral to Corporate Training Team)	Senior Environmental Officer

Matter Arising 3: Operational Practice: Site Visit (Operation)	Impact
<p>A site visit was undertaken at Glangwili Hospital on 14 December 2021, to review a range of areas both within the hospital (including public entrances, wards, canteens, waiting rooms, waste storage rooms) and the external waste compound.</p> <p>The site was tidy and free from a build-up of waste at the time of the visit. Bins were provided at easily accessible points for the public and staff (including recycling facilities) throughout the site. The waste compound was well organised with lockable gates to provide security when not attended.</p> <p>However, the following issues were identified:</p> <ul style="list-style-type: none"> • Some examples of mis-labelled bins were observed on Cadog ward, for example bins labelled as domestic or infectious waste contained offensive waste (tiger-stripe) bin liners. Noting that labels were provided via reversable magnetic signs, this would be easy to rectify; and • The NWSSP: SES guidance document 'Covid-19 Waste Management Standard Operating Procedure v2' (June 2021), states that Health Boards should comply with WHTM 07-01 in the return to business as usual after the initial Covid response, including: <p><i>"Masks and face coverings worn by patients, visitors and non-clinical staff who have entered a clinical area should be discarded in the offensive waste stream if no longer required. Bins for these should be located at the entrances and exits where masks are given to those who do not have them."</i></p> <p>Whilst offensive (tiger-stripe) waste bins were available in clinical areas, and in one general canteen area visited, no offensive waste bins were observed in public areas such as main entrances, waiting areas or the Outpatients department.</p> <p>In noting the absence of offensive waste bins in the above-mentioned areas at Glangwili Hospital, Estates management has acknowledged that the approach to the provision of offensive waste bins</p>	<p>Potential risk of:</p> <ul style="list-style-type: none"> • Incorrect waste segregation, leading to over/under treatment of waste and potential associated financial penalties/ increased costs of waste disposal.

varies by site (and at some sites provides greater compliance than noted above), with local Hotel Services teams varying in their approach in implementation of the UHB's policy.		
Recommendations		Priority
<p>3.1.a Relevant staff should be reminded that bin labels should correctly reflect the bin liner in use.</p> <p>3.1.b Offensive (tiger-stripe) waste bins should be provided in appropriate public areas to support compliance with the WHTM 07-01 in the disposal of face coverings worn by patients, visitors and non-clinical staff.</p> <p>3.1.c Management should liaise with Hotel Services (locally / centrally) to promote consistent compliance with WHTM 07-01 in the approach to clinical waste segregation across the UHB.</p>		Medium
Agreed Management Action	Target Date	Responsible Officer
3.1.a Contact Ward Sister of Cadog ward at GGH referenced in the audit report, to highlight the importance of correct bin labelling to avoid over or under treatment of Waste. Provide bin and magnetic label codes.	March 2022	3.1.a & b Senior Environmental Officer (in conjunction with relevant ward staff / Hotel Services / Infection Control).
We will deliver required training with Clinical teams to address this action by Sept 2022.	Sept 2022	
3.1.b Contact GGH Hotel Services Manger to review the number of bins at entrances and exits for disposal of PPE to ensure there are sufficient numbers to support compliance with WHTM 07-01 and WG guidance. Documented outcome will be completed by June 2022.	June 2022	3.1.c Head of Property Performance in conjunction with Hotel Services
3.1.c Carry out face to face training for Senior domestic staff on all Acute sites to ensure consistent application of WHTM 07-01 requirements across all sites.	Sept 2022	

Appendix B: Assurance opinion and action plan risk rating

Audit Assurance Ratings

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

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

Prioritisation of Recommendations

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

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

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



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