

# Waste Management Draft Internal Audit Report

June 2022

Cwm Taf Morgannwg University Health Board



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### Acknowledgement

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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 issued in this area.

A number of areas of good practice were observed during the audit, including a comprehensive policy and supporting procedures, a wide-reaching training programme, the implementation of clear signage and instructions at Prince Charles Hospital, and robust monitoring and reporting mechanisms.

The challenges of waste management in the last two years, resulting from the significantly increased volumes of clinical waste during the Covid pandemic, are recognised. Despite these challenges, the UHB has increased the proportion of recycled waste in the last year, and is currently exceeding its internally-set targets.

Recommendations have been made to improve the application of agreed waste control processes in some areas at the sites visited.

## Report Classification

Reasonable



Some matters require management attention in control design or compliance.

**Low to moderate impact** on residual risk exposure until resolved.

## Assurance summary<sup>1</sup>

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

<sup>1</sup>The 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
1.1	Improved clarity of intended bin usage at Ysbyty Cwm Cynon.	4	Operation	Medium
1.2	The locking of waste holds when not in use.	4	Operation	Medium
2.1	Improved liaison between key staff to facilitate consistent application of waste segregation policies across sites.	4	Operation	Low

## 1. Introduction

- 1.1 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 recently been developed ('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 Cwm Taf Morgannwg 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

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

- 2.1 The UHB's Waste Management Policy was in date at the time of review, approved by the Quality & Safety Committee in November 2021, and was comprehensive and in accordance with WHTM 07-01 requirements.
- 2.2 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 via Sharepoint, and also issued directly to key identified staff, as captured in a Training Needs Analysis.
- 2.3 Recognising the above, **substantial assurance** has been determined.

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

- 2.4 The Chief Operating Officer is responsible for waste management within the UHB, with management delegated to the Assistant Director of Facilities.
- 2.5 The Quality and Safety Committee provides executive oversight, with operational management via the Environmental Management Steering Group. A "Green Group" has also been implemented, to consider environmental matters including those related to waste.
- 2.6 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.
- 2.7 A robust training programme was operating, encompassing a waste training package delivered by Infection Control for all new starters, a mandatory ESR training module for all staff ('Environmental, Waste & Energy Awareness' – with a 90% compliance rate most recently reported), and targeted face to face training resulting from the UHB's waste audit findings.
- 2.8 Noting the above, **substantial 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.

- 2.9 The UHB's contractual arrangements for clinical waste and general waste / recycling were managed via joint agreements with other NHS Wales organisations, centrally procured and managed by NWSSP Procurement Services. Contracts had recently been extended with the existing providers.
- 2.10 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.
- 2.11 Contract awards complied with the UHB's Standing Financial Instructions and relevant Procurement Regulations, including exemptions relating to Covid-19 where necessary.
- 2.12 Clinical Waste contract performance (including delivery against KPIs) is monitored at the All-Wales Clinical Waste Consortium, where there had been an increased focus on performance during the last 2 years, 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.
- 2.13 The general waste contract included provision for performance review and management, with management reporting that no adverse performance issues have been experienced in this area.
- 2.14 **Reasonable assurance** has been determined, recognising the ongoing challenges associated with significant increase in clinical waste, associated with the ongoing Covid-19 pandemic, requiring removal.

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**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.

- 2.15 Operational practice was reviewed through site visits to Prince Charles Hospital and Ysbyty Cwm Cynon. The visits incorporated a review of waste management arrangements in areas including main entrances, wards / departments, waste holds and the respective external waste compounds.
- 2.16 Good practice was observed in a number of areas reviewed, including the:
- appropriate provision of clearly labelled bins and storage areas to facilitate correct segregation of waste at Prince Charles Hospital;
  - appropriate frequency of removal of waste from source to central holding areas, to prevent build-up of waste; and
  - appropriate labelling and packaging of waste in accordance with WHTM 07-01 requirements.
- 2.17 It was noted however that some bins at Ysbyty Cwm Cynon were not clearly labelled, with inconsistencies between outer and inner bin colours, increasing the risk of mis-segregation of clinical waste. A number of waste holds at both sites had also not been locked when unattended (**MA1**).
- 2.18 For the sample reviewed, waste consignment notes had been completed correctly and retained for the required period.
- 2.19 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.
- 2.20 The UHB monitors and reports performance against its internal targets for utilisation of the offensive (tiger stripe) waste stream; and whilst recent performance (against a target of 30%) has been as low as 11% (dropping from a previous reported 29%), this has been attributed to both the continued impact of Covid (particularly the Omicron wave in November 2021) and the UHB's boundary expansion to incorporate the Princess of Wales Hospital. A Waste Target Action Plan was in place to facilitate improved performance in this area.
- 2.21 During the site visits, it was confirmed that offensive (tiger-stripe) waste bags had been appropriately provided in the areas visited at both sites, in line with the WHTM guidance and UHB targets. However, there were some inconsistencies at Ysbyty Cwm Cynon between the outer and inner bin colours, which may present confusion over the correct use (see **MA1**). The Waste team advised they were also aware of some variances in approach between local domestic teams and Infection Control across the UHB (**MA2**).
- 2.22 Despite the impact of the Covid pandemic, the UHB has reported that its recycling figure for 2021-22 is projected to be 75%: a significant increase on the 40% figure for the last reporting period (2020-21) and exceeding the 50% UHB recycling to landfill ratio target

set for 2021-22. A range of waste reduction initiatives and future plans were evidenced, to support both UHB and Welsh Government targets.

2.23 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.

2.24 Appropriate arrangements had been determined for the recording and investigation of waste-related incidents. The incidents reviewed during the audit had been thoroughly investigated with mitigating controls implemented to reduce the risks of recurrence.

2.25 The UHB participates in a number of waste-related audits each year, including

- ISO14001 Environmental System external audit;
- Clinical Waste Pre-Acceptance audits (reviewing the segregation and handling of clinical waste on Trust premises); and
- Monthly internal audits (but noting these had in some cases been postponed during Covid due to access issues).

2.26 A non-conformities log was maintained to monitor audit recommendations, with audits reported to key forums, including the Environmental Management Steering Group, and Infection Control and house-keeping forums.

2.27 Wider robust waste management reporting mechanisms were additionally operating, including the reporting of waste compliance via the Waste Compliance Scorecard (monitoring legislative, statutory and best practice requirements). Reporting was evidenced to the following forums:

- Environmental Management Steering Group;
- Infection Prevention & Control Group; and
- Quality & Safety Committee.

2.28 Recognising the above, **substantial assurance** has been determined in this area.

## Appendix A: Management Action Plan

Matter Arising 1: Operational Practice: Site Visit (Operation)	Impact
<p>Site visits were undertaken at Prince Charles Hospital (PCH) and Ysbyty Cwm Cynon (YCC) on 8 February 2022, to review a range of areas both within the hospital (public entrances, outpatients department, waiting rooms, waste storage rooms) and outside (waste compound, external storage areas).</p> <p>The sites were generally tidy and free from a build-up of waste at the time of the visits. Bins were provided at easily accessible points for the public and staff (including recycling facilities) throughout the sites. Waste holds at both sites, and individual bins at PCH, were clearly labelled to guide the user as to the correct contents.</p> <p>However, the following issues were identified:</p> <ul style="list-style-type: none"> <li>• Whilst at PCH generic metal bins were in use, with magnetic signage affixed to clearly guide the user as to the intended contents, at YCC the bins themselves were generally colour coded (e.g. green, orange etc.). However, in a number of cases observed, most notably in Outpatients, the bin liners inserted did not correspond with the outer bin colour (see also <b>MA2</b> below). Noting also an absence of signage/instruction on or near the bins at this site, this may present confusion and the potential for mis-segregation of waste. It is recognised that the procurement of additional bins of the correct colours is the responsibility of individual departments, and therefore outside the control of the Waste team.</li> <li>• A number of the waste holds observed at both sites had been left unlocked, despite being unattended. Noting these rooms contain clinical waste, and are located off public corridors, they should be locked when not in use. Management advised that the upgrading of waste hold</li> </ul>	<p>Potential risk of:</p> <ul style="list-style-type: none"> <li>• Incorrect waste segregation, leading to over/under treatment of waste and potential associated financial penalties/ increased costs of waste disposal.</li> <li>• Public access to clinical waste areas presents a health and safety risk.</li> </ul>

locks is currently on the Capital work programme to provide swipe access locks (as opposed to the current keypads), for improved security and ease of usage.		
<b>Recommendations</b>		<b>Priority</b>
1.1 At Ysbyty Cwm Cynon: <ul style="list-style-type: none"> <li>• Staff should be reminded that outer bin colours should align with the bin liners used wherever possible; and</li> <li>• Signage should be placed on/near bins to clarify the required contents, in line with the good practice observed at PCH.</li> </ul>		<b>Medium</b>
1.2 Staff at both PCH and YCC should be reminded of the importance of locking waste storage rooms when not in use.		<b>Medium</b>
<b>Agreed Management Action</b>	<b>Target Date</b>	<b>Responsible Officer</b>
1.1 We encourage the use of all white 'Wybone' bins with magnetic signage within all departments and staff will be reminded to align bin colours with the bin liners used.	20 July 2022	Environment, Waste and Fleet Manager
1.2 The waste team are currently auditing health board sites to action signage, share presentations and posters, and encourage segregation. Staff will be reminded of the importance of locking waste storage rooms.		

Matter Arising 2: Operational Practice: Site Visit – Offensive Waste Stream (Operation)	Impact
<p>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> <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>The UHB has set internal targets for use of the offensive (tiger stripe) waste stream, to improve compliance with the WHTM requirement. As expected, performance in the last two years has been impacted by the effects of Covid (as has been the case across NHS Wales), including the most recent Omicron wave. The expansion of the UHB to incorporate the Princess of Wales Hospital has further impacted performance. Performance has been reported to have fallen from a previous 29% utilisation of the offensive waste stream (against a target of 30%) to as low as 11%. In addition to routine monitoring and reporting against the target, the UHB has implemented a Waste Target Action Plan to facilitate improved performance in this area.</p> <p>Tiger stripe bin liners were observed to have been provided in appropriate locations (both public and clinical) at both sites during the visits, to facilitate compliance with the above and reduce the usage of the infectious (orange) waste stream wherever possible. However, as discussed in <b>MA1</b> above, there were issues at YCC with inconsistencies in the placement of internal bin liners compared with the outer bin colour (including the tiger stripe bin liners), which may reduce the effectiveness of usage of the tiger stripe waste stream.</p> <p>The Waste Team acknowledged they had also noted some variance in local practices, with domestic staff and / or Infection Control in some cases making local decisions or applying agreed principles inconsistently, which may not align with the wider requirements. Whilst recognising that compliance with waste segregation requirements is formally reported to, and monitored by, the Infection</p>	<p>Potential risk of:</p> <ul style="list-style-type: none"> <li>• Non-compliance with WHTM 07-01.</li> <li>• Incorrect waste segregation, leading to over/under treatment of waste and potential associated financial penalties/ increased costs of waste disposal.</li> </ul>

Prevention & Control Committee, the Waste team have suggested the benefit of improved communication between the parties involved at a local level, and Audit would support this suggestion.		
<b>Recommendations</b>		<b>Priority</b>
2.1 The Waste Team should liaise with local domestic and Infection Control staff to promote consistent compliance with WHTM 07-01 in the approach to clinical waste segregation across the UHB.		<b>Low</b>
<b>Agreed Management Action</b>	<b>Target Date</b>	<b>Responsible Officer</b>
<p>2.1 The Waste management team regularly sends out reminders of WHTM 07-01 regulation and what is required from the Health Board to meet the segregation standard.</p> <p>All Senior IPC Nurses, Senior Clinicians, Senior Medical and Surgical leads, and all Facilities ILG leads will be briefed on a regular basis via email, Bulletins, SharePoint and Environmental and IP&amp;C meetings.</p> <p>We are also recommending regular internal waste audits following the relaxed measures of Covid 19, in addition to our annual pre-acceptance audits to again encourage waste segregation,</p>	31 July 2022	Environment, Waste and Fleet Manager

## 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:

	<b>Substantial assurance</b>	Few matters require attention and are compliance or advisory in nature. <b>Low impact</b> on residual risk exposure.
	<b>Reasonable assurance</b>	Some matters require management attention in control design or compliance. <b>Low to moderate impact</b> on residual risk exposure until resolved.
	<b>Limited assurance</b>	More significant matters require management attention. <b>Moderate impact</b> on residual risk exposure until resolved.
	<b>No assurance</b>	Action is required to address the whole control framework in this area. <b>High impact</b> on residual risk exposure until resolved.
	<b>Assurance not applicable</b>	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
<b>High</b>	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*
<b>Medium</b>	Minor weakness in system design OR limited non-compliance. Some risk to achievement of a system objective.	Within one month*
<b>Low</b>	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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