

NHS Lothian

Prison Healthcare (Pharmacy)

Internal Audit Report - Final
March 2026

Level of assurance:

Design	Limited
--------	---------

Effectiveness	Moderate
---------------	----------

Contents

1. Executive Summary	3
2. Detailed Findings	7
3. Observations	16
4. Appendix I: Background	20
5. Appendix II: Definitions	21
6. Appendix III: Terms of Reference	22
7. Appendix IV: Staff interviewed	23
8. Appendix V: Responsibilities, limitations and conformance...	24

RESTRICTIONS OF USE

The matters raised in this report are only those which came to our attention during our audit and are not necessarily a comprehensive statement of all the weaknesses that exist or all improvements that might be made. The report has been prepared solely for the management of the organisation and should not be quoted in whole or in part without our prior written consent. BDO LLP neither owes nor accepts any duty to any third party whether in contract or in tort and shall not be liable, in respect of any loss, damage or expense which is caused by their reliance on this report.

Distribution List		
For action	Jillian Torrens	Service Director Royal Edinburgh Hospital & Associated Services
	Mike Reid	General Manager
	Dzidzai Chipuroiro	Clinical Services Manager
For information	Paul Maguiness	Lead Clinical Pharmacist - Mental Health & Associated Services
	Audit Committee	Members

Report Status	
IA delivery team:	Claire Robertson, Gemma Macleod, Mary Yeatman
Fieldwork performed:	16 February 2026
Initial findings shared:	6 March 2026
Draft report issued:	19 March 2026
Management responses received:	26 March 2026
Final report issued:	27 March 2026



Executive Summary

Level of assurance: (see appendix II for definitions)		
Design	Limited	System of internal controls is weakened with system objectives at risk of not being achieved.
Effectiveness	Moderate	Evidence of non-compliance with some controls, that may put some of the system objectives at risk.

Summary of findings (see appendix II)			# of agreed actions
M	4		13
L	2		3
Total number of findings: 7			

Background

As part of the 2025-26 Internal Audit Plan, it was agreed that Internal Audit would conduct a review of the arrangements around Prison Healthcare, particularly focussing on pharmacy controls, at NHS Lothian.

There are two prisons within the NHS Lothian Health Board boundary - HMP Edinburgh which is a public sector prison with approximately 900 prisoners and HMP Addiewell which is a privately run, male only prison with approximately 800 prisoners.

A previous audit was carried out in prison healthcare in 2016 resulting in five “green” rated and one “amber” rated control objectives. This review focussed on the

governance arrangements and the complaints handling procedure which was newly devolved from the Patient Experience Team at the time.

There are a range of Standard Operating Procedures (SOPs) outlining pharmacy processes in the prison setting which were developed three years ago as there were no procedures in place at the time. Copies of the SOPs are stored in folders in storage cabinets within the Healthcare Centre at both sites.

The provision of Prison Pharmacy services does not involve the operation of a pharmacy on either prison site. The service is nurse-led; with the nursing management line in-charge of ordering medicines and receiving medicines outsourced externally from M&D Green.

There is a Pharmacy Technician at both Edinburgh and Addiewell; and three pharmacy support workers in Edinburgh and two in Addiewell. Prison Pharmacy is governed by two strategic lead Pharmacists who started post in January and job share across both sites.

Paper Kardex are in use for prescribing, and all medication orders are handwritten on a paper order sheet and scanned and sent to M&D Greens along with a copy of the Kardex.

There is a National Prison Pharmacy Group which includes Health Improvement Scotland (HIS), M&D Green and all Lead Pharmacists across all other HMP Scotland prisons to share best practice.

Purpose

The purpose of the Prison Healthcare Internal Audit was to provide assurance to management and the Audit and Risk Committee that the pharmacy controls are well designed and operating effectively; considering the processes around policies and procedures, acute medication ordering, weekly, monthly and supervised medication, medication reviews, repeat medication self requests and monitoring and reporting.

Conclusion

As part of our work, we have identified seven findings, four assessed as medium and two assessed as low significance.

There is a need to review all SOPs in place and streamline processes across both HMP Edinburgh and Addiewell.

Internal Audit identified significant resourcing constraints at both sites with a shortage of permanent medical staff and a reliance on locum doctors, with limited training opportunities for existing staff due to current constraints. As a result, there is a need for clearer role distinctions to better utilise staff expertise, particularly Pharmacy Technicians.

There is a heavy reliance on paper-based methods due to the lack of systems in place leading to increased risk of errors or inefficiencies, compounded by technical issues with Vision and lack of integration with Hospital system TRAK; resulting in the need for an electronic ordering system improve medicines management, however it was noted that the current system is commissioned nationally at a government level and therefore NHS Lothian do not have the ability to effect change in this area.

Additionally, current systems are hindered by the absence of clear performance reporting and KPIs due to paper-based prescribing; resulting in the need to for more clarity around reporting and governance structures in place.

Effective medicines management in prison healthcare requires clearly defined roles and responsibilities, which are currently lacking due to generic role descriptions and the absence of pharmacy-specific line management.

Lastly, there are discrepancies in medication order forms and a need for standardisation across both locations.

As a result of our audit, we are able to provide Limited assurance over the design and Moderate assurance over the operational effectiveness of NHS Lothian’s arrangements in place in relation to Prison Healthcare.



Executive Summary

SUMMARY OF GOOD PRACTICE

We noted a number of areas of good practice being demonstrated at the organisation in relation to Prison Healthcare. These include:

- ▶ Internal Audit can confirm that SOPs are physically available and easily accessible in a folder in the 'pharmacy' area on site, i.e., filing cabinet / control drug room.
- ▶ Internal Audit performed site visits at both HMP Edinburgh and HMP Addiewell on Tuesday 24th and Wednesday 25th March 2026. We undertook walk throughs of the following processes on site and can confirm that these activities were carried out in line with the documented SOPs:
 - Ordering Weekly, Monthly and Supervised Medications
 - Ordering Acute Medications
 - Receipt of Patients Medication from Pharmacy
- ▶ Management in Edinburgh noted that there has been a lot of positive improvement with layout, newly established pharmacy team and more streamlined processes. The re-fit that resulted in removing excess cabinets has now allowed for the team to have more working space.
- ▶ Management is able to download the vaccines temperature log as well as the log tag graphs from the 'Log tag' software used to monitor the fridge temperatures. Internal Audit observed that there is a sign in the Addiewell control room to remind staff to check the fridge temperature.
- ▶ Internal Audit reviewed a sample of 10 recent Medication Orders for both Edinburgh and Addiewell to check the review dates and confirm that any medications with review dates under two weeks had been highlighted for prescriber attention. No exceptions were identified in this testing.
- ▶ Internal Audit conducted sample testing and observed the following:
 - Internal Audit selected 10 acute medication orders from Edinburgh and 6 from Addiewell. We can confirm that the relevant order forms have been fully completed, signed and scanned before the cut off; and we can confirm that items ordered by the cut off were received the same day; and for items that were not ordered the same day, arrived the following day.
 - Internal Audit tested whether the relevant order sheets displayed a valid, authorised prescriber signature on each medication line. We

were able to confirm that they have been made in line with the documented procedure and the individual completing the order form was a valid member of the team at both Edinburgh and Addiewell.

- We observed that order sheets and Kardex copies are securely filed on site.
- Delivery notes are provided confirming what was sent in the delivery and is matched to the SPIN/patient name.
- Internal Audit conducted sample testing of Repeat Medication Self Request Forms. For Addiewell, we can confirm that all Repeat Medication Self Request forms were checked against the Kardex; and were valid and sent to the pharmacy to be ordered; and that there were no omissions.
- ▶ Patients in Addiewell have access to a computer Custodial Management System (CMS) accessible via their cells by which they can submit their Medication Self Requests. They are only able to do one request at a time until the initial request has been cleared which reduces the backlog and prevents duplicated orders. The Pharmacy team can also send out notifications to all patients in Addiewell via this system. These can be updates around certain cut off time periods i.e., Christmas time being closed.
- ▶ There is a Pharmacy Prison Group that meet monthly with all Pharmacy Leads across HMPs in Scotland, M&D Green and Healthcare Improvement Scotland to share best practise.

Our testing did not identify any significant concerns surrounding the controls in place to mitigate the following risks:

- ✓ Non-adherence to ordering schedules could create medication shortfalls or excessive stock.
- ✓ Unauthorised or inappropriate self-requests may lead to supply of medications not on the Kardex or past the review date.



Executive Summary

SUMMARY FINDINGS

Notwithstanding the areas of good practice noted above, we have noted areas where further improvements can be made:


- ▶ **Policies and Procedures** - Internal Audit has identified outdated and incomplete Standard Operating Procedures (SOPs), which are key for consistent operations. Key issues include overdue SOP reviews and lack of applicability to HMP Addiewell, with specific gaps such as missing processes for medication distribution and repeat requests via CMS. Additionally, the Acute Medication Ordering SOP is still in draft form, and SOPs reference outdated pharmacy contractors. There is also a lack of patient guidance on pharmacy arrangements. Lastly, staff engagement with SOPs is inadequate, as shown by incomplete 'Read and Sign' lists.
- ▶ **Resourcing Constraints** - Significant resourcing constraints affecting the healthcare services were identified at both sites, with a shortage of permanent medical staff and reliance on locum doctors. Whilst Pharmacy staffing gaps have improved with new support workers, training opportunities are limited due to current constraints. Additionally, specific training requirements restrict the resource pool, and agency staff usage is complex and requires various layers of approvals. Lastly, clearer role distinctions are needed to effectively utilise staff expertise; as Management noted that Pharmacy Technicians are underutilised and could be more patient-facing, focusing on high-risk patients needing medication monitoring to prevent serious health issues.
- ▶ **Systems** - Current prison healthcare systems are inefficient, relying heavily on paper-based methods that could lead to errors and inefficiencies. Management has 'read only' access to TRAK and uses Vision for patient notes, which is prone to technical issues and lacks integration with hospital systems. Work to align Kardex and Vision is seen as non-value adding and a duplication of effort, therefore is done inconsistently.
- ▶ **Key Performance Indicators** - Whilst Management noted that some operational reports are received from M&D Green; these are not clinically focussed, and current systems lack clear performance reporting and KPIs due to paper-based prescribing. Management is working on a clinical assurance plan; however, challenges exist in mimicking hospital pharmacy KPIs due to the lack of readily accessible data.
- ▶ **Governance and Oversight Arrangements** - Effective governance and oversight are essential for quality medicines management in prisons, however, there is a lack of formal documentation outlining governance structures, meeting frequencies, and reporting lines, with no Terms of Reference for the prison SMT. Internal Audit acknowledge that the Medicines Datix Review Group has been inactive since the previous Lead Pharmacist's departure and is intended to resume under new leadership; as well as establishing a Pharmacy Governance Group.
- ▶ **Roles and Responsibilities** - Currently, there is a lack of clarity regarding the Pharmacy Team's remit, especially with new initiatives like the Nicotine Replacement service. Generic role descriptions in place do not address the unique needs of the prison environment, and the lack of pharmacy-specific line management, with teams reporting to the Senior Charge Nurse, is a concern to staff. Staff have expressed the need for line management by a pharmacy professional to effectively address pharmacy-specific queries.
- ▶ **Order Forms and Medication Reviews** - There are discrepancies in acute order form templates between Edinburgh and Addiewell, with Edinburgh lacking a section for authorised signatures. Additionally, outdated Lloyd's order forms are still in use, necessitating updates to reflect current contractual arrangements. Sample testing revealed incomplete documentation of medication reviews, highlighting the need for improved record-keeping practices.

Detailed Findings



Detailed Findings

RISK: PROCESSES FOR ORDERING, RECEIVING AND MANAGING MEDICATIONS IN THE PRISON SETTING MAY NOT BE CLEARLY DOCUMENTED RESULTING IN A LACK OF COMPLIANCE WITH EXPECTED PROCEDURES; DELAYED OR INACCURATE ORDERING OF URGENT MEDICATIONS COULD LEAD TO MISSING OR INCORRECT ORDERS AND GAPS IN PATIENT CARE.

Finding 1 - Policies and Procedures	Type
<p>Having appropriate and up-to-date Standard Operating Procedures (SOPs) is essential for ensuring consistent and compliant operations within healthcare services.</p> <p>Internal Audit identified the following opportunities for improvement in the SOPs related to prison healthcare services:</p> <ul style="list-style-type: none"> • The SOPs were found to be one year overdue for review, with the next scheduled review date set for December 2024. • The SOPs only reference HMP Edinburgh, without clear applicability to HMP Addiewell. • Specific gaps were noted in the SOPs, such as the absence of set days for supplying medication to halls in Addiewell, the cut off-time for Addiewell and the lack of a documented process for repeat medication self-requests via CMS. • The Acute Medication Ordering SOP contains unresolved questions from the drafting process, indicating it has not been finalised. • The SOPs still refer to 'Lloyds', the former pharmacy contractors. • Whilst Spot checks are conducted by nurses in both locations to ensure medication supply levels and patient compliance, the SOP for this only refers to HMP Addiewell and the review date for the SOP is July 2020. <p>Internal Audit identified the following instances where there is a lack of documentation or procedure:</p> <ul style="list-style-type: none"> • There is currently no guidance issued to patients in the prison setting regarding pharmacy arrangements, leading to unrealistic expectations and complaints. Management is considering creating a document to explain NHS services, pharmacy processes, and expectations for new patients upon arrival. • In Addiewell, the process of reviewing and sorting medication lacks a second checker, unlike Edinburgh, where medication orders are checked by a second member of the pharmacy team. There is no SOP for the process of distributing medication from sorting to halls. • Whilst Management noted that checking fridge temperatures is part of the morning routine, the procedure for managing refrigerated medication, including insulin, is not formally documented. There is a 'recording the temperature in LogTag' guidance; however, there is an opportunity to build this or link this to the SOP regarding 'SOP 004 Receipt of Patients Medications from Pharmacy'. • Whilst Internal Audit observed that there is a sign in the control room in HMP Addiewell to remind staff to check fridge temperature. It is unclear if there is one in Edinburgh. <p>Whilst Management confirmed that there are 'read and sign' lists for all SOPs; our review of the 'Read and Sign' lists for two SOPs in Edinburgh showed that not all staff had signed to indicate they had read and understood the SOPs, with only 16 individuals having read the 'receipt of patients medication from pharmacy' SOP and 13 having read the 'Ordering Acute Medication' SOP. The sheet contains a blank table for staff to write their name in, meaning that it is not immediately clear where there are gaps in sign offs as there is no list of staff members.</p>	<p>Design</p> 



Detailed Findings


RISK: PROCESSES FOR ORDERING, RECEIVING AND MANAGING MEDICATIONS IN THE PRISON SETTING MAY NOT BE CLEARLY DOCUMENTED RESULTING IN A LACK OF COMPLIANCE WITH EXPECTED PROCEDURES; DELAYED OR INACCURATE ORDERING OF URGENT MEDICATIONS COULD LEAD TO MISSING OR INCORRECT ORDERS AND GAPS IN PATIENT CARE.

Finding 1 - Policies and Procedures			Type
Implication			Significance
If identified deficiencies in the SOPs are not addressed, this could lead to a lack of understanding of or adherence to standard processes which increases the risk of medication errors, compromised patient safety, and may lead to operational inefficiencies, potentially resulting in non-compliance with healthcare standards and patient complaints.			Medium
Recommendations	Action owner	Management response	Completion date
We recommend that management conduct a comprehensive review of all Standard Operating Procedures (SOPs) to ensure they are current, applicable, and fully documented. This review should focus on identifying any overdue updates, ensuring relevance to both HMP Addiewell and Edinburgh, and addressing any documentation gaps as mentioned above.	Paul Maguiness	SOPs will be reviewed in conjunction with nursing staff to ensure comprehensive documentation of medicine related processes in both HMP Edinburgh and HMP Addiewell	September 2026
Management should create a new SOP for the distribution of medication from the primary care centre to the patient; and link LogTag guidance to ‘SOP 004 Receipt of Patients Medications from Pharmacy’.	Paul Maguiness	New SOP will be created advised. Logtag guidance will be link to SOP 004.	June 2026
We recommend that the SOP “read and sign” sheets are updated to include a printed-out list of all staff that are required to read the SOPs. Staff will then need to sign and date next to their name; and management can follow up on any gaps.	Sharlyn Taylor	Read and sign sheets will be made available for all staff complete - 100 percent to be achieved by May 2026	May 2026
We recommend that management expedite the development and distribution of a comprehensive guidance document for patients within the prison setting. This document should clearly outline NHS services, pharmacy processes, and set realistic expectations for new patients upon arrival.	Sharlyn Taylor	Leaflets are available in Reception which outlines the services available to all prisons	April 2026
There is an opportunity to introduce a second checker system for reviewing and sorting medication in Addiewell, similar to the process in Edinburgh.	Paul Maguiness	Process will be evaluated and addressed.	June 2026



Detailed Findings

RISK: PROCESSES FOR ORDERING, RECEIVING AND MANAGING MEDICATIONS IN THE PRISON SETTING MAY NOT BE CLEARLY DOCUMENTED RESULTING IN A LACK OF COMPLIANCE WITH EXPECTED PROCEDURES; MEDICATION REVIEWS MAY BE OVERLOOKED OR NOT COMPLETED IN TIME, LEADING TO USE OF OUT-OF-DATE PRESCRIPTIONS.

Finding 2 - Resourcing Constraints	Type
<p>Ensuring appropriate resourcing is crucial for maintaining the quality and continuity of healthcare services, particularly in settings that require specialised care such as prison environments. Adequate staffing levels and the availability of skilled professionals are essential to meet the healthcare needs of the population effectively and to ensure compliance with regulatory requirements.</p> <p>During our audit, we identified significant resourcing constraints affecting the healthcare services at both sites. Management reported a shortage of permanent medical staff, with only one permanent General Practitioner (GP) available on Wednesdays, while locum doctors cover the remaining days.</p> <p>Additionally, there have been instances of short staffing in the pharmacy department, necessitating nursing staff to cover these gaps. Internal Audit acknowledge that significant improvements have been made with recruiting additional pharmacy support workers; and Management noted that they are in a significantly better position now than a year ago. There is a Resilience Plan is out of date with processes in place for primary care support workers to cover roles if required. The ‘current status’ of the resilience plan for both locations were ‘Amber’ status with reviews dates being September and December 2023.</p> <p>Staff expressed a desire to pursue further qualifications to enhance service delivery, however, the current resourcing constraints hinder their ability to allocate time for training.</p> <p>The requirement for specific training before working in the prison setting limits the available resource pool to cover staff absences, and the use of agency staff involves multiple layers of approval, further complicating staffing solutions.</p> <p>There is also a need for clearer role distinctions to ensure that staff with technical and clinical expertise are utilised effectively. Concerns were raised regarding the underutilisation of the Pharmacy Technician role, with suggestions to evolve it into a more patient-facing position focusing on high-risk patients, such as those requiring medication monitoring to prevent serious health issues.</p> <p>Management has advertised for two pharmacy technician positions but at the time of this audit these positions had not been filled. Furthermore, there is no permanent advanced nurse practitioner for Edinburgh, although recruitment efforts are underway to fill this position and alleviate some of the staffing pressures. Lastly, it was noted that the new Lead Pharmacist has not been added to the system for Edinburgh to be able to prescribe.</p>	<p>Design</p> 
Implication	Significance
<p>There is a risk that the ongoing resourcing constraints in prison healthcare services could lead to compromised patient care, non-compliance with regulatory standards, and increased staff turnover due to limited professional development opportunities.</p>	Medium



Detailed Findings


RISK: PROCESSES FOR ORDERING, RECEIVING AND MANAGING MEDICATIONS IN THE PRISON SETTING MAY NOT BE CLEARLY DOCUMENTED RESULTING IN A LACK OF COMPLIANCE WITH EXPECTED PROCEDURES; MEDICATION REVIEWS MAY BE OVERLOOKED OR NOT COMPLETED IN TIME, LEADING TO USE OF OUT-OF-DATE PRESCRIPTIONS.

Finding 2 - Resourcing Constraints			Type
Recommendations	Action owner	Management response	Completion date
We recommend that Management prioritise the recruitment of an advanced nurse practitioner to alleviate staffing pressures.	Sharlyn Taylor	Advanced nurse practitioner recruited- start date 06/04/2026	06/04/2026
We recommend that that Management streamline the approval process for staff bank to ensure timely coverage of absences. Establish a pool of pre-approved bank staff trained for prison settings to expedite staffing solutions.	Sharlyn Taylor and Dzidzai Chipuriro	There is an existing process for recruitment with NHS Lothian staff bank with development of a pool	Ongoing
There is an opportunity for Management to develop a strategic recruitment plan to attract permanent medical staff, including incentives such as competitive salaries and professional development opportunities.	Dzidzai Chipuriro	We are in the process of reviewing the GP sessions with service and leadership arrangements to enhance opportunities for professional development. Paper sent to REAS SLT 2.3.26. Paper to be discussed with Deputy CE	01/01/2027
We recommend that the Resilience Plan is updated to reflect the current environment i.e., staffing numbers and current status.	Sharlyn Taylor and Lauren Stewart	Resilience plan will include upskill all HCSW to carry roles in pharmacy. HCM and Senior charge will lead on this	01/01/2027



Detailed Findings


RISK: LACK OF CLEAR PERFORMANCE METRICS OR INSUFFICIENT OVERSIGHT MAY LEAD TO UNRECOGNISED COMPLIANCE ISSUES, REPEATED ERRORS, AND LIMITED VISIBILITY OF SYSTEM-WIDE RISKS.

Finding 3 - Key Performance Indicators			Type
<p>Establishing Key Performance Indicators (KPIs) and a robust measurement framework is crucial for effective performance reporting, to enable management to identify areas for improvement.</p> <p>There is a lack of clear performance reporting and there are currently no KPIs in place around medicines management in the prison setting and, due to the paper based prescribing approach, Management noted that it is difficult to collect data for meaningful measurement and reporting.</p> <p>There is an Assurance Framework with KPIs which is reported on every three months for Hospital Pharmacy; and Management are trying to formulate a plan to provide clinical assurance in relation to the prison service. Management noted that there would be difficulty in mimicking this Framework in the Prisons service as they would not have the same level of data input, and there is a lack of clarity on how to collect the KPIs and measure in a paper-based system. Whilst M&D Green provides updates on the service sent through expenditure reports; it was noted that it is not a clinically focused but rather an operational audit report. It was noted that it was part of the previous Lead Pharmacist's mission to make processes more auditable, however, he left post and the two new Lead Pharmacists are still getting up to speed.</p>			<p>Design and Effectiveness</p> 
Implication			Significance
<p>If the current lack of clear performance reporting and KPIs in medicines management within the prison setting is not addressed, there is a risk that areas of underperformance may not be identified and rectified in a timely manner.</p>			Medium
Recommendations	Action owner	Management response	Completion date
<p>Management should continue efforts to identify suitable metrics for measurement and should establish and document the arrangements for reporting on these, including how frequently they are reported and the recipients of reporting.</p>	Dzidzai/ Paul/ Sharlyn	<p>KPIs will be discussed and developed within the Governance Group. In the interim, measurement will rely on the existing paper-based system until the electronic system is implemented, and no timescales have yet been confirmed for this</p>	May 2026



Detailed Findings

RISK: LACK OF CLEAR PERFORMANCE METRICS OR INSUFFICIENT OVERSIGHT MAY LEAD TO UNRECOGNISED COMPLIANCE ISSUES, REPEATED ERRORS, AND LIMITED VISIBILITY OF SYSTEM-WIDE RISKS.


Finding 4 - Governance and Oversight Arrangements			Type
<p>Effective governance and oversight arrangements are crucial for ensuring the quality and safety of medicines management within the prison setting.</p> <p>There was a handover document, developed by the previous Lead Pharmacist which outlined some of the key meetings and governance groups for the benefit of the new Lead Pharmacists; however, we noted that this document merely lists the meetings and does not clearly outline the frequency of meetings, governance routes or reporting lines. Additionally, the document notes that there is no Terms of Reference available for the Prison SMT. There is no formal documentation of the governance structures or oversight arrangements for prison healthcare.</p> <p>Management noted that whilst there are many REAS governance oversight groups which feed into the Area Drug and Therapeutics Committee as the main reporting route into NHSL, there is a lack of clarity around the reporting and escalation groups.</p> <p>Management noted that there are intentions to establish a 'Pharmacy Governance Group'. Additionally, there is opportunity for meetings between Edinburgh and Addiewell to be set up to establish links, improve communication channels and create more awareness between each prison.</p> <p>There was previously a Medicines Datix Review Group which met every 2 months to review Datix incidents. This group has not met since the previous Lead Pharmacist left post 4-5 months ago. It is intended that this group will resume under the new lead pharmacists.</p>			<p>Design and Effectiveness</p> 
Implication			Significance
Without clear pathways for reporting and oversight, critical information may not reach the appropriate decision-makers, hindering timely interventions and improvements in the prison healthcare system which could lead to unresolved incidents.			Medium
Recommendations	Action owner	Management response	Completion date
There is an opportunity to formally document the governance/oversight arrangements within the Pharmacy remit as outlined on Page 14, including the frequency of meetings and escalation routes.	Paul Maguiness	Escalation for governance concerns will be documented and shared.	June 2026
We recommend that Management prioritise setting up the 'Pharmacy Governance Group' meeting cadence; and outline a Terms of Reference and set agenda for these meetings. Additionally, there is opportunity for meetings between Edinburgh and Addiewell to be set up to establish links, improve communication channel and create more awareness between each prison.	Paul Maguiness	This group will be re-established in April 2026.	April 2026
NHS Lothian should ensure that the Medicines Datix Review Group resumes meetings.	Paul Maguiness	This group will be re-established in April 2026.	April 2026



Detailed Findings

RISK 1: PROCESSES FOR ORDERING, RECEIVING AND MANAGING MEDICATIONS IN THE PRISON SETTING MAY NOT BE CLEARLY DOCUMENTED RESULTING IN A LACK OF COMPLIANCE WITH EXPECTED PROCEDURES.


RISK 6: LACK OF CLEAR PERFORMANCE METRICS OR INSUFFICIENT OVERSIGHT MAY LEAD TO UNRECOGNISED COMPLIANCE ISSUES, REPEATED ERRORS, AND LIMITED VISIBILITY OF SYSTEM-WIDE RISKS.

Finding 5 - Roles and Responsibilities			Type
<p>Clearly defined roles and responsibilities are important in the prison healthcare setting to ensure effective medicines management and service delivery.</p> <p>Currently, there is confusion regarding the scope of the Pharmacy Team's remit, particularly concerning new initiatives like the Nicotine Replacement service for patients however, it was noted that Management is awaiting clarification on these processes.</p> <p>There are generic role descriptions that exist within the Health Board for Pharmacy Technicians and Support Workers, however, Management noted that they do not address the unique requirements of the prison environment.</p> <p>Additionally, the lack of pharmacy-specific line management, with both teams reporting to the Senior Charge Nurse, has been identified as a concern; and Staff have expressed the need for line management by a pharmacy professional to address pharmacy-specific queries effectively.</p>			<p>Design and Effectiveness</p> 
Implication			Significance
There is a risk of ineffective medicines management and service delivery which could lead to delays in implementing new initiatives.			Low
Recommendations	Action owner	Management response	Completion date
We recommend that Management create a documented remit for the Pharmacy Team in both locations to accurately capture roles and responsibilities.	Paul Maguiness/Dzidzai Chipuriro/Mike Reid	Roles will be clarified, particularly the role of pharmacy technicians and associated clinical remit	June 2026
We recommend that Management review the suitability of line managers in the service.	Paul Maguiness/Dzidzai Chipuriro/Mike Reid	Managers to discuss current line management arrangements. Aim to take a paper through governance if agreement reached by end May	May 2026



Detailed Findings

RISK: PROCESSES FOR ORDERING, RECEIVING AND MANAGING MEDICATIONS IN THE PRISON SETTING MAY NOT BE CLEARLY DOCUMENTED RESULTING IN A LACK OF COMPLIANCE WITH EXPECTED PROCEDURES; DELAYED OR INACCURATE ORDERING OF URGENT MEDICATIONS COULD LEAD TO MISSING OR INCORRECT ORDERS AND GAPS IN PATIENT CARE.

Finding 6 - Order Forms and Prescriber Signatures			Type
<p>It is important that order forms are standardised across locations to ensure compliance and accuracy in processes. Internal Audit conducted sample testing which revealed discrepancies in the acute order forms between Edinburgh and Addiewell, with Edinburgh lacking a section for authorised signatures, unlike Addiewell.</p> <p>Furthermore, it was noted that Lloyds order forms, associated with the former pharmacy contractors, are still in use, indicating the need for updating documentation to reflect the current contractual arrangements.</p> <p>Internal Audit conducted sample testing to confirm that medication reviews were completed. There were nine instances from our sample of 20, where a review was done (as indicated by an updated future review date), however, there was no initial along with the date of the review.</p>			<p>Design and Effectiveness</p> 
Implication			Significance
The lack of standardisation in order forms across locations poses a risk of non-compliance and inaccuracies in procurement processes.			Low
Recommendations	Action owner	Management response	Completion date
We recommend that a standardised order form template be developed and implemented across all locations to ensure consistency and compliance in procurement processes. This template should include necessary sections such as authorised signatures and be regularly updated to align with current practices. Additionally, all materials related to former contractors should be disestablished.	Paul Maguiness	This document will be developed.	June 2026

Observations



Observations

1. Lead Pharmacists New Posts

In January, NHSL appointed two Lead Pharmacists to oversee strategic leadership and governance within Prison Pharmacy across Edinburgh and Addiewell. The Lead Pharmacists are on a fixed-term 12-month contract and share the role, with one working Monday, Tuesday, and alternate Wednesdays, and the other working Thursday, Friday, and alternate Wednesdays. It is important to note that their role does not include line management of technicians or direct workflow management. Internal Audit has acknowledged that the Lead Pharmacists are still acclimating to their roles, especially considering the absence of a predecessor for several months prior to their appointment.

2. GP coordinator role

Management is in the process of establishing a GP Coordinator role to enhance support for General Practitioners (GPs) and Advanced Nurse Practitioners (ANPs) on site. Currently, the responsibilities associated with this role are being managed by either a healthcare support assistant or an admin lead. The creation of this dedicated position aims to streamline the process of medication ordering and ensure efficient support for medical staff. Management note that the job description for the GP Coordinator role is pending approval.

3. Acute Medication Ordering

During the sample testing of Acute Medication Ordering, Internal Audit was unable to determine the exact time the orders were placed. However, it was confirmed that all items in the sample were delivered on the same day as they were ordered. This suggests that the orders were likely placed before the respective cut-off times of 11:30 am for Addiewell and 12:30 pm for Edinburgh. This assumption is based on the timely delivery of the medications, indicating compliance with the established ordering deadlines.

4. Control Mechanisms for Prescribing Medication

During the sample testing of medication authorisations on the Kardex, Internal Audit was unable to provide full assurance regarding the presence of an authorised prescriber for each medication line due to illegible handwriting, which hindered the verification of signatures. Additionally, Staff noted that they can spend weeks chasing a GP to review dates and that there are not enough columns on the Kardex for reviews.

Management has acknowledged this issue and have discussed the potential implementation of a standardised Kardex across all HMPs in Scotland during a recent monthly meeting with Healthcare Improvement Scotland (HIS) and other pharmacy leads. This initiative presents an opportunity to enhance the Kardex by incorporating a unique identifier column to clearly indicate the prescriber, thereby reducing the risk of fraud associated with unreadable signatures.

Internal Audit also explored the feasibility of appointing a dedicated person to review authorisations or maintaining specimen signatures for authorised signatories. Management highlighted the existing control mechanisms, through M&D Greens' database to cross-check signatures. Additionally, it is the role of pharmacists in conducting sense checks on medication accuracy; and they are responsible for contacting the prison for further information if necessary, ensuring an additional layer of verification in the medication prescribing process.



Observations

5. Development of a 28-day Supply of Medication Standard Operating Procedure

Management is in the process of developing a Standard Operating Procedure (SOP) to address the provision of a 28-day supply of medication. This initiative requires a comprehensive risk assessment to determine appropriate supply levels, particularly for medications that may be toxic or controlled drugs, which would necessitate supervision rather than possession. Additionally, considerations are being made for individuals who may be vulnerable, ensuring that medication management aligns with safety and health requirements. This approach aims to balance the need for medication accessibility with the imperative of maintaining stringent controls to mitigate risks associated with medication misuse or toxicity.

6. Sample Testing: Repeat Medication Self Request Forms

During the audit process, we were only able to test 6 repeat medication self requests forms compared to 10 in Addiewell. This was due to the SPIN numbers being redacted and we were unable to match the request form against the Kardex provided to the medication delivered.

7. Current System Limitations

Efficient and reliable systems are important to facilitate accurate record-keeping, reduce the risk of errors, and enhance communication between healthcare providers.

Our review identified several limitations within the current operating systems used in prison healthcare setting:

- Both prisons rely on paper-based systems, including handwritten Kardex and order forms, which can lead to errors and inefficiencies due to issues with legibility. Internal Audit conducted sample testing to confirm that the relevant order sheets displayed a valid, authorised prescriber signature on each medication line. Based on our sample of 10 medication orders in both Edinburgh and Addiewell, Internal Audit were unable to confirm this as it was difficult to identify and match all signatures to the approved prescribers due to handwriting. It was noted that M&D Greens hold a signatory database and it is their responsibility to verify the legality of the prescriber signature prior to dispensing.
- Management has indicated that they have 'read only' access to TRAK, a system used in NHS hospitals and instead utilise the 'Vision' program for patient notes, which is standard across all HMPs in Scotland. However, staff have reported that Vision is prone to freezing and closing unexpectedly, causing frustration and potential data loss.
- Furthermore, when a patient is transferred from prison to a hospital, notes on Vision are not accessible to hospital staff, as this system is not used in hospitals. Management has noted that the patient Kardex accompanies the patient to the hospital and serves as the most reliable patient record, rather than Vision.
- Additionally, Vision lacks the functionality to prescribe medications and while Management noted that there was some ongoing work to explore electronic prescribing through Vision, this development is anticipated to be 2-3 years away.
- Staff have advised that the contents of the Kardex should be replicated on Vision, but this is not consistently done by all staff due to the absence of documented requirements or processes. This task is perceived as a duplication of effort that does not add value. Internal Audit observed that Vision includes a symptom checker tab, but its utility is diminished if Vision is not fully complete and up to date.

Management noted that there is a lot to be improved in the day to day running of the medicine management function; especially with the prison service reliant on paper-based systems; there is a perception that Prison Healthcare has been left behind and there is a need to invest in an electronic ordering system to improve the quality and efficiency of patient care. However, it was noted that Vision is commissioned nationally at government level so changes or improvements to the system are outwith NHS Lothian control.

Appendices



Background

It was agreed as part of the 2025-26 Internal Audit Plan that Internal Audit would conduct a review of the arrangements around Prison Healthcare, particularly focussing on pharmacy controls, at NHS Lothian.

There are two prisons within the NHS Lothian Health Board boundary - HMP Edinburgh which is a public sector prison with approximately 900 prisoners and HMP Addiewell which is a privately run, male only prison with approximately 800 prisoners.

A previous audit was carried out in prison healthcare in 2016 resulting in five “green” rated and one “amber” rated control objectives. This review focussed on the governance arrangements and the complaints handling procedure which was newly devolved from the Patient Experience Team at the time.

Management advised that one of the key areas of risk within the prison healthcare setting, and one which most of the complaints received relates to, is pharmacy.

There are a range of Standard Operating Procedures that came out about three years ago as there were no procedures in place at the time and outline the pharmacy controls for the following:

- Ordering Weekly, Monthly and Supervised Medications
- Acute Medications
- Receipt of Patients Medication from Pharmacy
- Kardex Review Dates

These are accessible via folders in cabinets the Pharmacy Department within the Healthcare Centre at both locations.

Prison Pharmacy is a non-dispensing pharmacy and a nurse-led organisation; with the nursing management line in-charge of ordering medicines and receiving medicines outsourced externally from M&D Greens.

There is a Pharmacy Technician at both Edinburgh and Addiewell; and three pharmacy support workers in Edinburgh and two in Addiewell.

For prescribing medication, there are three Advanced Nurse Practitioners (ANP) in Addiewell, with two of these temporarily covering Edinburgh; and four Non-Medical Prescribers across Edinburgh, with two of these also covering Addiewell.

There are newly appointed two Lead Pharmacists who started post in January and job share across both Edinburgh and Addiewell. They are the strategic leads and oversee Governance within Prison Pharmacy.

All staff that work in the prisons have to complete three-day training which includes boundaries i.e., how it operates, security; talk to me training and suicide prevention and personal protection training.

At both Edinburgh and Addiewell, Paper Kardex are used and act as the prescription for patients. They are stored in ring binders in filing cabinets. They include the Name, Scottish Prisons Identity Number (SPIN), and Date of Birth.

All Medication required is ordered and handwritten on an order sheet and scanned and sent to M&D Greens; whether that is through repeat prescriptions, acute ordering prescriptions or self-requests.

The programme 'Vision' which is central across HMP Scotland is used for patient notes i.e., bloods, checking medicines or approving. They have read-only access to TRAK which is used in NHS hospitals.

There are a number of key governance forums including the National Prison Pharmacy Group, Prison Clinical Management Team, Prison Senior Management Team and Medicines Datix Review Group.

The National Prison Pharmacy Group is with Health Improvement Scotland (HIS), M&D Green and all Lead Pharmacists across all other HMP Scotland prisons to share best practice.



Appendix I: Definitions

Level of assurance	Design of internal control framework		Operational effectiveness of controls	
	Findings from review	Design opinion	Findings from review	Effectiveness opinion
Substantial	Appropriate procedures and controls in place to mitigate the key risks.	There is a sound system of internal control designed to achieve system objectives.	No, or only minor, exceptions found in testing of the procedures and controls.	The controls that are in place are being consistently applied.
Moderate	In the main there are appropriate procedures and controls in place to mitigate the key risks reviewed albeit with some that are not fully effective.	Generally a sound system of internal control designed to achieve system objectives with some exceptions.	A small number of exceptions found in testing of the procedures and controls.	Evidence of non compliance with some controls, that may put some of the system objectives at risk.
Limited	A number of significant gaps identified in the procedures and controls in key areas. Where practical, efforts should be made to address in-year.	System of internal controls is weakened with system objectives at risk of not being achieved.	A number of reoccurring exceptions found in testing of the procedures and controls. Where practical, efforts should be made to address in-year.	Non-compliance with key procedures and controls places the system objectives at risk.
No	For all risk areas there are significant gaps in the procedures and controls. Failure to address in-year affects the quality of the organisation's overall internal control framework.	Poor system of internal control.	Due to absence of effective controls and procedures, no reliance can be placed on their operation. Failure to address in-year affects the quality of the organisation's overall internal control framework.	Non compliance and/or compliance with inadequate controls.

Recommendation significance	
High	A weakness where there is substantial risk of loss, fraud, impropriety, poor value for money, or failure to achieve organisational objectives. Such risk could lead to an adverse impact on the business. Remedial action must be taken urgently.
Medium	A weakness in control which, although not fundamental, relates to shortcomings which expose individual business systems to a less immediate level of threatening risk or poor value for money. Such a risk could impact on operational objectives and should be of concern to senior management and requires prompt specific action.
Low	Areas that individually have no significant impact, but where management would benefit from improved controls and/or have the opportunity to achieve greater effectiveness and/or efficiency.



Appendix II: Terms of reference

Extract from terms of reference

Purpose

The Prison Healthcare Internal Audit aimed to provide assurance to management and the Audit and Risk Committee that the pharmacy are well designed and operating effectively. This review considered the processes around Policies and Procedures, Acute Medication Ordering, Weekly, Monthly, and Supervised Medications, Receipt of Medications from Pharmacy, Medication Reviews, Repeat Medication Self Requests and Monitoring and Reporting.

Key risks

- Processes for ordering, receiving and managing medications in the prison setting may not be clearly documented resulting in a lack of compliance with expected procedures.
- Delayed or inaccurate ordering of urgent medications could lead to missing or incorrect orders and gaps in patient care.
- Non-adherence to ordering schedules could create medication shortfalls or excessive stock.
- There is a risk of medication errors or missing stock if deliveries are not checked properly against original requests and Kardex entries.
- Medication reviews may be overlooked or not completed in time, leading to use of out-of-date prescriptions.
- Unauthorised or inappropriate self-requests may lead to supply of medications not on the Kardex or past the review date.
- Lack of clear performance metrics or insufficient oversight may lead to unrecognised compliance issues, repeated errors, and limited visibility of system-wide risks.

Exclusions

The scope of the review was limited to the areas documented under the scope and approach. All other areas were considered outside of the scope of this review. Our review does not provide assurance over all aspects of prison healthcare.

Where sample testing is undertaken, our findings and conclusions were be limited to the sample tested only. Please note that there is a risk that our findings and conclusions based on the sample may differ from the findings and conclusions we would reach if we tested the entire population from which the sample is taken.



Appendix III: Staff interviewed

BDO LLP appreciates the time provided by all the individuals involved in this review and would like to thank them for their assistance and cooperation.

Dzidzai Chipuriro	Clinical Services Manager
Mike Reid	General Manager
Paul Maguiness	Lead Clinical Pharmacist - Mental Health and Associated Services
Stephen McBurney	Associate Director of Pharmacy
Craig Stenhouse	
Sharlyn Taylor	Healthcare Manager - HMP Edinburgh / HMP Addiewell
Oscar SanchezMontes	Lead Pharmacist
Lana Mackenzie	Pharmacy Technician - Edinburgh
Angela Kiernan	Lead Pharmacist
Karen Thomas	Pharmacy Technician - Addiewell



Appendix IV: Responsibilities, limitations and conformance with the Global Internal Audit Standards

Management responsibilities

The Board is responsible for determining the scope of internal audit work, and for deciding the action to be taken on the outcome of our findings from our work.

The Board is responsible for ensuring the internal audit function has:

- The support of the Company's management team.
- Direct access and freedom to report to senior management, including the Chair of the Audit Committee.
- The Board is responsible for the establishment and proper operation of a system of internal control, including proper accounting records and other management information suitable for running the Company.

Internal controls covers the whole system of controls, financial and otherwise, established by the Board in order to carry on the business of the Company in an orderly and efficient manner, ensure adherence to management policies, safeguard the assets and secure as far as possible the completeness and accuracy of the records. The individual components of an internal control system are known as 'controls' or 'internal controls'.

The Board is responsible for risk management in the organisation, and for deciding the action to be taken on the outcome of any findings from our work. The identification of risks and the strategies put in place to deal with identified risks remain the sole responsibility of the Board.

Limitations

The scope of the review is limited to the areas documented under Appendix II - Terms of reference. All other areas are considered outside of the scope of this review.

Our work is inherently limited by the honest representation of those interviewed as part of colleagues interviewed as part of the review. Our work and conclusion is subject to sampling risk, which means that our work may not be representative of the full population.

Internal control systems, no matter how well designed and operated, are affected by inherent limitations. These include the possibility of poor judgment in decision-making, human error, control processes being deliberately circumvented by employees and others, management overriding controls and the occurrence of unforeseeable circumstances.

Our assessment of controls is for the period specified only. Historic evaluation of effectiveness may not be relevant to future periods due to the risk that: the design of controls may become inadequate because of changes in operating environment, law, regulation or other; or the degree of compliance with policies and procedures may deteriorate.

Conformance with the Global Internal Audit Standards This engagement has been conducted in accordance with the Institute of Internal Auditors' Global Internal Audit Standards.

FOR MORE INFORMATION:

Claire Robertson, Head of Risk Advisory
Services - Scotland

07583 237 579
Claire.Robertson@bdo.co.uk

Freedom of Information

In the event you are required to disclose any information contained in this report by virtue of the Freedom of Information Act 2000 ("the Act"), you must notify BDO LLP promptly prior to any disclosure. You agree to pay due regard to any representations which BDO LLP makes in connection with such disclosure, and you shall apply any relevant exemptions which may exist under the Act. If, following consultation with BDO LLP, you disclose this report in whole or in part, you shall ensure that any disclaimer which BDO LLP has included, or may subsequently wish to include, is reproduced in full in any copies.

Disclaimer

This publication has been carefully prepared, but it has been written in general terms and should be seen as containing broad statements only. This publication should not be used or relied upon to cover specific situations and you should not act, or refrain from acting, upon the information contained in this publication without obtaining specific professional advice. Please contact BDO LLP to discuss these matters in the context of your particular circumstances. BDO LLP, its partners, employees and agents do not accept or assume any responsibility or duty of care in respect of any use of or reliance on this publication, and will deny any liability for any loss arising from any action taken or not taken or decision made by anyone in reliance on this publication or any part of it. Any use of this publication or reliance on it for any purpose or in any context is therefore at your own risk, without any right of recourse against BDO LLP or any of its partners, employees or agents.

BDO LLP, a UK limited liability partnership registered in England and Wales under number OC305127, is a member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms. A list of members' names is open to inspection at our registered office, 55 Baker Street, London W1U 7EU. BDO LLP is authorised and regulated by the Financial Conduct Authority to conduct investment business.

BDO is the brand name of the BDO network and for each of the BDO member firms.

BDO Northern Ireland, a partnership formed in and under the laws of Northern Ireland, is licensed to operate within the international BDO network of independent member firms.

The matters raised in this report are only those which came to our attention during our audit and are not necessarily a comprehensive statement of all the weaknesses that exist or all improvements that might be made. The report has been prepared solely for the management of the organisation and should not be quoted in whole or in part without our prior written consent. BDO LLP neither owes nor accepts any duty to any third party whether in contract or in tort and shall not be liable, in respect of any loss, damage or expense which is caused by their reliance on this report.

Copyright © 2026 BDO LLP. All rights reserved. Published in the UK.

www.bdo.co.uk

