

NHS Lothian
Internal Audit Report 2021/22
Analytical Services and Robustness of Data

Assurance Rating: Moderate Assurance

Date 8 June 2022

Final Report

Contents

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2 Management Action Plan

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Timetable

- Date closing meeting held: Client responded directly To audit report
- Date draft report issued: 20 May 2022
- Date management comments received: 01 June 2022
- Date Final report issued: 8 June 2022
- Date presented to Audit and Risk Committee: 20 June 2022

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Executive Summary

Introduction

Data migration is the process of moving data from one system to another and is often used to consolidate data from various sources. NHS Lothian migrates data to Public Health Scotland (PHS) for centralised monitoring, recording and decision making.

The effective management of migration is essential to ensure data is accurately and securely transferred. Both NHS Lothian and Public Health Scotland will use data to inform decision making and require robust assurance that migrated data is accurate and current.

Scope

Our review considered the controls system in place around the migration of data between NHS Lothian and Public Health Scotland (formally Information Services Division, ISD). We will consider how NHS Lothian have assurance over the robustness of data used for reporting purposes and utilised to inform decisions within NHS Lothian and the wider NHS.

Approach

Through our planning work we identified the following risks which formed the basis of the audit work undertaken.

- Standard Operating Procedures (SOP)'s are not in place to ensure data collection and migration is consistent with local and national requirements.
- Data entry is not checked for accuracy prior to submission.
- Staff do not receive adequate training to allow them to perform the duties expected of them.
- Data input cannot be traced to source documentation and as such the Board cannot place reliance on the accuracy of the data.
- Data is not input in real time and as such may become skewed.
- Migration is not rerun to ensure retrospective changes are captured in the reporting process.
- Data which undergoes migration between NHS Lothian and Public Health Scotland is not backed up before execution.
- Migration processes are not routinely tested.
- The reported data is not robust and as such is not used to inform decision making within NHS Lothian and the wider NHS.

A complete list of staff involved in the audit and documents reviewed can be seen at Appendix 1.

Acknowledgments

We would like to thank all staff consulted during this review for their assistance and cooperation.

Limitations in Scope

Please note that our conclusion is limited by scope. It is limited to the risks outlined above. Other risks that exist in this process are out with the scope of this review and therefore our conclusion has not considered these risks. Where sample testing has been undertaken, our findings and conclusions are limited to the items selected for testing.

This report does not constitute an assurance engagement as set out under ISAE 3000.

Summary of Findings

We have concluded that the controls in place around the migration of data between NHS Lothian and Public Health Scotland, and the robustness of the data provides a **MODERATE** level of assurance. The table over the page provides a summary of the findings. The ratings assigned are based on the agreed internal audit rating scale (**Appendix 2**).

Detailed findings, recommendations and agreed management actions are found in Section 2 of this report.

MODERATE assurance

Summary of Processes followed and controls

Guidance documentation is in place to direct staff on data extraction and migration - the eHealth TrackCare User Scottish Morbidity Record (SMR) Extracts Process Policy has been produced by the Clinical Application & Integration Manager to guide staff on the extraction of data files from TrakCare and submission to PHS.

Error reports are run to identify and correct errors and data validation checks are built into the Scottish Morbidity Record (SMR) extract process within TrakCare. Data is extracted for upload to PHS throughout each month.

External quality assessment of the data held by NHS Lothian is periodically carried out by the Data Quality Team from PHS.

The ISD Liaison Group meets quarterly and attended by representatives from NHS Lothian and PHS. The Group's remit includes the oversight and scrutiny of the process for correcting errors.

Executive Summary

HIGH MEDIUM LOW ADVISORY



Ref	Issue	H	M	L	A
2.1	Risk area as per scope: Data entry is not checked for accuracy prior to submission	-	1	-	-
	PHS is not routinely appraised of all coded episodes, with some locations reporting high numbers of uncoded episodes				
2.2	Risk area as per scope: The reported data is not robust and as such is not used to inform decision making within NHS Lothian and the wider NHS	-	1	-	-
	The Terms of Reference for the ISD Liaison Group require update and reporting arrangements confirmed				
2.3	Risk as per scope: Standard Operating Procedures (SOP)'s are not in place to ensure data collection and migration is consistent with local and national requirements	-	-	1	-
	The TrakCare User SMR Extracts Process Document is not readily available to staff and requires additional content				
2.4	Risk area as per scope: Data entry is not checked for accuracy prior to submission	-	-	1	-
	Errors remain outstanding in patient records several weeks after discharge/ treatment.				
2.5	Risk as per scope: Staff do not receive adequate training to allow them to perform the duties expected of them	-	-	1	-
	Records of staff training is not routinely kept or updated				
2.6	Risk as per scope: Data is not input in real time and as such may become skewed	-	-	-	1
	Data is not being confirmed as entered in real time				
2.7	Risk as per scope: The reported data is not robust and as such is not used to inform decision making within NHS Lothian and the wider NHS	-	-	-	1
	Findings from PHS Data Quality Audits are not reported or acted on promptly				
TOTAL		-	3	3	1

Follow Up

Approximately two weeks following issue of the final Internal Audit report, a member of the Audit Team will issue an 'evidence requirements' document for those reports where management actions have been agreed. This document forms part of the follow up process and records what information should be provided to close off the management action.

The follow-up process is aligned with the meetings of the Board's Audit & Risk Committee. Audit Sponsors will be contacted on a quarterly basis with a request to provide the necessary evidence for those management actions that are likely to fall due before the next meeting of the Audit and Risk Committee.

Management Action Plan

Finding 2.1 – PHS is not routinely appraised of all coded episodes, with some locations reporting high numbers of uncoded episodes

MEDIUM

Control

The timetable for the submission of SMRs January 2021 – December 2021, provided by PHS advises staff on the submission to PHS of SMR Monthly Outstanding Coding/Submission Reports.

These reports are produced by the PA for the Head of Health Records to coincide with the “Last date to submit data” as much as possible, and sent to PHS within a few days to ensure an accurate measure of completeness is recorded.

The reports list the number of accurately coded episodes submitted in that month’s upload alongside those that were incomplete, broken down by NHS clinical site.

Observation

We reviewed the submissions prepared for PHS on the 12 July, 11 September and 11 November 2021, confirming that the coded episode reports relating to SMR01 and SMR02 have been prepared according to the timetable for submission.

Despite this being a requirement of PHS, no similar report is produced for SMR00 submissions. Also, while a spreadsheet is maintained locally to record the ongoing count of all coded SMR04 episodes, we were advised by the Health Records Manager at the Royal Edinburgh Hospital the no similar reporting of this data is made to PHS. Staff were not able to identify during our testing or fieldwork a reason for these reports not being produced.

Further review of the SMR01 on SMR02 submissions have noted long term issues with the submission of completed coded SMR01 data at four locations, summarised below:

Murrayfield - 2 of 66 episodes coded for the 3 months (3%) - SMR01

The Edinburgh Clinic - 0 of 71 episodes coded for the 3 months (0%) - SMR01

Lower figures have also been noted for:

St Columbas - 27 of 41 episodes coded in May 2021 (66%) - SMR01

St Michaels - 2 of 9 episodes coded in May 2021 (22%) - SMR01

Risk

Without the complete and timely submission of Monthly Outstanding Coding /Submission reports, PHS and NHS Lothian management staff are unable to adequately review and assess the coding performance for each site and identify ongoing issues around the completeness of data on a site by site basis.

Recommendation

Management should provide SMR Monthly Outstanding Coding/Submission Report for all four SMR categories, providing them to PHS each month.

A root cause analysis exercise should be completed for the four sites reported above to identify the issues behind the reports figures and implement corrective actions to support improved reporting.

Management Response

We do not code SMR00 and so there wouldn't be the need for coding estimates for SMR00. There is no PHS mandate to provide these reports as It's a local agreement we have with PHS so they had an estimate of what to expect each month whilst we were addressing a large historical backlog. A quarterly SMR00 report detailing backlog numbers is provided to PHS by Lothian Analytical Services..

Management Action Plan

Finding 2.1 – Continued

Management Action

We will confirm the ongoing requirement with PHS regarding these Submission Reports or otherwise and take action accordingly re SMR02 and SMR04. There is no further action required for SMR00.

An analysis will be undertaken regarding the Coding completeness at the 4 sites listed above to understand and remediate any issues relating to ongoing issues.

Responsibility	Target Date
Head of Health Records	31 July 2022

Control

In February 2020, Terms of Reference for the Information Services Division (ISD) Liaison Group were produced. According to the Terms of Reference, the purpose of the ISD Liaison Group is:

- To oversee ISD monitoring reports, data quality audits and their subsequent recommendations through to completion.
- To oversee and scrutinise the process for correcting errors, identifying and addressing root causes for all SMR submission failures and to ensure resolution of longstanding issues.
- To review ISD Quality reports and identify trends and instigate corrective actions where required.
- To maintain a contemporary action log of all outstanding ISD related issues and recommendations ensuring that these are addressed timeously.

The reporting requirements according to the Terms of Reference are as follows:

- A formal report detailing the entire work plan will be taken to the Information Governance Steering Group on a quarterly basis by the Information Governance Manager
- A formal report detailing the Data Quality aspects of the work plan will be taken to the Access and Governance Committee by the Associate Director, Lothian Analytical Services (LAS) twice per year at 6 monthly intervals
- Ad hoc escalations will be made to either the Access & Governance Committee of the Information Governance Committee as appropriate by the Chair

Observation

Since February 2022 there have been various changes to the governance and reporting arrangements which have not been reflected in the Terms of Reference:

- The reporting requirements of the Terms of Reference require reporting to the Information Governance Steering Group, however that group was retired in 2020 as a Committee
- The Terms of Reference have not been updated to reflect the change from ISD to PHS, although the membership of the group has remained unchanged the title of the group is outdated
- The Access and Governance Committee is now known as the Access Compliance Assurance Group – again membership is unchanged but the name of the group is outdated.

As a result of the changes to some governance arrangements since 2020 the reporting requirements of the group are no longer clear and we were not able to obtain evidence that the formal report detailing the entire work plan has been produced, or that reports detailing the Data Quality aspects of the work have been prepared and presented to the Access Compliance Assurance Group.

Risk

Without clear and up-to-date governance arrangements, supported by the necessary reporting requirements, there is a risk that the Access Compliance Assurance Group is not receiving appropriate assurance from the Liaison Group that it has agreed and implemented a programme of work to address ongoing issues around the quality of data available from TrakCare.

Recommendation

The Terms of Reference for the ISD Liaison Group should be updated to reflect the Group's change in title and the reporting requirements. Thereafter a detailed workplan should be produced and presented to the NHS Lothian Access Compliance Assurance Group twice yearly.

Management Response

During the pandemic, Digital and IT / LAS operational tasks have taken precedence. Also at a Board Committee level the Information Governance Sub committee was formally retired due to insufficient Non executive Director resource during this period.

Notwithstanding the above, it is agreed that the TORs for this group require to be updated.

Finding 2.2– Continued

Management Action

TOR update already completed by the PHS Liaison group. This TOR will be formally ratified next PHS liaison meeting 21 July 2022.

TOR already notes (and now with refreshed committee names) “A formal report detailing the Data Quality aspects of the work plan will be taken to the Access Compliance Assurance Group by the Associate Director, LAS twice per year at 6 monthly intervals.”

Responsibility	Target Date
Terms of Reference: Information Governance and Security Manager	31 October 2022
Work Plan Report: Associate Director - LAS	

Control

The eHealth TrakCare User SMR Extracts Process standard operating Procedure (SOP) has been produced by the Clinical Application & Integration Manager to guide staff on the requirement to submit data files to Public Health Scotland (PHS) on a regular basis. The current SOP was published in July 2021 and is due to be reviewed in July 2022.

The SOP covers the extract of the following data files from TrakCare and their submission to PHS:

- SMR00 – Outpatient Activity
- SMR01 – Inpatient Activity
- SMR02 – Maternity Activity
- SMR04 – Mental Health Activity

The process and techniques to be used in producing data extracts from TrakCare, checking the extracted files, submitting the files to PHS and correcting errors in the data are included.

Observation

The SOP was provided directly to audit by the System Administration Manager and is stored in a shared drive. However it is not readily available for staff to refer to through the NHS Lothian eHealth intranet pages that list and provide access to all of the various eHealth policies, procedures and forms.

Also, while the SOP has recorded that PHS require final submissions according to a calendar (6 weeks after the end of each month for that month's data), they only state that each NHS Board is required to submit data files to PHS on a regular basis. They do not specify:

- The frequency of extracts to be run by NHS Lothian between uploads to PHS (i.e first Monday of each week, last day of the month etc)
- How long staff should be taking to resolve error issues, with escalations where necessary.

Risk

Without appropriate access to the SOP there is a risk that staff will be unable to refer to the most up-to-date version of the guidance and perform the duties required of them. Furthermore, lack of detail around the extraction of data and error correction carries the risk that staff are not running extracts at an appropriate frequency to support the prompt identification and resolution of errors identified in the data.

Recommendation

The Clinical Application and Integration Manager should provide additional detail in the TrakCare User SMT Extracts Process document SOP. Appropriate escalation routes should also be included where errors are not cleared within a certain timeframe.

The SOP should be added to the NHS Lothian intranet.

Management Response

The SOP document explaining the data extract process for all SMR schemes is only relevant to staff within the System Administration Team as they are the only staff with the appropriate access on TrakCare to perform this task. It is currently available to all System Administration Staff but to keep consistency with all other digital procedures it will be moved into a shared folder where all Digital Standard Operating Procedures are stored so access is available to anyone within Digital.

The Standard Operating Procedure document is scheduled for review in July 2022 and we will take this opportunity to add more clarity around the timetable for submissions and escalation routes

Finding 2.3– Continued

Management Action

- Create SOP document to outline responsibility for monitoring of error reports
- Include escalation process within the SOP document
- Create a report of errors in SMRs that are system or staff generated along with recommendations of how to address each of them
- Define a report template that can be used to report error numbers and percentages to the PHS Liaison group and Access Compliance Assurance Group

Responsibility

Systems Administration Manager

Target Date

30 September 2022

Finding 2.4 – Errors remain outstanding in patient records several weeks after discharge/treatment

LOW

Control

Data validation checks are built into the SMR extract process within TrakCare. TrakCare users with System Administrator access run the extract process throughout the month.

Along with the extracted PHS submission file for upload, two error files are also automatically run from TrakCare. One report lists a summary of all errors and the other further detail behind each of the errors.

Error files are reviewed throughout the month by either the Trak System Administration team or Health Records to allow for corrections to be made (where possible) before a repeat submission is carried out.

Data files are coded in TrakCare as the following:

- SMR00 – Outpatient Activity
- SMR01 – Inpatient Activity
- SMR02 – Maternity Activity
- SMR04 – Mental Health Activity

Observation

Testing was carried out on a sample of 92 errors across the four SMR categories and with clinic/inpatient dates between February 2021 and September 2021 (total sample population was 2,277). The errors were reviewed against the error files dated 13 October for SMR00 and 27 October for SMRs 01, 02 and 04 to identify those that were outstanding and not yet cleared.

While the majority of errors identified in the samples for SMR01, SMR02 and SMR03 had been cleared (93%), 16 of the 34 selected from the SMR00 error files were outstanding (47%). Clinic dates for those errors were during August 2021.

While this is a known issue and management are aware of outstanding coding errors, there have not been lessons learned processes to identify the reasons for this, or improvement plans developed to introduce corrective actions going forward.

Risk

Without the prompt resolution of errors and an improvement plan in place to correct errors there is a risk that the data submitted to PHS and utilised in clinical reporting elsewhere in NHS Lothian is insufficiently robust and cannot be relied upon.

Recommendation

Management should implement controls to monitor errors outstanding for a considerable length of time and raise this periodically with the relevant senior staff within the clinical areas identified. Advice should be given which includes providing a clear timescale for the resolution of the errors. A lessons learned exercise should be undertaken to inform the development of an improvement plan for correcting errors within an agreed timescale.

Additional reporting should also be introduced to highlight this to the ISD Liaison Group and Access Compliance Assurance Group.

Management Response

Summary reports covering the number of errors for SMR01, SMR02 and SMR04 are produced weekly by Business Intelligence. There is no similar report for SMR00, the error reports are only available when an SMR00 extract is produced. Some errors reported cannot be fixed without clinical input for coding. Some other errors cannot be fixed due to system faults or incorrect use of the system by staff outwith Digital.

Finding 2.4 – Continued

Management Action

- Create SOP document to outline responsibility for monitoring of error reports
- Include escalation process within the SOP document
- Create a report of errors in SMRs that are system or staff generated along with recommendations of how to address each of them
- Define a report template that can be used to report error numbers and percentages to the PHS Liaison group and Access Compliance Assurance Group

Responsibility

Systems Administration Manager

Target Date

30 September 2022

Control

NHS Lothian Coding Supervisors provide initial basic training to eHealth (Health Records) coding staff on the following manuals:

- International Statistical Classification of Diseases and Related Health
- Classification of Interventions and Procedures.

10 days of training is provided by the ISD Tutors and ongoing training provided by Senior Coders/Supervisors

Coding staff spend the first 2 years in post covering all the Band 2 work which applies to the non-complex specialties. Once they are proficient in these they are then able to apply for a Band 3 post as and when they become vacant. There will still, however, be ongoing training in the complex specialties which can only be done while in post.

Observation

However, the Clinical Coding Team Leader has advised that a record of all training received by coding staff is not routinely kept or updated.

They have also stated that the majority of coders are all fully trained in all the specialties relating to the NHS sites they work from (i.e. they can code all specialties on our work rota for each hospital). There are only a few Coders who are still learning and are being monitored by the Clinical Coding Team Leader.

Training by PHS is only carried out when someone is first employed. However, there are only a few workshops supplied by them and all participation certificates are given to each Coder to keep themselves.

Risk

Considering the relatively low number of staff employed as coders and noted oversight by the Clinical Coding Team Leader, we have identified a low risk that without a complete and up-to-date record of training management may be unable to receive assurances that all staff have received the necessary training to perform their duties. Consequently patient data might be coded incorrectly, or in the absence of the Clinical Coding Team Leader the training received by staff not readily available for review.

Recommendation

Management should develop and introduce a framework of the ongoing monitoring and update of training records for coding staff.

Management Response

Management accept this recommendation.

Management Action

Create a system for the recording and monitoring of Training records for clinical coding staff.

Head of Health Records

Head of Health Records

Target Date

30 September 2022

Control

Clinical staff are expected to enter data on TrakCare with records required to be updated in real time in order for patient treatment to progress. In some cases, a patient cannot be treated unless the necessary information is added at the appropriate points during the patient Journey.

Observation

Everything in TrakCare is marked with a date and time, which is the time the user enters the information on the system. Whether this matches the exact time a patient is admitted, transferred or discharged is not something the system can provide or determine. The accuracy of the timing of the information entered can only be measured against any supporting documentation or observed only at the time of entering. Staff are therefore unable to tell from the TrakCare system whether a member of staff had entered data at the time it occurred or entered it into TrakCare at the next available opportunity. We recognise that management do provide training on the requirement for timely entry of data so there is some risk mitigation in place.

Risk

There is a risk management cannot be assured that data is being entered at the appropriate times and in line with their treatment pathway. Therefore data might be inaccurate with no means of identifying and correcting incorrect data.

Recommendation

For treatment journeys that rely on real time entry of data then management should introduce measures to sample test and monitor the patient records for timeliness of input.

Management Response

For treatment journeys that rely on real time entry of data some core clinical activities cannot be undertaken unless the information is already recorded on the system i.e. laboratory and radiological investigations, and increasingly the prescribing and administration of medicines.

By necessity, data needs to be entered in near real time and as such, this polices itself. Management therefore do not believe that there is a material issue to be address here, However, we would be open to explore the scope of a future audit to establish the facts if that is desirable.

Management Action

Discuss the scope of a potential future internal audit which would aim to gather real-world intelligence around actual practice versus that which is desirable.

Responsibility	Target Date
Director of Digital	31 August 2022

PCCO

Slide 14

PCC0 For a medium rated recommendation we need management agreement before we can issue the report. Based on this management response I would change this to an advisory rating (and then please make sure to update the summary table etc)

Peter C Clark, 2022-06-02T14:56:32.399

MRO 0 Done

McIntosh, Russell, 2022-06-06T13:38:09.816

Control

The Data Quality Team from PHS carry out regular audits to investigate the accuracy of recording of clinical and non-clinical data across NHS Lothian's acute sites.

Boards are given notice of upcoming audits and asked to ensure access to systems and appropriate staff are in place.

Observation

The most recent PHS Data Quality Assurance reports were received by NHS Lothian in January 2021, where the date of discharge from an acute site for the patient had occurred between 1 January 2019 and 31 March 2021. The reports were reviewed to confirm that the issues and actions raised within them had been resolved.

While some actions have been confirmed as complete (3 out of 7), four remained outstanding as at December 2021.

It has been advised by the Head of Health Records on 21 December 2021 that they were following up on the recommendations and work was underway to update the Access and Compliance Group in February 2022, following an earlier update paper in November 2021.

However, the initial report to the Access and Compliance Group report providing the findings and actions from the PHS audit was at the November 2021 meeting, several months after the receipt of the reports from PHS.

Risk

There is a risk that unless the actions resulting from the PHS data quality audits are acted upon promptly reliance cannot be placed on the accuracy of the data held by NHS Lothian. And any identified gaps in the information supplied to NHS Lothian's clinical coders also not addressed to ensure the accuracy and completeness of the data.

Recommendation

Management should ensure that the findings and recommended actions from the PHS Data Quality Audits are reported promptly to the Access Compliance Governance Group and an action plan to take forward the recommendations from PHS should include time lines for completion.

Management Response

This was discussed at the May and again the July meetings of the Access and Compliance Group which resulted in the Head of Health Records becoming a Group member in October 2021 to specifically address these issues amongst others.

It should be noted that during the pandemic operational imperatives were taking precedent to other management activities.

Management Action

Future PHS Data Quality Audits will be taken to the next scheduled Access and Compliance Group meeting thereafter.

Responsibility	Target Date
Head of Health Records	31/05/22 – Closed

Appendices

Appendix 1 – Staff Involved and Documents Reviewed

Staff Involved

- Information Governance and Security Manager
- System Administration Manager
- Head of Health Records
- Systems Administrator
- Clinical Coding Team Leader
- Health Records Manager

Documents Reviewed

- Outsanding Coding Summary
- eHealth Process Document – TrakCare User SMR Extracts Process
- 2021 Timetable for the submission of SMRs to PHS
- ISD Liaison Group Terms of Reference – February 2020
- ISD Liaison Group Minutes/Action Log:
 - 25 November 2020
 - 9 March 2021
 - 1 July 2021
 - 8 September 2021
- Access Compliance Assurance Group 16 November 2021 - PHS SMR01 Data Quality Report 2019-2020
- PHS Assessment of SMR01 (Inpatient/Day Case) Data Date of Discharge 01 January 2019 – 31 March 2019 - Royal Hospital for Sick Children
- PHS Assessment of SMR01 (Inpatient/Day Case) Data Date of Discharge 01 January 2019 – 31 March 2019 - Royal Infirmary of Edinburgh
- PHS Assessment of SMR01 (Inpatient/Day Case) Data Date of Discharge 01 January 2019 – 31 March 2019 – Western General Hospital
- PHS Assessment of SMR01 (Inpatient/Day Case) Data Date of Discharge 01 January 2019 – 31 March 2019 – St John's Hospital
- Coded Episodes SMR01 and SMR02 provided to PHS, covering May, July and September 2021
- Trak SMR01 6 Week Target Combined
- Trak SMR02 6 Week Target Combined
- Trak SMR04 6 Week Target Combined
- PHS Error Rejection Reports
- Clinical Coding 6 Week Target - 0 to 1
- Clinical Coding 6 Week Target - 1 to 2
- SMR00 Error Reports – 8 reports between 23 July 2021 and 26 November 2021
- SMR01 Error Reports – 7 reports between 2 June 2021 and 30 November 2021
- SMR02 Error Reports – 6 reports between 2 June 2021 and 10 November 2021
- SMR04 Error Reports - 6 reports between 11 June 2021 and 10 November 2021
- Access Compliance Assurance Group Minutes (02/02/21, 13/04/21, 11/05/21, 08/06/21, 06/07/21, 10/08/21, 06/10/21, 16/11/21)

Appendix 2 – Our IA Report assurance levels

The table below shows the levels of assurance we provide and guidelines for how these are arrived at. We always exercise professional judgement in determining assignment assurance levels, reflective of the circumstances of each individual assignment.

Rating	Definition	When Internal Audit will award this level
Significant assurance	<p>The Board can take reasonable assurance that the system(s) of control achieves or will achieve the control objective.</p> <p>There may be an insignificant amount of residual risk or none at all.</p>	<p>There is little evidence of system failure and the system appears to be robust and sustainable. The controls adequately mitigate the risk, or weaknesses are only minor (for instance a low number of findings which are all rated as 'low' or no findings)</p>
Moderate Assurance	<p>The Board can take reasonable assurance that controls upon which the organisation relies to achieve the control objective are in the main suitably designed and effectively applied.</p> <p>There remains a moderate amount of residual risk.</p>	<p>In most respects the "purpose" is being achieved. There are some areas where further action is required, and the residual risk is greater than "insignificant".</p> <p>The controls are largely effective and in most respects achieve their purpose with a limited number of findings which require management action (for instance a mix of 'medium' findings and 'low' findings)</p>
Limited Assurance	<p>The Board can take some assurance from the systems of control in place to achieve the control objective, but there remains a significant amount of residual risk which requires action to be taken.</p>	<p>This may be used when:</p> <ul style="list-style-type: none"> There are known material weaknesses in key control areas. It is known that there will have to be changes that are relevant to the control objective (e.g. due to a change in the law) and the impact has not been assessed and planned for. <p>The controls are deficient in some aspects and require management action (for instance one 'high' finding and a number of other lower rated findings)</p>
No assurance	<p>The Board cannot take any assurance from the audit findings. There remains a significant amount of residual risk.</p>	<p>The controls are not adequately designed and / or operating effectively and immediate management action is required as there remains a significant amount of residual risk (for instance one Critical finding or a number of High findings)</p>

Appendix 2 - Continued

The table below describes how we grade our audit recommendations based on risks

Rating	Description	Possible features
High	Findings that are fundamental to the management of risk in the business area, representing a weakness in the design or application of activities or control that requires the immediate attention of management	<ul style="list-style-type: none"> ▪ Key activity or control not designed or operating effectively ▪ Potential for fraud identified ▪ Non-compliance with key procedures / standards ▪ Non-compliance with regulation
Medium	Findings that are important to the management of risk in the business area, representing a moderate weakness in the design or application of activities or control that requires the immediate attention of management	<ul style="list-style-type: none"> ▪ Important activity or control not designed or operating effectively ▪ Impact is contained within the department and compensating controls would detect errors ▪ Possibility for fraud exists ▪ Control failures identified but not in key controls ▪ Non-compliance with procedures / standards (but not resulting in key control failure)
Low	Findings that identify non-compliance with established procedures, or which identify changes that could improve the efficiency and/or effectiveness of the activity or control but which are not vital to the management of risk in the business area.	<ul style="list-style-type: none"> ▪ Minor control design or operational weakness ▪ Minor non-compliance with procedures / standards
Advisory	Items requiring no action but which may be of interest to management or which represent best practice advice	<ul style="list-style-type: none"> ▪ Information for management ▪ Control operating but not necessarily in accordance with best practice



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