



CAD Data Quality Audit Policy

Document Reference	POL013
Document Status	Approved
Version:	V6.0

DOCUMENT CHANGE HISTORY		
Initiated by	Date	Author (s)
HEOC Audit	July 2012	Donna Finney (Data Compliance Audit and Training Manager)
Version	Date	Comments (i.e. viewed, or reviewed, amended approved by person or committee)
V1.0	November 2010	Approved at SLT
V2.0	June 2011	Approved by IGG
V3.0	29 August 2013	Approved at ELT
V3.0	December 2014	Review date extension approved at EMB
V4.0	December 2015	Review date extension approved at ELB
V4.3	February 2016	Reviewed by Senior EOC Management Team
V5.0	17 November 2016	Approved at ELB
V6.0	April 2018	Approved at IGG

Document Reference	EOC CAD Data Audit Policy Directorate: EOC
Recommended at Date	Senior EOC Management Team meeting February 2018
Approved at Date	IGG April 2018
Review date of approved document	April 2020
Equality Analysis	Completed
Linked procedural documents	Data Quality Policy
Dissemination requirements	EOC via EEAST Intranet and EOC Communications email
Part of Trust's publication scheme	Yes

The East of England Ambulance Service NHS Trust has made every effort to ensure this policy does not have the effect of unlawful discrimination on the grounds of the protected characteristics of: age, disability, gender reassignment, race, religion/belief, gender, sexual orientation, marriage/civil partnership, pregnancy/maternity. The Trust will not tolerate unfair discrimination on the basis of spent criminal convictions, Trade Union membership or non-membership. In addition, the Trust will have due regard to advancing equality of opportunity between people from different groups and foster good relations between people from different groups. This policy applies to all individuals working at all levels and grades for the Trust, including senior managers, officers, directors, non-executive directors, employees (whether permanent, fixed-term or temporary), consultants, governors, contractors, trainees, seconded staff, homeworkers, casual workers and agency staff, volunteers, interns, agents, sponsors, or any other person associated with the Trust.

All Trust policies can be provided in alternative formats.

Contents

Paragraph

1.	Introduction	4
2.	Purpose	4
3.	Duties	5
4.	Definitions	6
5.	Development	7
5.1	Prioritisation of Work	7
5.2	Identification of Stakeholders	7
5.3	Responsibility for Document’s Development	7
6.	Principles of Data Audit	7
7.	Identification of new audits	7
8.	Audit Process	8
9.	Managing Performance	8
10.	Data Validation	8
11.	Systems and Synchronisation	9
12.	Data Amendment Process	9
13.	Data Retention	9
14.	Confidentiality	9
15.	Risk	9
16.	Data Quality and Training	10
17.	Equality Impact Assessment	10
18.	Dissemination and Implementation	10
18.1	Dissemination	10
18.2	Implementation	10
19.	Review	10

Appendices

Appendix A	Checklist for the Review and Approval of the document	12
Appendix B	Monitoring Table	13
Appendix C	Equality Impact Assessment	14

1. Introduction

The Trust has a responsibility to ensure that all data is accurate in compliance with the Data Protection Act 1998, and is fit for purpose, as directed by NHS Connecting for Health. This is set out in the East of England Ambulance Service NHS Trust's ('The Trust') 'Data Quality Audit Policy'.

Good quality information underpins the effective delivery of patient care and is essential if improvements in quality of care are to be made. Lord Darzi stated that "We can only be sure to improve what we can actually measure"¹. Improving data quality will assist in improving the quality of patient care.

Data quality is crucial and the availability of complete, accurate, reliable and timely data is important in supporting patient care, clinical governance, management and service agreements for healthcare planning and accountability.

The auditing of CAD (Computer Aided Dispatch) Data Quality is a crucial process to provide assurance that the information that is produced and reported on accurately reflects the Trust's 999 and Urgent call activities. Such information is essential for the efficient running of the Trust and to maximise utilisation of resources for the benefit of both patients and staff.

Data Audit is a powerful business tool which provides a means for the Emergency Operations Centre (EOC) to reflect and improve on its practices against Trust defined standards.

2. Purpose

The purpose of this policy is to set out the key principles for CAD Data Quality Audit in order to ensure a standardised and accurate approach to the auditing of data that is entered into the Cleric CAD. This policy should be referred to when organising Data Audit activities regarding CAD. This policy intends to:

- Describe the processes for introducing new CAD data audits.
- Set rules for those involved in CAD Data Audit to manage the activity consistently and in accordance with best practice.
- Support the Trust's Data Quality Policy with regards to CAD activity.

CAD Data Quality Audit ensures that Trust policies and procedures are being adhered to regarding the recording and documenting of data by the EOC staff. It is a means of measuring compliance to approved control processes and procedures and providing an audit trail where amendments are required. Data validation of incident times is essential as this ensures correct verification of information pertinent to monthly and year-end returns and to ensure better service provision to patients.

The audit process is imperative in maintaining performance and quality. It ensures that all EOC staff are supported in the use of the relevant EOC Standard Operating Procedures (ESOPs). This policy will endorse a standardised, consistent and fair approach to the working practices across the EOC's. It will provide clarity as to the responsibilities and actions required of those involved in the recording, auditing and performance management of CAD data.

¹ Lord Darzi, High Quality Care for all, June 2008. Also referenced in the Trust's Data Quality Policy

The specific processes for each audit are detailed in methodology forms used by the EOC Audit and Training department. These are reviewed regularly and amendments will be made in response to audit outcomes.

3. Duties

3.1 EOC Audit and Training Manager

- To implement this policy and oversee the work of the CAD Data Auditor(s) in following this policy and other key procedural documents.
- To report to the Senior EOC Manager – Audit & Training, Technology and Business Continuity and Senior EOC Managers (SEMs) to ensure the effective application of the CAD Data Quality Audit process.
- Ensure that all processes for auditing are documented and regularly reviewed.
- Ensure that audits are carried out in a robust manner and are of an appropriate quality.
- Ensure that appropriate changes are made as a result of feedback from audits and monitoring.

3.2 Senior EOC Managers

- To ensure that all EOC staff adhere to this policy and are provided with the appropriate training and resources required to do so.
- To manage non-compliance to Standard Operating Procedures
- Support data audit activity.
- Disseminate and review data audit reports and figures and act upon the findings.
- Ensure that action plans are implemented at service level where recommendations for improvement have been made.

3.3 CAD Data Auditors

- To audit the system according to this policy and other key procedural documents, and to provide accurate reporting of findings for both internal and external audits in a consistent manner.
- To provide information to the EOC Audit and Training Manager and SEMs where there are inconsistencies or technical problems which may affect the availability of information that may lead to the misrepresentation of performance figures.
- To adhere to audit methodologies and escalate where it is deemed that instructions are no longer fit for purpose or require improvement.
- Accurately evaluate and record data compliance

3.4 Duty EOC Duty Officers (DEOs) and Team Leaders

- To ensure that EOC staff follow the ESOPs and other key procedural information on CAD related processes and to support staff with queries or concerns regarding these.
- To deal with any non-compliances as detailed in this policy.
- To refer any possible non-compliant incidents that are discovered or brought to their attention by staff in EOC, to the Data Audit Team for confirmation of this.
- Responsible for ensuring that all missing times are completed during their shifts and that all amendments required with respect to non-compliances are manually entered into CAD accurately and in the correct format.

3.5 EOC Dispatchers and Call Handlers

- To follow the EOC procedures in relation to CAD and to record information clearly and accurately.
- All manually input data should be right first time, which means that the responsibility is at the point at which it is collected and recorded.
- Effectively obtain the required information and accurately record the information as stated to ensure clear auditable data.
- To raise any concerns or queries regarding the ESOPs to a Team Leader or DEO.

3.6 EOC Trainers

- To provide initial and remedial training on the use of the ESOPs.
- To provide training and support to any individual's falling below the standards to ensure clear guidance and understanding of the use of these procedures in order to improve compliance and accuracy of recorded information.

4. Definitions

4.1 Data

Data is a collection of facts from which information is constructed via processing or interpretation.

4.2 Information

Information is the result of processing, gathering, manipulating and organising data in a way that adds to the knowledge of the receiver.

4.3 Data Quality

Data quality is a measure of the degree of usefulness of data for a specific purpose.

4.4 Data Audit

A data audit refers to the auditing of data to assess its quality or utility for a specific purpose. Auditing data involves looking at key metrics, other than quantity, to create conclusions about the properties of a data set to evaluate a system and its applicable processes.

4.5 Quality Improvement

The combined efforts to make the changes that will lead to better patient outcomes, better system performance and better professional development.

4.6 The Portal

The tool used to access the Trust's Data Warehouse information allowing access to specific reporting and dashboards.

5. Development

5.1 Prioritisation of Work

Data audit activities will be prioritised through annual planning and in response to implementation of new projects or systems.

5.2 Identification of Stakeholders

EOC staff and Management are the main stakeholders, but this will also be relevant to the Information team and any other Trust business areas that will have responsibility for, or input into, the CAD System.

5.3 Responsibility for Document's Development

Responsibility for developing this policy lies with the EOC Audit and Training Manager, as does the responsibility for updating it as and when required.

6. Principles of Data Audit

Data Audit is an important requirement in assurance of good data quality. This is essential to achieve better business processes and ultimately to deliver better performance and patient care:

6.1 The Trust will be active in identifying the requirements for internal monitoring of its processes.

The Data audit process will pro-actively identify, along with its stakeholders, requirements for new audits. Data audit will be encouraged for implementation of new CAD processes and procedures as identified through the EOC leadership team meetings.

6.2 All activity will be conducted in a consistent manner.

Each approved audit will be fully documented with a proposal and methodology form that will also reference any associated EOC SOPs. Data audit will be undertaken with good practise following a systematic approach. All staff undertaking audits will be appropriately trained. This can be carried out using a variety of methods, including supervision, data quality reviews, appraisal of completed work and audit the auditor.

6.3 Results will be reported and fed back to appropriate persons.

The specific reporting processes will be defined as per audit methodology forms. Compliance reports will be sent to the EOC management team.

6.4 Results and recommendations will be used to improve processes and service delivery.

The results of audits will be available in the Portal sent electronically to the appropriate managers. Whenever results are unsatisfactory, an action plan for improvement should be created and documented at an appropriate Trust group level or written up as a separate document. Concerns arising from specific audit activity, or the practice of an individual, should be reported to the EOC SEM. Where the concern is having a significant impact on Data Quality, this must be escalated and entered on 4Risk (see section 16).

7. Identification of new audits

New audit activity may be requested by EOC management, and may be the result of the following:

- A new process, system or procedural implementation.
- An area identified as a risk to the Trust (through 4Risk or following an adverse incident).
- A random review on an area that has not previously been validated or reviewed.
- An identified gap in Data Quality.

When a new audit is requested, the requestor must provide the Data Audit Team with the following information:

- 1) **Criteria as to how the calls will be identified for audit:** how will certain incidents or data be selected for checking and will the audit include a sample of, or complete set of, data?
- 2) **Parameters of the audit:** what information is actually being measured?
- 3) **Clearly defined standards to audit against:** What is 'compliant'? What is expected of the person inputting data and /or the process?
- 4) **The reporting process:** How do the results need to be reported and to whom (which managers / groups)? What are the actions required for non-compliance?
- 5) **Timeframe of the audit:** Is this a permanent process or a one-off check?

Once approved in principle, a pilot audit will take place before this is approved to become a permanent audit. This process may involve checking a large sample of data to identify trends and patterns before an appropriate sample is agreed.

8. Audit processes

Each EOC audit procedure document will identify the following information :

- **Background:** This will provide supporting information on the type of data, process or area of the system that is being evaluated
- **Objectives:** this section will define the set of objectives for the audit
- **Process:** this will detail the complete audit process
- **Standards:** this will detail what is considered 'compliant' (or exemplary) and what activities are considered 'non-compliant'.
- **Reporting process and structure:** This will detail the reporting structure and identify how non-compliance will be managed
- **Recording:** this will identify the methods of recording and what systems the data auditors will be using to collate the information
- **Validation:** this will detail the methods used for validating the information
- **Supporting information:** this may include how the audit will progress when there are technical difficulties
- **Summary:** overview of the process
- **Date of review**

9. Managing performance

Where non-compliance has been identified, this will be reported to the relevant EOC Line Manager to take the appropriate remedial action in order to reduce further incidents of non-compliance. Each audit methodology will recommend appropriate action to deal with non-compliance but the responsibility of completing action plans or such recommendations lies with the EOC Management Team.

10. Data Validation

10.1 Importance of Validation

Data validation is the process of ensuring that a system operates on clean, correct and useful data. Automated as well as manual processes are imperative to establish data validity. Audit is one form of validation to ensure that data is accurate, valid, reliable, timely, relevant and complete. This includes ensuring compliance with national definitions and standards.

11. Systems and synchronisation

The Trust's CAD uses Network Time Protocol (NTP) to synchronise its internal clock to internal NTP servers which receive a combination of time references from the Global Positioning System (GPS) space-based global navigation satellite system and public time servers on the Internet. The combination provides resilience with a precision between 15 and 3 microseconds. This is a constant procedure (i.e. not a scheduled process) as the servers have permanent access to the GPS receiving devices and the Internet for this protocol. The current Satnav software allows the MDT clock to be set accurately down to milliseconds. The MDT synchronises the clock every time it starts up, this is every time it has been switched off manually or when it switches off automatically because it hasn't been used for more than 30 minutes. It also synchronises every hour on the hour.

12. Data amendment process

Where there is a requirement for data changes which are outside of the audit process this is to be made on the CAD, this can be completed by the EOC. A request with evidence for the change should be sent to the CAD Database Manager, who will ratify the information with a Senior EOC Manager prior to the change being enacted. This will be recorded and a random audit will be undertaken to provide assurance.

13. Data Retention

Data Audit information will be maintained for a period of at least five year and in accordance with the records Management: Code of Practice 2006 (DH 2009). After five years, data should be deleted but the final reports should remain available.

14. Confidentiality

The legislation for the protection of personal information is contained in the Data Protection Act 1998 and Health and Social care Act 2001. The Department of Health has incorporated this legislation into guidance in the NHS Confidentiality: Code of Practice. This is a key component of information governance arrangements within the Trust and all staff should ensure that they are aware of the

requirements and standards that apply. Breach of confidence, inappropriate use of information or abuse of computer systems may lead to disciplinary measures.

Any voice recordings saved from the voice recording system) must not be emailed other than via secure NHS Net email accounts. Calls can be shared with appropriate persons via the shared drives, once the appropriate authorisation has been granted.

15. Risk

Data quality is embedded in risk management arrangements, with regular assessment and mitigation of the risks associated with unreliable or inaccurate data. CAD Data quality risks should be identified and recorded at the earliest opportunity. This will provide assurance of data quality being proactively as well as reactively managed across the Trust. Where a risk is identified, and cannot be managed locally, this should be escalated to the Corporate Risk register, as described in the Trust Risk Management Procedure.

16. Data Quality and Training

The Trust will maintain suitable staff training to increase awareness of the requirement for accurate data, and to undertake the procedures necessary to achieve this. Specific data quality responsibilities will be in-built into job descriptions as a standard for all new Trust employees. Data Quality will also be a part of any staff induction.

Line managers are responsible for identifying the training requirements of their staff and working with the Learning and Development Unit to identify training providers to ensure these needs are met. Staff must be enabled to attend the appropriate training courses allowing them an adequate level of proficiency in order to carry out their functions effectively.

17. Equality Impact Assessment

An EqIA was completed at the original release of this policy. This has been reviewed with no changes: there are no negative impacts. (see Appendix C).

18. Dissemination and Implementation

18.1 Dissemination

This policy will be distributed to all EOC staff. All staff will be advised via email and a copy will be uploaded to the Trust's intranet page.

18.2 Implementation

All new data audits will be implemented as agreed and detailed in section 7.0 in accordance with the requirements of the specific activities. Any changes in process will be implemented and where appropriate will include staff training. Effective implementation is also the responsibility of the

department / function manager. The processes will be dynamic and will be sufficiently flexible to support the business requirements.

19. Review

This policy will be reviewed every 2 years

19. Appendices

Appendix A – Template for the Checklist for the Development or Review and Approval of Procedural Document

This should be completed and attached to any procedural document when submitted to the appropriate committee/group for consideration and approval.

	Title of document being reviewed:	Yes/No/ N/A	Comments
1.	Purpose		
	Are the reasons for the development of the Document stated?	Yes	
2.	Definitions	Yes	
	Have all key terms been clearly defined?	Yes	
3.	Consultation		
	Have relevant stakeholders and/or users been consulted with?	yes	Sent via email for comments
4.	Equality Impact Assessment		
	Has the Trust Equality Impact Assessment Screening Form been completed and attached by the author and approved by the responsible Executive Director?	yes	Completed for original version
5.	Monitoring		
	Has the Monitoring Table been fully completed and attached?	yes	
6.	References/Associated Documents		
	Are key references cited?	Yes	
	Are linked documents identified where appropriate?	Yes	
6.	Approval		
	Does the Document identify which committee/group will approve it?	Yes	
7.	Dissemination and Implementation		
	Is there an outline/plan to identify how this will be done?	Yes	
	Does the plan include the necessary training/support to	Yes	

POL013, CAD Data Quality Audit Policy

	Title of document being reviewed:	Yes/No/ N/A	Comments
	ensure compliance?		
8.	Review Date		
	Is the review date identified?	Yes	

Information Governance Lead (or delegated authority)			
This Procedural Document complies with the Policy for the Development of Procedural Documents			
Name	Gail Butler	Date	03/05/2013
Clinical Quality Team			
The Procedural Documents complies with the relevant NHSLA standards			
Name		Date	
Please attach to the procedural document and forward to the relevant committee for approval			

Appendix B – Monitoring Table

What	Who	How	Frequency	Evidence	Reporting arrangements	Acting on recommendations	Change in practice and lessons to be shared
<p><i>The following will require monitoring: Assurance of Audits taking place Assurance that KPIs are being reported SOPs are current and being adhered to</i></p>	<p><i>Data Audit Team EOC Management Team</i></p>	<p><i>Regular Reporting to the EOC Management team s</i></p> <p><i>Internal Audit the Auditor checks</i></p>	<p><i>Monthly and weekly reports to the EOC Management team</i></p>	<p><i>Compliance Reporting KPIs Methodology forms</i></p>	<p><i>Records are stored in the portal. Reports are emailed to the management team.</i></p>	<p><i>ELB / IGG will make recommendations and provide timescales.</i></p>	<p><i>Data Audit Team will ensure that changes in procedures will be updated in methodology forms</i></p>

Appendix C
Equality Impact Assessment: Executive Summary

Executive Summary Page for Equality Impact Assessment:	
Document Reference: POLO13	Document Title: CAD Data Quality Audit Policy
Assessment Date: 19 th January 2018(review)	Document Type: Policy
Responsible Director: Kevin Brown	Lead Manager: Gary Morgan
Conclusion of Equality Impact Assessment: Following review of the original policy there are no significant changes to the staff affected by the policy and as per initial assessment this policy has no adverse impact on equality or diversity.	
Recommendations for Action Plan: No actions required	
Risks Identified: No risks identified	
Approved by a member of the executive team:	
YES	NO
Name:	Position:
Signature:	Date: