GIG CYMRU NHS WALES | Bwrdd Iechyd Prifysgol Caerdydd a'r Fro | Cardiff and Vale University Health Board	**Reference Number:UHB 288** **Version Number: 1** **Date of Next Review: 15 Sep 2018** **Previous Trust/LHB Reference Number:N/A**

Data Quality Management Procedure

Introduction and Aim

This document is written is support of the Data Quality Policy. It provides a mechanism to achieve and maintain good standards for data quality for data and information processed by Cardiff and Vale University Health Board (the UHB). The aim is that the processing of all data and information is managed through assigned and trained staff with stated accountabilities and responsibilities and that there are clear lines of accountability within the management and governance framework.

The successful implementation of this procedure will address clinical and business performance standards for example the requirement to meet Caldicott Standards, Health and Care Standards (2015), and the Information Governance Toolkit Standards as far as possible in the context of NHS Wales

Objectives

The Data Quality Management procedure describes the mechanism the UHB will use to develop and maintain best practice in data quality management.

The UHB has seven key objectives in this area. These are to:

- Provide a structure and organisation to deliver the data quality management agenda that effectively links the assurance responsibilities of the Senior Information Risk Officer (SIRO) and the Information Governance Sub Committee (IGSC) with the operational responsibilities of the Chief Operating Officer (COO).
- Ensure that the Clinical Boards and Corporate departments meet their obligations for Data Quality as part of their Information Governance (IG) responsibilities through the deputy SIROs and delegated officers. Clear accountabilities and responsibilities must be documented within their job descriptions as part of the wider information governance remit.
- Develop and maintain standard operating procedures to support this overarching procedure.
- Train staff appropriately
- Provide adequate resources to maintain good practice
- Monitor and audit data quality routinely
- Provide exception reports to form the basis for improvements to the provision, support and development of data quality assurance.

Scope

This procedure applies to all of our staff in all locations including those with honorary contracts

Equality Impact Assessment	An Equality Impact Assessment has been completed for the overarching IG and associated Data Quality Policy. The assessment found that there was some impact on the equality groups mentioned in relation to communication. An action plan has been developed to address those areas.
Documents to read alongside this Procedure	Information Governance Policy Data Quality Policy Data Quality: Operational Management and Responsibilities Information Risk Management Procedure Risk Management Policy Guide to Incident Reporting Incident Management Investigation and Reporting. [Serious incidents]
Approved by	Information Governance Sub Committee
Accountable Executive or Clinical Board Director	
Author(s)	Head of Information Governance and Assurance Senior Manager, Performance and Compliance

Summary of reviews/amendments			
Version Number	**Date of Review Approved**	**Date Published**	**Summary of Amendments**
1	15/09/2015	06/04/2016	New document

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1. Introduction

This procedure provides a mechanism to achieve and maintain appropriate standards of the organisation's data quality. All aspects of processing data and associated information must be managed to the highest standards. All staff have responsibility to create and maintain high data quality and managerial responsibilities should be assigned. Accountability for data quality helps to ensure that appropriate standards are maintained and risk of poor performance reduced.

2. Purpose

The purpose of this procedure is to provide assurance to the Senior Information Risk Owner (SIRO) and ultimately the Board, that appropriate frameworks are in place to ensure robust Data Quality controls are in place to support the UHBs policies for clinical care, business and legal requirements and patient experience.

3. Data Quality

Access to high quality data is essential for good clinical governance and effective performance management. Better information will support the use of best evidence; provide more accurate assessment of the quality of services to support clinical governance, performance management and patient experience.

4. Roles and responsibilities

The responsibilities, accountabilities and reporting systems are set out in the *"Data Quality Operational Management and Responsibilities"* as part of the UHB information governance structure in clinical boards and corporate departments.

5. Definitions

Data
Data are numbers, words or images that have yet to be organised or analysed to answer a specific question.

Information
Information is produced through processing, manipulating and organising data to answer questions, adding to the knowledge of the receiver.

Knowledge
Knowledge is known by a person or persons and involves interpreting information received, adding relevance and context to clarify the insights the information contains.

Information Asset

Information Assets are those records that are central to the efficient running of departments within the UHB i.e. patient, finance, staff employment, stock control etc. Information Assets include paper and the computer systems, network hardware and software which are used to process this data.

Each Information asset must have in place:

- Documented local data quality audits (must be sponsored by the deputy SIROs and undertaken on a regular basis). Audit outcomes to be reported to the relevant group.
- Local data quality issue logs to be implemented and maintained. Common themes to be highlighted to the relevant group for escalation as required.
- User data quality spot checks to be undertaken on a regular basis and the outcomes formally documented.

6. Key Processes

6.1. The UHB is committed to ensuring that its key electronic systems have built in validation programmes which are conformant to or map to national standards (where these exist). These will be supported by appropriate policies/procedures for checking

- Duplicate records
- Periodic updating
- Completeness and validity of data sets
- Adherence to nationally mandated definitions
- Validation routines

These policies and procedures will reflect the requirements of the assessment standards e.g. IG Toolkit and must be recorded for compliance in the UHB IG controlled document framework

6.2. Data feeds and similar will only be sourced from appropriately validated sources e.g. NWIS. Use of official WG information sources e.g. NHS data dictionary, Welsh Demographic Service, NHS number tracing service etc is mandatory.

6.3. The quality of data will be assessed by the use of

- Monthly error reports
- Data quality reporting tools
- External data quality reports

6.4. Documented procedures will be in place for analysing trends in information over time, in particular any material variations in volume etc.

6.5. Documented procedures backed up by a regular audit cycle will be in place to check the completeness, validity and accuracy of service user data.

6.6. Clinical staff will be involved in the validation of information derived from the recording of clinical activity.

6.7. Staff training will be kept up to date and relevant by the UHB PADR process.

7. Operational Principles

The following principles will be followed:

7.1. Staff must follow best practice guidelines when registering new patients onto systems in order to avoid duplication of patient records.

7.2. All data items held on UHB computer systems must, where applicable be in the format mandated by Welsh Government. Where codes are used, these will comply with national standards or map to national values. Wherever possible, computer systems are programmed to only accept valid entries.

7.3. All mandatory data items within a data set must be completed. Default codes will only be used where appropriate, and not as a substitute for real data. If it is necessary to bypass a data item in order to progress the delivery of care to a service user, the missing data must be reported by the user to the manager of the relevant system for immediate follow up. Where necessary the user must make a formal application for work to be undertaken to remedy this.

7.4. Data collection and recording must be consistent throughout the UHB to enable national and local comparisons to be made. Operations and diagnoses must be consistent with age and gender. Duplicate data items between different systems must be consistent so as not to lead to any ambiguity between different data sources.

7.5. Data will reflect all interactions and processing transactions associated with attendance at hospital and treatment provided. Correct departmental procedures are essential to ensure complete data capture and spot checks/audits must be undertaken to identify missing or inaccurate data. Comparisons between data systems must also be used to identify missing or inaccurate data where relevant.

7.6. All recorded data must be correct when the patient is registered and present at the UHB and updated as appropriate thereafter to accurately reflect both the patient's detail and clinical pathway.

7.7. Staff must take every opportunity to check a patient's demographic details with the patient him/herself. Inaccurate demographics may result in incorrect identification of the patient, important letters being mislaid, or incorrect/delayed income for the UHB. There are specific codes that can be used on Patient systems for patients who are unable to give their demographic details, such as unconscious patients, stroke victims, etc.

7.8. The Performance and Information Department regularly updates reference tables which contain data items such as GPs and Postcodes. If reference tables are found to be incomplete then the user must inform the relevant system manager so that the tables can be updated. The accurate recording of data items must however not be allowed to delay treatment of the patient.

7.9. Recording of data in a timely fashion is beneficial to the treatment of the patient. Recording diagnoses and operations, recoding the outcome of a patient's visit to an outpatient clinic or keeping up-to-date information on patient admissions/transfers/discharges makes that information available to all involved in treating patients even if they do not have access to the paper records.

7.10. All data must be recorded in a locally agreed timescale that will enable the data to be submitted in line with local and national deadlines. If data entry is delayed in any system, the relevant activity may not be coded in time, which means that the data will not be submitted and payment may not be received by the UHB for activities carried out.

7.11. Compliance with data standards will be monitored via the national and local Data Quality key performance indicators. Where appropriate specific feedback will provided at Directorate/Department/User level in order to provide additional training and support for users to improve compliance and performance. Where data quality concerns persist following a period of targeted training and support, users may be subject to disciplinary action.

8. Controlled Document Framework

8.1. Policies and procedures

The Data Quality Policy, its associated procedure Data Quality: Operational Management and Responsibilities and this procedure provide a framework that sets of how the UHB will deliver its obligations in respect of data quality.

These must be supported by standard operating procedures in the operational setting. All departmental data processing procedure documents should ensure that staff responsibilities in relation to the quality of the data entered onto

patient systems, are clearly referenced and managers must ensure that these are regularly reviewed and updated

Processes and procedures must be in place to ensure that where new services are provided or system changes are made, the appropriate action is taken to notify system administrators of changes and ensure that all users are aware of the impact of those changes to maintain information quality.

9. Data Set Change Notices

Formal notifications such as Data Set Change Notices (DSCNs) must be logged and disseminated appropriately within the UHB.

9. Information Security

Information Security controls exist in order to safeguard the confidentiality, integrity and availability of all forms of information within the organisation with the overall purpose of protecting personal and corporate information from all threats, whether internal or external, deliberate or accidental. The implementation and monitoring of such controls provides assurance to the Board that comprehensive and consistent information security controls are in place to ensure that staff process UHB data and information in an appropriate way and create maintain the highest data quality.

It is a requirement of the organisation to ensure that in respect of all information assets:

- Information will be protected against unauthorised access and processing including risk to data quality.
- All staff will be trained and authorised on induction to access paper records systems in line with UHB policies and local procedures
- All staff will be trained, issued individual passwords and security notifications to facilitate access to UHB electronic systems in line with UHB policies and procedures.
- Alleged breaches found to be related to poor data quality, actual or suspected, will be reported and investigated using existing UHB monitoring and audit processes.

10. Information Risk

Data Quality will be a formal sub set of the Information governance section of the risk register.

11. Business Continuity and Disaster Recovery

The integrity of all recorded data and information held must be protected from loss or degradation of quality. All clinical boards and corporate departments must have:

- Approved Business Continuity (BC) and Disaster Recovery (DR) plans in place
- Effective training programmes for staff
- A regular testing programme for BC/DR arrangements
- Formal evaluation with outcomes and lessons learned formally reported to the relevant group/committee

12. Training

The Deputy SIROs in clinical boards and corporate departments will ensure that compliance with the UHBs policies and procedures and training policy will be met. They will be required to undertake training as necessary to ensure they remain effective in their role.

All staff processing data and information must incorporate data quality, information risk and security, testing of knowledge, and an observation before access is authorised.

Refresher training must be available for all staff every two years or sooner if change or capability issues have arisen. All training will be recorded on the employee staff record using ESR.

9. Assurance Framework

The UHB will gain assurance in regard to the quality of its data and information through:

- Clinical Board and corporate department routine data quality checks
- Reports from the Data Quality Group
- Escalation reports from the Information Governance Sub Committee

The UHB will also require assessments against acknowledged standards:

- Health and Care Standards
- IG Toolkit
- Caldicott C-PiP

The UHB's internal audit programme will include data quality as part of its annual programme. The UHB will take part in audits undertaken by the Wales Audit Office.