



**Health
Information
and Quality
Authority**

An tÚdarás Um Fhaisnéis
agus Cáilíocht Sláinte



Five quality improvement tools for national data collections

March 2017

Safer Better Care

National health and social care data collections enable



About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is an independent authority established to drive high quality and safe care for people using our health and social care services in Ireland. HIQA's role is to develop standards, inspect and review health and social care services and support informed decisions on how services are delivered.

Reporting to the Minister for Health and the Minister for Children and Youth Affairs, HIQA has statutory responsibility for:

- **Setting Standards for Health and Social Services**
- **Regulation**
- **Monitoring Children's Services**
- **Monitoring Healthcare Safety and Quality**
- **Health Technology Assessment**
- **Health Information**

Five quality improvement tools

This document sets out tools and supports for national data collections to use to improve their information management practices and work towards meeting the *Information management standards for national health and social care data collections*. This is the first in a series of brief guides that will be produced to help national data collections improve their information management practices. It identifies five tools that national data collections can use, as follows:

1. Statement of Purpose
2. Statement of Information Practices
3. Data Quality Framework
4. Data Quality Statement
5. Data Dictionary

HIQA will publish further tools to support improvement, as informed by the identified needs of national data collections.

1 STATEMENT OF PURPOSE

What is it?

A statement of purpose is a publicly available document which succinctly captures why the national data collection exists, and clearly outlines its overall function and objectives. It may also outline the name of the managing organisation and governance arrangements, the year of commencement, the target population, funding arrangements and legislation that it must adhere to.

Why is it important?

A well-governed and managed national data collection is clear about what it does and how it does it. The objectives and purpose of the national health and social care data collection should be clear and unambiguous. Publishing this information promotes transparency by informing the public and people who use the data about the national data collection.

What does it look like?

Statement of Purpose Template

The statement of purpose should contain the following information about the national data collection:

- full legal name
- the year it commenced operation
- contact details, including website information
- name of the managing organisation
- target population
- overall function and purpose
- aims and objectives
- list of data providers
- legal basis
- source of funding
- governance and managing structure
- national legislation and standards that it must adhere to
- international legislation and standards it must adhere to
- document version number
- date it is effective from
- signatures of all parties responsible.

2 STATEMENT OF INFORMATION PRACTICES

What is it?

A statement of information practices sets out what information the service collects; how it is used; with whom it is shared and for what purpose; the safeguards that are in place to protect it; and how people can access information held about them. It should be publicly available in an accessible format.

Why is it important?

A statement of information practices demonstrates the national data collection's commitment to openness and transparency about the way in which it collects and uses information. It also records the importance placed on safeguarding the rights of people about whom it holds information.

What does it look like?

Statement of Information Practices Template

The statement of information practices should contain the following information about the national data collection:

- what information is collected
- how the information is collected, recorded and stored
- an explanation of how the information is used
- an overview of the consent process
- who information is shared with and for what purpose
- how the privacy of personal information is protected
- information on people's rights, for example, to access personal information held about them and to have any factual inaccuracies corrected
- the procedure for making a personal information access request
- how people can obtain further details on information handling practices
- the procedure for making a complaint or raising a concern about the information handling practices.

3 DATA QUALITY FRAMEWORK

What is it?

A data quality framework outlines the approaches to systematically assess, document and improve data quality. This may include data quality policies and procedures, key performance indicators and metrics, audits and improvement initiatives.

Why is it important?

Each national data collection holds a rich source of data. The data must be of high quality to gain the greatest benefit. A data quality framework is necessary to outline the processes and policies in place to consistently evaluate and improve the quality of the data held by the national data collection.

What does it look like?

A data quality framework may consist of a number of different components, including the following:

- Data quality policies and procedures:
 - the roles and responsibilities of staff with regard to data quality
 - specific processes to be undertaken to ensure data quality.
- Data quality key performance indicators (KPIs) and metrics:
 - specific and measurable elements of practice that are designed to assess key aspects of structures, processes and outcomes which influence data quality.
- Data quality audits:
 - regular review of data quality to identify any data quality issues or risks.
- Data quality improvement initiatives:
 - measures for addressing data quality issues which may be identified through data quality audits, feedback from stakeholders, or international best practice, to drive improvement and prevent the recurrence of errors.

4 DATA QUALITY STATEMENT

What is it?

A data quality statement is a statement prepared to accompany each published output from the national data collection highlighting the dimensions of data quality, including strengths and weaknesses.

Why is it important?

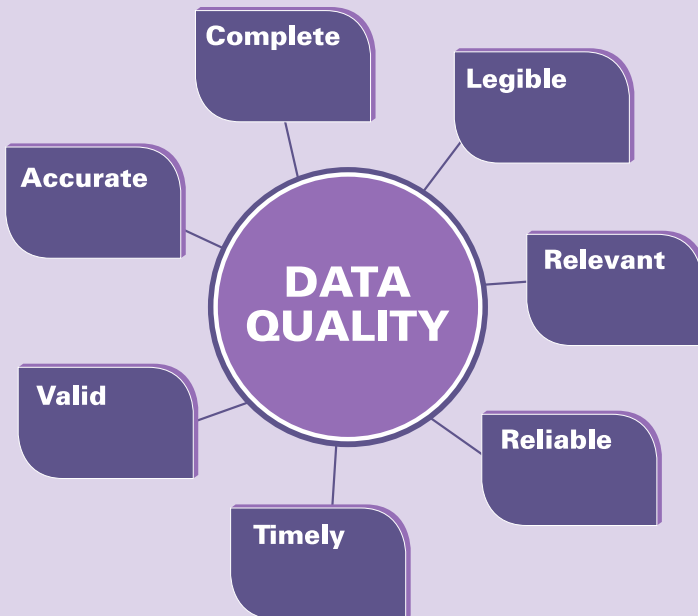
Including a data quality statement with all published outputs provides information about the quality of the data in each output. It allows data users to interpret the data and information and make informed judgements about whether the data meets their needs.

What does it look like?

Proposed structure of a Data Quality Statement

The content of the data quality statement will vary depending on the data and information being published, but is likely to address:

- the key dimensions of data quality (accuracy, completeness, legibility, relevance, reliability, timeliness and validity)
- an overview of any classifications or terminologies that were used
- strengths and weaknesses of the data and information.



5 DATA DICTIONARY

What is it?

A data dictionary is a descriptive list of names (also called representations or displays), definitions and attributes of data elements to be collected in an information system or database. The data dictionary standardises definitions and ensures they are used consistently.

Why is it important?

It is a tool to aid the standardisation of data definitions. It ensures consistency in data collection and enables data users to accurately use and interpret data. The absence of a data dictionary can restrict data quality within and across national data collections, making it difficult to standardise and compare data.

What does it look like?

Data Dictionary 2017, Version 6












Field No.	Data set	Data element name	Data Type	Field length Min	Field length Max
1	Demographic information	Date of birth	Numeric DD/MM/YY	8	8
2	Demographic information	Date of birth status	Numeric - code	1	1

Proposed data dictionary structure

Data dictionary structure	Explanation of term
Data set	This relates to the group of data elements to which a particular data element belongs. For example name, address and date of birth are part of a demographic data set.
Data element name	This is the name of the data element, which should explain clearly what it refers to.
Data element ID number	This is a reference number for the data element.
Definition	The definition should clearly explain what is meant by the data element.
Context	This should explain the context in which the data element is collected.
Data type	Refers to the type of data that is recorded for each data element, it could be numeric, alpha-numeric or a coded value
Field length minimum	The minimum number of characters to be entered

Data dictionary structure	Explanation of term
Field length maximum	The maximum number of characters to be entered
Instructions for answering field	This section provides information for the person filling in the information.
Codes and values	This field should give clear definitions of each of the codes and values that are captured as part of the data element.
Verification rules	This section outlines the ways in which the accuracy of the data element can be verified.
Comments and guidelines	This section provides guidance to the person collecting the data element. For example, steps to take if the data element is a required field and the value is unknown.
Related data elements	Related data means any other data elements that are linked to or closely related to the particular data element.

Additional resources available on www.hiqa.ie

-  Information management standards for national health and social care data collections
-  Guiding Principles for national health and social care data collections
-  International review of national health and social care data collections
-  Guidance on information governance for health and social care services in Ireland
-  What you should know about information governance: A guide for health and social care staff
-  What you should know about data quality: A guide for health and social care staff
-  Guidance on privacy impact assessment in health and social care
-  Guidance on developing key performance indicators and minimum data sets to monitor healthcare quality
-  Guidance on messaging standards in Ireland
-  Guidance on classification and terminology standards for Ireland
-  National standard demographic dataset and guidance for use in health and social care settings in Ireland.



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