Health Information and Quality Authority

An tÚdarás Um Fhaisnéis agus Cáilíocht Sláinte

Guide to the Health Information and Quality Authority's review programme of eHealth services in Ireland

October 2019

About the Health Information and Quality Authority

The Health Information and Quality Authority (HIQA) is an independent statutory authority established to promote safety and quality in the provision of health and social care services for the benefit of the health and welfare of the public.

HIQA's mandate to date extends across a wide range of public, private and voluntary sector services. Reporting to the Minister for Health and engaging with the Minister for Children and Youth Affairs, HIQA has responsibility for the following:

- **Setting standards for health and social care services** — Developing person-centred standards and guidance, based on evidence and international best practice, for health and social care services in Ireland.

- **Regulating social care services** — The Office of the Chief Inspector within HIQA is responsible for registering and inspecting residential services for older people and people with a disability, and children's special care units.

- **Regulating health services —** Regulating medical exposure to ionising radiation.

- **Monitoring services** — Monitoring the safety and quality of health services and children's social services, and investigating as necessary serious concerns about the health and welfare of people who use these services.

- **Health technology assessment** — Evaluating the clinical and cost-effectiveness of health services, policies, medicines, medical equipment, diagnostic and surgical techniques, health promotion and protection activities, and providing advice to enable the best use of resources and the best outcomes for people who use our health service.

- **Health information** — Advising on the efficient and secure collection and sharing of health information, setting standards, evaluating information resources and publishing information on the delivery and performance of Ireland's health and social care services.

- **National Care Experience Services** — Carrying out national service-user experience surveys across a range of health services, in conjunction with the Department of Health and the HSE.

Overview of the Health Information function of HIQA

Health is information-intensive, generating huge volumes of data every day. Health and social care workers spend a significant amount of their time handling information, collecting it, looking for it and storing it. It is, therefore, very important that information is managed in the most effective way possible in order to ensure a high-quality, safe service.

Safe, reliable healthcare depends on access to, and the use of, information that is accurate, valid, reliable, timely, relevant, legible and complete. For example, when giving a patient a drug, a nurse needs to be sure that they are administering the appropriate dose of the correct drug to the right patient and that the patient is not allergic to it.

Similarly, lack of up-to-date information can lead to the unnecessary duplication of tests — if critical diagnostic results are missing or overlooked, tests have to be repeated unnecessarily and, at best, appropriate treatment is delayed or, at worst, not given.

In addition, health information has an important role to play in healthcare planning decisions — where to locate a new service, whether or not to introduce a new national screening service and decisions on best value for money in health and social care provision.

Under section (8)(1)(k) of the Health Act 2007,[1] the HIQA has responsibility for setting standards for all aspects of health information and monitoring compliance with those standards. In addition, under section 8(1)(j), HIQA is charged with evaluating the quality of the information available on health and social care and making recommendations in relation to improving its quality and filling in gaps where information is needed but is not currently available.

Information and communications technology (ICT) has a critical role to play in ensuring that information to promote quality and safety in health and social care settings is available when and where it is required. For example, it can generate alerts in the event that a patient is prescribed medication to which they are allergic. It can also support a much faster, more reliable and safer referral system between the patient's general practitioner (GP) and hospitals.

Although there are a number of examples of good practice, the current ICT infrastructure in Ireland's health and social care sector is highly fragmented, with major gaps and silos of information which prevent the safe, effective transfer of information. This results in people using services being asked to provide the same information on multiple occasions.

In Ireland, information can also be lost, documentation is poor, and there is over-reliance on memory. Equally, those responsible for planning our services experience great difficulty in bringing together information in order to make informed decisions. Variability in practice leads to variability in outcomes and cost of care.

Furthermore, we are all being encouraged to take more responsibility for our own health and wellbeing, yet it can be very difficult to find consistent, clear and trustworthy information on which to base our decisions. HIQA has a broad statutory remit, including both regulatory functions and functions aimed at planning and supporting sustainable improvements.

Confidentiality

Please note that HIQA is subject to the Freedom of Information Acts and the statutory Code of Practice regarding Freedom of Information. eHealth services should not return any information to HIQA that could be used to identify an individual.

Contents

Document outline

This guide provides an overview of HIQA's review programme to assess compliance of eHealth services against the *National Standards for Safer Better Healthcare*.[2]

This guide also explains the six main stages involved in the review process:

1. Self-assessment tool to be completed by the eHealth service
2. Prioritisation process to inform the prioritisation of eHealth services for this review programme
3. Information request
4. On-site assessments
5. Report writing and recommendations
6. Quality improvement plan.

It also provides information on elements of the review programme, including how the findings will be summarised, the publication of reports and the expected response from eHealth services.

1. Introduction

Accurate, relevant and timely data is essential in order to improve health and social care, inform decision-making, monitor diseases, organise services, inform policy-making, conduct high-quality research, and plan for future health and social care needs, both at national and local levels. eHealth is the use of information and communication technologies in healthcare to meet needs of stakeholders, including patients, health and social care practitioners, service providers and policy makers. It is concerned with improving the flow of information, through electronic means, to support the delivery of health services and the management of health systems.

eHealth services facilitate and enable the sharing of patient's information in electronic format and play a crucial role in the delivery of health and social care for patients. These services ensure that information is shared efficiently and effectively between health and social care professionals in a manner which protects the privacy and confidentiality of patients.

In Ireland, a significant amount of patient information is shared electronically on a daily basis using eHealth services, including:

- electronic referrals, both general referrals and specialist referral
- electronic ordering of tests
- electronic transmission of laboratory result
- electronic transmission of radiology reports
- electronic discharge summaries
- electronic transfer of care provided in out-of-hours general practitioner clinics
- electronic notification of appointments in hospitals and admissions and discharges to hospitals.

Considerable time, effort and resources has been invested in developing and delivering these services in Ireland. They play a significant role in the day-to-day delivery of care to patients. It is crucial that they are efficient and effective, that quality data is shared securely and that they enable better outcomes for patients.

An eHealth service is defined as the technology, people and processes which facilitates the sharing of electronic patient specific information between health and social care services across organisations and/or care settings.

Managing Organisation is defined as the organisation, agency, managing unit, institution or group with overall responsibility for the eHealth service.

Appendix 1 illustrates the definitions and relationship between the managing organisation and the eHealth service.

Under the Health Act 2007 and subsequent amendments to the Act, HIQA has a statutory remit to set standards for the Health Service Executive (HSE), the Child and Family Agency (Tusla) and service providers and to assess compliance with those standards.

The National Standards for Safer Better Healthcare, developed under Section 8(1)(b) of the Health Act and published in 2012, describe a vision for quality and safety in healthcare which includes the use of accurate and timely information to promote effectiveness and drive improvements. Themes include Person-Centred Care and Support; Leadership, Governance and Management; and Use of Information. Person-Centred Care and Support defines how services place the service user at the centre of their delivery of care. This includes the concepts of access, equity and protection of rights. Leadership, Governance and Management stresses the importance of having arrangements put in place by a service for clear accountability, decision making and risk management as well as for meeting its strategic, statutory and financial obligations. Use of Information emphasises the critical importance of actively using information as a resource for planning, delivering, monitoring, managing and improving care.

These nationally mandated standards apply to all healthcare services (excluding mental health) provided or funded by the HSE. The standards provide a specific outcome for the eHealth service to meet.

HIQA also has a statutory remit to develop standards, evaluate information and make recommendations about deficiencies in health information under Section 8(1)(k) and 8(1)(l) of the Health Act 2007. HIQA has developed technical and information standards in areas such as electronic referrals,[3] electronic discharge summaries,[4] electronic prescribing[5] and dispensing,[6] electronic patient summaries[7] and a General Practice Messaging Standard.[8] Technical standards complement the National Standards for Safer Better Healthcare. Collectively, these standards provide a roadmap to improve the quality of health information and data, which will ultimately contribute to the delivery of safe and reliable healthcare. For a full list of technical standards developed by HIQA please see Appendix 2.

HIQA has established a review programme under Section 8(1)(c) of the Health Act 2007. The review programme will assess compliance with *National Standards for Safer Better Healthcare* for eHealth services within the HSE in Ireland. This review programme aims to drive quality improvements by identifying areas of good practice and areas where improvements are necessary across eHealth services within the

HSE. To achieve this, the review programme intends to assess compliance using themes including Person-Centred Care and Support; Leadership, Governance and Management; and Use of Information. The review programme will also focus on data quality issues relating to how eHealth solutions are implemented.

Underpinned by HIQA's legal remit, the steps involved in conducting a review are outlined in section 2.0.

2. Review programme

HIQA has developed a structured review programme of assessing the compliance of eHealth services in Ireland with the *National Standards for Safer Better Healthcare.* The review programme will be implemented on a phased basis, and HIQA will continue to engage eHealth services throughout the duration of the review.

The aim of this review programme is to:

- determine the information governance and management practices of the individual eHealth service
- identify areas of good practice and areas where improvements are necessary
- work with the eHealth service to achieve compliance with the standards, ultimately improving the quality and maximising the use of national health information.

This guide outlines the way HIQA reviews eHealth services against the *National Standards for Safer Better Healthcare* in order to assess the level of compliance. A framework has also been prepared to support HIQA staff when gathering evidence and reaching decisions in relation to compliance with the standards. The framework promotes consistent evidence-based assessment and judgment through the use of standardised processes.

2.1 Designated contact person

Each eHealth service included in the review programme is asked to identify the responsible individual who will be the designated contact person for the review programme. This individual is responsible for:

- returning the completed self-assessment tool (See Appendix 3.0)
- being the contact person for the information request and ensuring it is returned
- liaising with HIQA in relation to the on-site assessment and the report of the findings of the review.

2.2 Main steps of the review programme

The six main steps of the review programme are illustrated in Figure 1.0 and are outlined in detail in steps 1–6 below.

Figure 1. The six main steps of the review programme

Step 1: Self-assessment tool

A self-assessment tool must be completed by the eHealth service. The self-assessment tool will facilitate HIQA with the prioritisation process for selecting eHealth services for review.

The designated contact person will be requested to complete and return the self-assessment within 15 working days of receiving it.

The completed self-assessment will inform the review process for each individual service. For example, it may highlight areas where additional information will be requested as part of the next stage of the process or highlight an area that the review team may observe as part of the on-site assessments.

Step 2: Prioritisation process

The eHealth services that will be included in the first phase of the review programme will be determined by considering the following broad prioritisation criteria:

- quality and safety impact — such as the contribution of the eHealth service to the quality and safety of health and social care services

- alignment with the priority eHealth projects outlined in the National eHealth strategy and the Sláintecare Implementation Strategy
- other operational factors which may impact on the review services.

More specifically, to inform the prioritisation process, information is collated regarding the eHealth services in relation to the following criteria:

- stage of system development — business planning, initiation, delivery, closed
- number of messages transferred (2018)
- number of sites that transfer messages (2018)
- level of coverage — is the eHealth service operating at a national or regional level or on a pilot basis
- stage of implementation — is the eHealth service operational, using live data and data for clinical decision-making

Step 3: Information request

Following review of the completed self-assessment tool, HIQA may request additional information from an eHealth service. HIQA will contact the designated contact person and request that any information required be submitted to HIQA within 15 working days of the request. The information request will be informed by the self-assessment tool and will inform the prioritisation process and potentially the on-site assessment as outlined in Step 4 below.

Step 4: On-site assessment

There are three aspects to an on-site assessment:

- documentation review
- observation
- interviews with staff members.

Each of these aspects will be informed by the self-assessment tool and the information request. The following information about the on-site assessment will be provided to the eHealth service:

- the documentation that HIQA will request to see during the on-site assessment
- a list of the staff members to be interviewed on the day
- specific systems or processes to be observed on the day
- the names of the HIQA staff members who will carry out the on-site assessment.

This will be provided in order to minimise disruption to the day-to-day work of the eHealth service.

Step 5: Reports writing and recommendations

All information collected through the information request and on-site visits is analysed and a draft of the report of findings is developed. The report is sent to the head of the eHealth service for factual accuracy review. The service has 15 working days to send feedback to HIQA. Once the feedback is received, it will be considered in the preparation of the final report. The final report will be published on the HIQA website.

Step 6: Quality improvement plan

Each service is responsible for preparing and implementing quality improvement plans (See Appendix 4) to assure itself that the findings relating to areas for improvement are prioritised and implemented to comply with the *National Standards for Safer Better Healthcare.*

In the event that the review team is concerned that there may be a breach of data protection legislation, it is the responsibility of the service to take appropriate remedial action and to notify the Office of the Data Protection Commissioner.

Where opportunities for improvement have been identified by the review team, checks will be carried out during future reviews to ensure that the necessary improvements have been made.
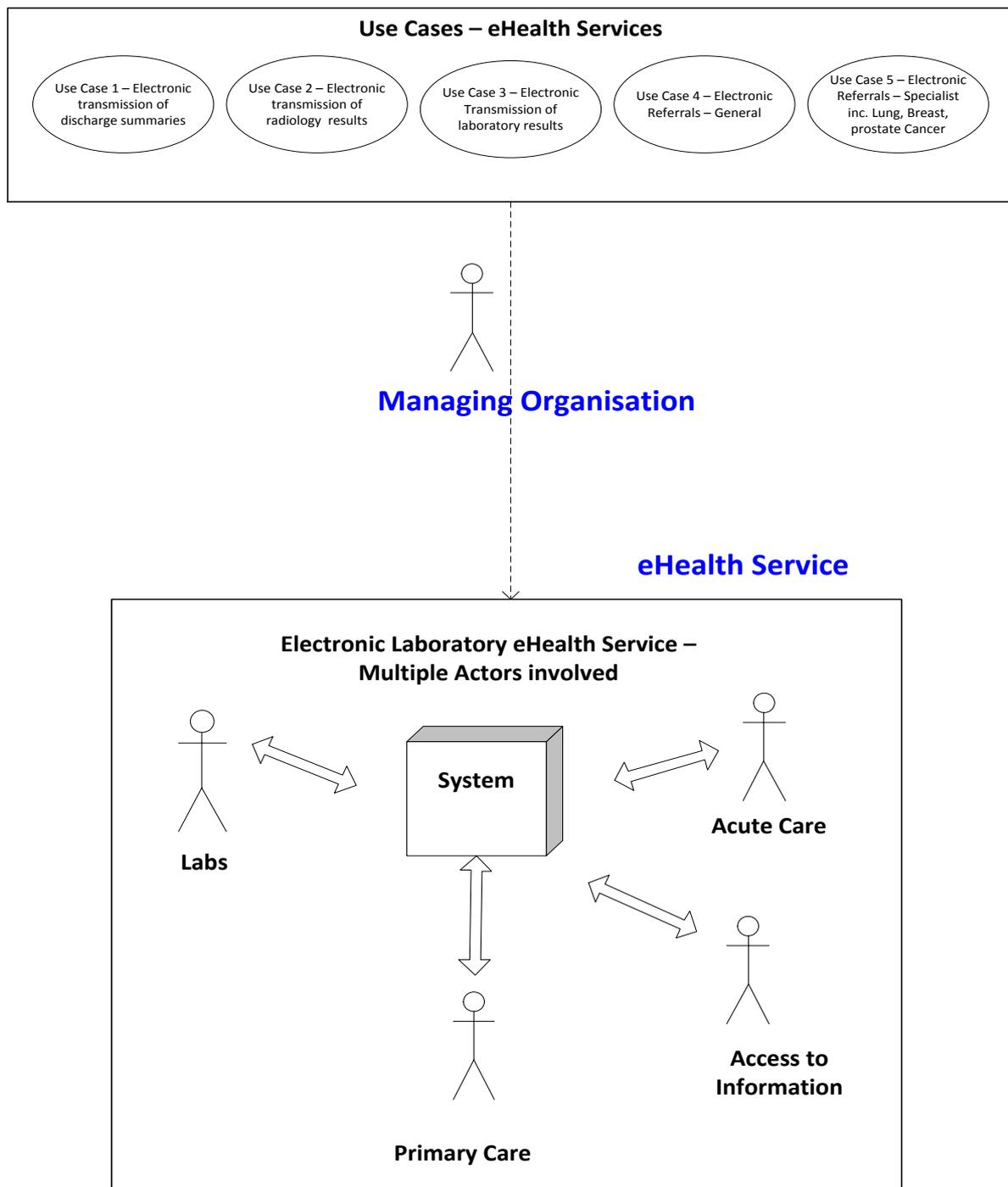
eHealth services should continue to assess their compliance with the *National Standards for Safer Better Healthcare* between reviews by HIQA to assure themselves and the public that they are meeting the requirements of the standards.

3. Contact details

If you have any questions regarding the review programme, you can contact a member of our team by emailing technicalstandards@hiqa.ie or by calling (01) 8147683/ (01) 8147685.

Appendix 1 — Definitions and relationship between the managing organisation and the eHealth service.

Figure 2 below illustrates the definitions and relationship between the managing organisation and the eHealth service.

Use Cases – eHealth Services

Use Case 1 – Electronic transmission of discharge summaries

Use Case 2 – Electronic transmission of radiology results

Use Case 3 – Electronic Transmission of laboratory results

Use Case 4 – Electronic Referrals – General

Use Case 5 – Electronic Referrals – Specialist inc. Lung, Breast, prostate Cancer

Managing Organisation

eHealth Service

**Electronic Laboratory eHealth Service –
Multiple Actors involved**

System

Labs

Acute Care

Access to Information

Primary Care

Appendix 2 — National Standards, guidance and recommendations

In the technical standards area, some of the standards, recommendations and guidance that HIQA has published in this regard are listed below.

National Standards

- National Standard on information requirements for national community-based ePrescribing (2018)
- General Practice Messaging Standard, Version 4.0 (2017)
- National Standard for a Dispensing Note including a Clinical Document Architecture specification (2016)
- National Standard for a Procedure including a Clinical Document Architecture specification (2016)
- National Standards for Diagnosis Datasets and Clinical Document Architecture Templates (2016)
- National Standards for Adverse Reaction Datasets and Clinical Document Architecture Templates (2016)
- National Standard Demographic Dataset and Guidance for use in health and social care settings in Ireland (2015)
- ePrescription dataset and clinical document architecture standard (2015)
- National Standards for Patient Discharge Summary Information (2013)
- National Standards for Patient Referral Information (2011).

Recommendations

- Recommendations for the national, community-based ePrescribing programme in Ireland (2018)
- Recommendations regarding the adoption of SNOMED Clinical Terms as the clinical terminology for Ireland (2014)
- Recommendations for a Unique Health Identifier for Individuals in Ireland (2009)

Guidance

- Guidance on Terminology Standards for Ireland (2017)
- Guidance on Messaging Standards for Ireland (2017)
- Overview of Healthcare Interoperability Standards (2013)

Appendix 3 — Example of Questions for a Self-assessment tool to inform the prioritisation process

The following questions are included in the self-assessment tool.

Num	Question
1	Who has individual executive accountability for the eHealth service?
2	Does the eHealth service have an oversight committee or board?
3	Does the eHealth service have a management team?
4	Has a privacy impact assessment (PIA) ever been conducted for the eHealth service?
5	Is risk assessment routinely conducted by the eHealth service?
6	Is a risk register in place?
7	Are health information standards for interoperability or messaging in use within the eHealth service?
8	Are clinical terminologies and classification systems (for example, ICD-10 or SNOMED-CT) in use within the eHealth service?
9	Does the eHealth service have up-to-date policies and procedures in place for all aspects of information governance?

Appendix 4 — Example of a Quality improvement plan template

eHealth services will be required to prepare a quality improvement plan as illustrated below.

Standard number	Improvement required	Action planned	Role of person responsible	Time frame	Status
1[1]	Statement of Information Practices is not complete or publicly available	Ensure content of the Statement of Information Practices contains all elements listed in the Standards	Lead for Information Governance	2 weeks from XX/XX/XXXX	Ongoing

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[1] This is an example of how you may fill out the template.

References

1. Department of Health *Health Act 2007* Available from http://www.oireachtas.ie/documents/bills28/acts/2007/a2307.pdf.Accessed on: May 2019

2. Health Information and Quality Authority (HIQA). *National Standards for Safer Better Healthcare.* 2012. Available from https://www.hiqa.ie/reports-and-publications/standard/national-standards-safer-better-healthcare. Accessed on: May 2019

3. Health Information and Quality Authority (HIQA). *Report and Recommendations on Patient Referrals from General Practice to Outpatient and Radiology Services, including the National Standard for Patient Referral Information*. 2011. Available from: http://www.hiqa.ie/publications/hiqa%E2%80%99s-gp-referral-report-published. Accessed on: May 2019

4. Health Information and Quality Authority (HIQA). *National Standard for Patient Discharge Summary Information.* 2013. Available from: https://www.hiqa.ie/reports-and-publications/health-information/national-standard-patient-discharge-summary-information. Accessed on: January 2018.

5. Health Information and Quality Authority (HIQA) *ePrescription Dataset and Clinical Document Architecture Standard.* 2015 Available from https://www.hiqa.ie/sites/default/files/2017-01/ePrescribing-Dataset_and_CDA_Specification.pdf. Accessed on: January 2018.

6. Health Information and Quality Authority (HIQA) *National Standard for a Dispensing Note including a Clinical Document Architecture specification* 2017 Available from https://www.hiqa.ie/reports-and-publications/health-information/national-standard-dispensing-note-including-clinical. Accessed on: January 2018.

7. Health Information and Quality Authority *National Standard on Information Requirements for a National Electronic Patient Summary.* Available from https://www.hiqa.ie/reports-and-publications/health-information/national-standard-national-electronic-patient-summary. Accessed on: 29 January 2019.

8. Health Information and Quality Authority (HIQA) *General Practice Messaging Standards Version 4.0* . 2017.Available from https://www.hiqa.ie/reports-and-publications/health-information/general-practice-messaging-standard-version-40 Accessed on: May 2019