Digital Health and Pharmacy: HIQA's role in supporting the Irish digital health and health information landscape



Irish Institute of Pharmacy Webinar

Dr Kevin O'Carroll, Health Information Programme Manager, HIQA Deirdre Hyland, Health Information Programme Manager, HIQA



10 September 2025



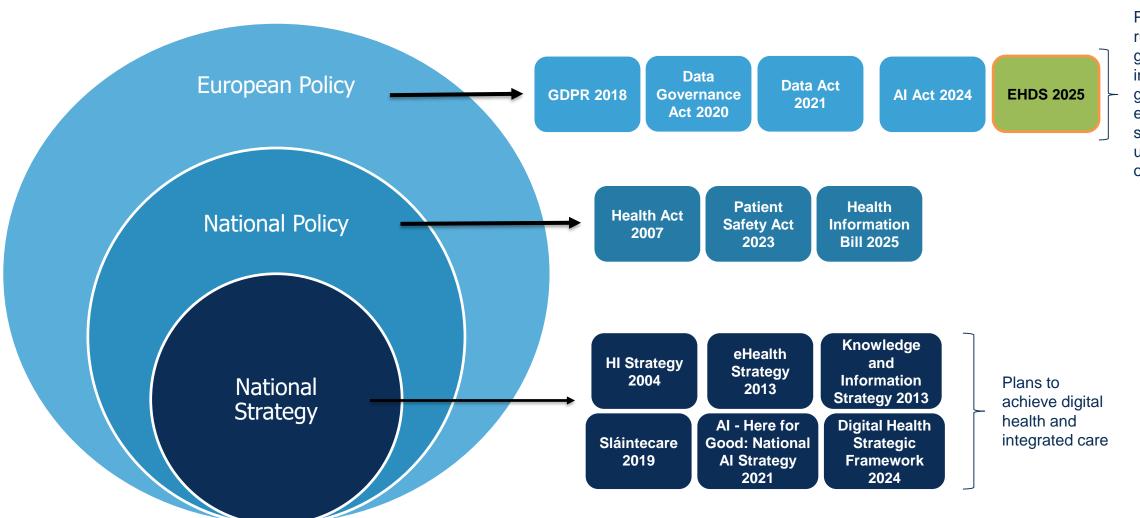
- The Health Information and Quality Authority (HIQA) is an independent statutory body established under the Health Act 2007 to promote safety and quality in the provision of health and social care services for the benefit of the health and welfare of the public.
- As an independent statutory body established to promote safety and quality in the provision of health and social care services, HIQA is responsible for developing national standards, recommendations and guidance to support the Irish digital health and health information landscape to ensure safer, better care.
- To do this, HIQA develops person-centred standards, guidance and recommendations that are underpinned by principles of:
 - a human rights-based approach
 - safety and wellbeing
 - responsiveness
 - accountability

Webinar overview

- Introduction to the Health Information function at HIQA
- Overview of recent and current projects at the Health Information function
 - National Engagement on Digital Health and Social Care
 - National Guidance for the Responsible and Safe Use of Artificial Intelligence in Health and Social Care
 - National Standards for Information Management in Health and Social Care
 - Revision of:
 - (a) National Standard for a Demographic Dataset for Health and Social Care
 - (b) National Standard for Hospital Discharge Information

Introduction to the Health Information function at HIQA

What is the context for our work?



Principles and rules to support government to implement goals related to effective and safe collection, use and sharing of data.

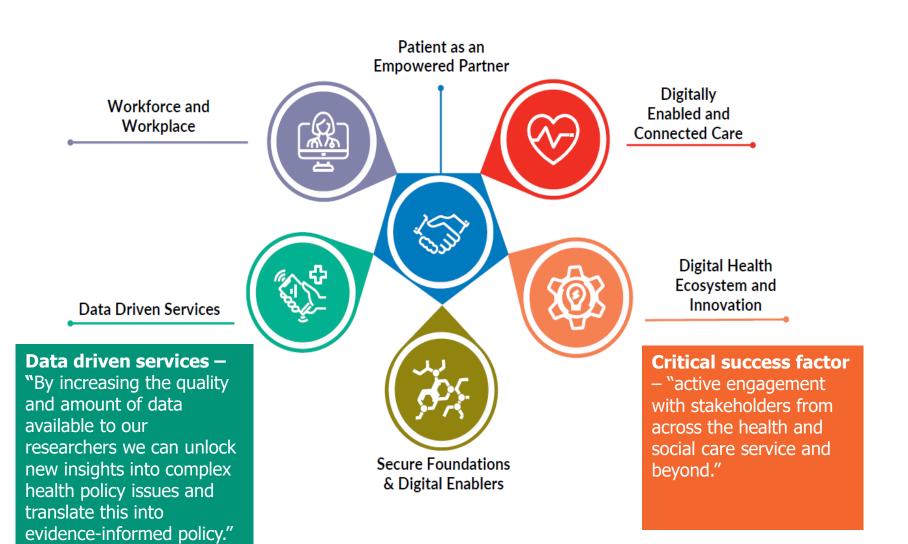
Key national developments

A Digital Health Framework for Ireland 2024–2030: Six Principles for Digital Care









HIQA's Health Information function



Provide **leadership** in defining health information landscape



Set standards, develop **guidance** and make **recommendations** for health information



Drive **quality improvements** in health information



Enhance foundations for eHealth



How is the Health Information function at HIQA structured?

Health Information and Standards Directorate

Health Information function

Health Information Quality and Assurance

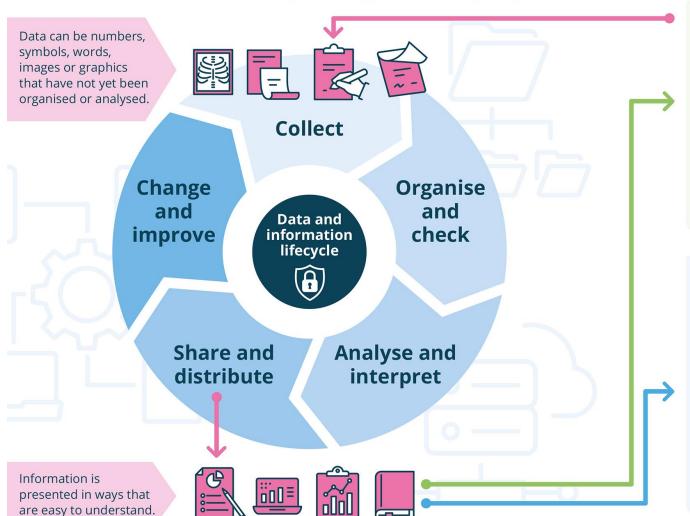
- Quality, implementation support & training
- Evidence for HI Policy, engagement & research
- Assurance and review
- Data quality and utility

Health Information Standards

- Health information standards
- Implementation supports including tools, guidance and frameworks

What is health information?

Before data becomes information, it goes through the following lifecycle:



Primary use of information:

Use of a person's health information to inform their care.

EXAMPLES:



Individuals use their health information to make decisions on their own health and well-being, for example, managing a chronic (ongoing) condition.



Health and social care professionals use health information to decide on what care, support or treatment is best for the person.

Secondary use of information:

Re-using a person's information to help plan and manage health and social care services, inform public health, guide policy-making, and perform research.

EXAMPLES:



Healthcare organisations, such as hospitals, use information to manage services and plan for future needs with the aim of continuously improving quality of care and achieving better value for money.



National data collections use information to inform policymaking, improve public-health and undertake research to compare treatments and services.

How does the Health Information Standards team support good information collection and management?

Setting **standards** to drive improvements in the standardisation of information across health and social care services

frameworks and
tools to help services
and organisations
implement standards
and improve practice

Health Information Standards to date

National Standard for Patient Referral Information (2011)



Data model for an electronic medicinal product reference catalogue – a National Standard (2015)



General Practice Messaging Standard (Version 4.0) (2016)



National Standard for national communitybased electronic prescribing (2018)



2011



2015













National Standard for a Clinical Summary (Patient Discharge) (2013)



National demographic dataset Standard and guidance (2016)



National Standard for a Procedure Dataset, Adverse reaction, Diagnosis dataset including clinical document architecture (CDA) template (2016)



National Standard for a electronic patient summary (2018)



Recommendations to date

Recommendation s for a Unique Health Identifier for Individuals in Ireland (2009)



Recommendation s on SNOMED CT terminology (2014)



Recommendation s on the coordination of patient safety intelligence in Ireland (2016)



Recommendation s on the Implementation of a National Electronic Patient Summary in Ireland (2021)



2009







2016









Recommendation s for Unique Health Identifiers for Healthcare Practitioners and Organisations (2011)



Recommendation s on National Data Collections (2014)



Recommendation s on communitybased ePrescribing (2018)



Recommendation s on the ICT enablement of older persons services (2022)

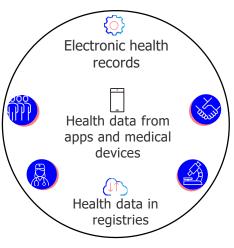


EU regulations: European Health Data Space and Primary Data

Aims to improve individuals' access to, and control over, their personal electronic health data, from anywhere within the EU; and facilitate secondary use of large anonymised datasets for specified purposes, including for research, innovation, policy-making and regulatory activities

Better diagnosis and treatment, improved patient safety, continuity of care and improved healthcare efficiency Empower individuals to have control over their health data

Enable health professionals to have access to relevant health data



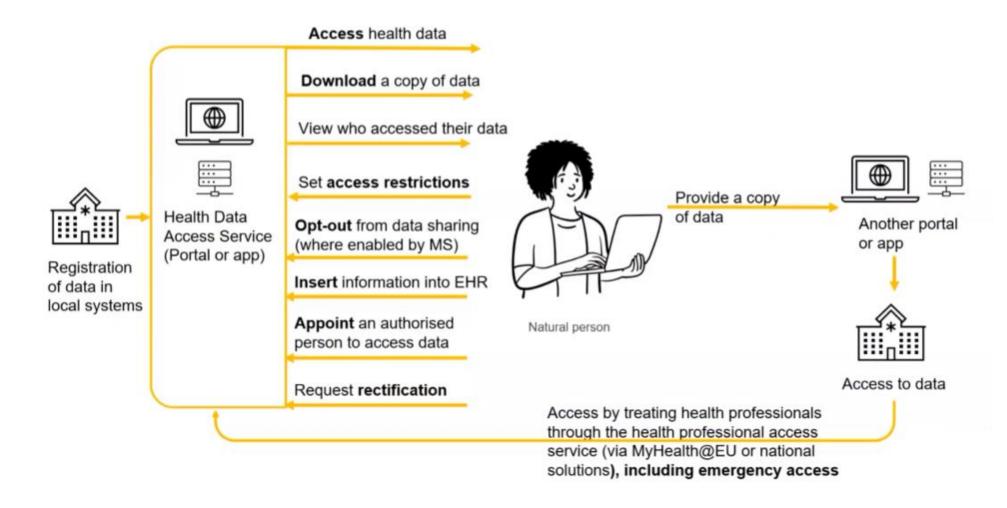
Assist policy makers and regulators in accessing relevant non-identifiable health data

Facilitate access
to nonidentifiable
health data for
researchers
and innovators

Better health policy, greater opportunities for research and innovation



What it means for natural persons



Priority categories of data

The EHDS Regulation mandates a **phased** approach for integrating **six priority data categories of electronic health data** into **national health information systems**.

- > **By 26 March 2029**: Member States are required to ensure that the first group of priority data categories are integrated into their national health information systems.
 - patient summaries
 - electronic prescriptions
 - electronic dispensation
- > By 26 March 2031: The remaining priority data categories must be incorporated into national systems.
 - laboratory results
 - medical imaging and reports
 - hospital discharge reports

HealthData@IE Project (2024-2027)

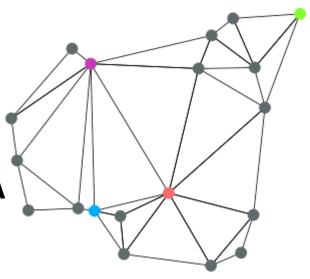
Establishing the services of a Health Data Access Body (HDAB) in Ireland



- Funding from EU Commission to establish health data access services for Ireland
- Collaborative approach DoH, HIQA, HRB, HSE and key stakeholders

Key areas for advancement for Ireland:

- Programme of engagement, dissemination, training and support HIQA
- National dataset catalogue HIQA
- National data access application management system (DAAMS) HRB
- Secure processing environments (SPE)
- Data quality enhancement HIQA



What is the Health Information Standards team doing to support these developments?

Recent projects

National Engagement on Digital Health and Social Care

Information Management Standards

Current projects

Development of National Guidance for the Responsible and Safe Use of AI in Health and Social Care

National Standard for Demographic Dataset

National Standard for Hospital Discharge Information

Overview of recent and current digital and health information standards projects



1

National Engagement on Digital Health and Social Care

National Engagement on Digital Health and Social Care

- HIQA, HSE and Department of Health partnership
- Built on the work of the National Public Engagement
 Survey to gather the attitudes and opinions of the public
 in relation to the collection, use and sharing of health
 information
- Findings report, and a range of additional assets published September 2024





Background and aim



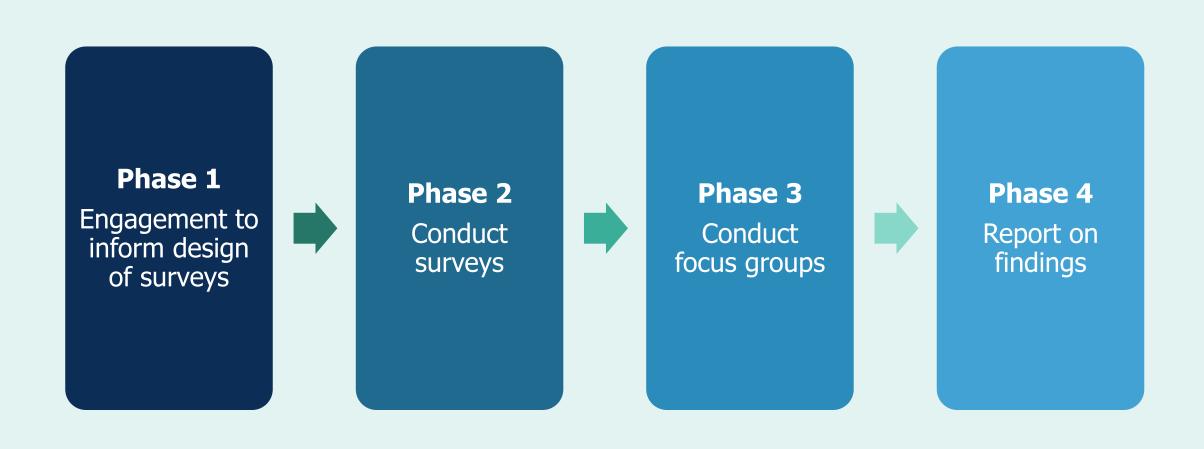




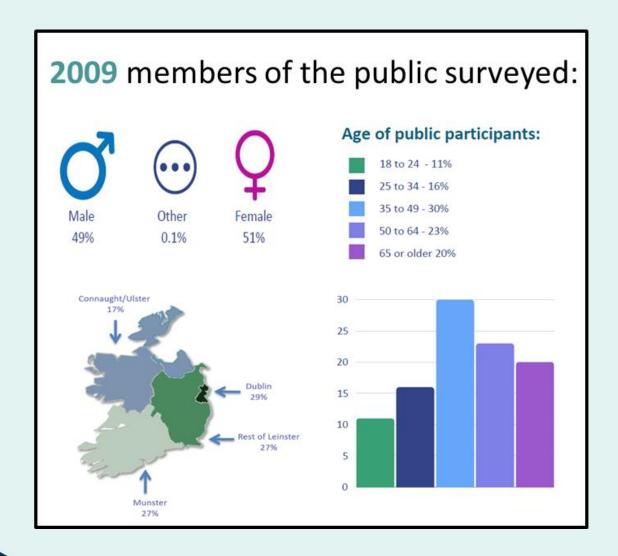
- The WHO promotes the importance of assessing local needs and context before the development of new digital health and social care systems.
- The European Commission has set goals to support Europe's digital transformation, one of which is to provide access to electronic health records for all European Union (EU) citizens by 2030. The EC has recently adopted the European Health Data Space Regulation which will enable people to access their electronic health data nationally and across borders.
- The Health Information Bill 2024 makes provisions for information to be collected and shared within the electronic health record.
- The Digital Health Framework for Ireland 2024-2030 and the HSE's corresponding implementation roadmap set out a vision to digitally transform health services with a focus on empowering patients.

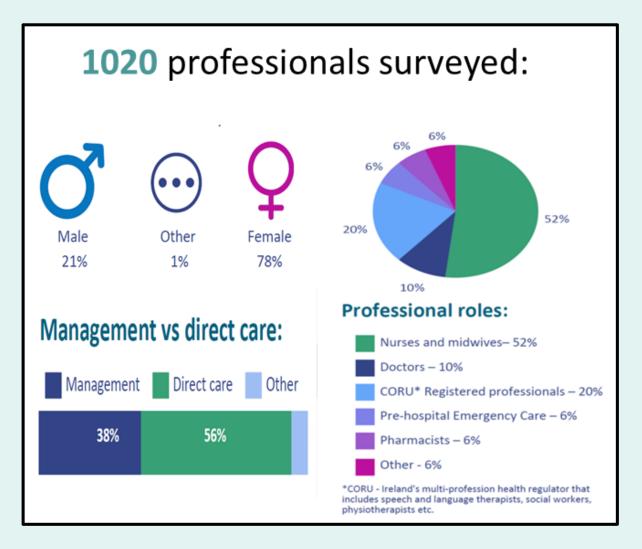
The aim of the National Engagement on Digital Health and Social Care was to understand the opinions and attitudes of the Irish public and professionals in relation to the digitalisation of health and social care services.

Approach



Who participated in the survey?





Key findings – public

What did the public tell us?



The public feel ready to engage digitally with health and social care services.

74% said that they would access their online health record when it is available online.

95% of people said they are comfortable getting text and email reminders.

55% said that they would access digital health services if available.

Key findings – public

The public want their online health record for practical tasks to manage their health.

90% want to use it to contact professionals about mistakes or missing information.

90% want to use it to renew prescriptions for regular medications.

89% want to use it to track progress of tests.



"you remember to tell one doctor [your family history] but possibly not the next..having that readily available to anyone reading your [online record] would be really nice."

Key findings – public

The public need an online record to have more autonomy and to actively participate in decisions around their care.

91% think it will help them understand their health.

90% think it will help them manage their health between visits.

88% think it will help them talk to a professional about their health.



Everybody would have the same view that the more information you can get about your own care and your own records the more it puts things in your own control to a certain extent. And that you are effectively managing your own health.

Key findings – professionals

What did the professionals tell us?



Professionals think that online records will empower people to be more in control of their health.

88% think the public will be better informed about their health.

88% think the public will be better prepared to ask questions.

"[when people readily have access to their health information] I think people's outcomes are way better, they have more choice, they feel freer and it improves the relationship because you know they know what you are saying about them."

Key findings – professionals

Professionals need technical support and training in place prior to feeling comfortable interacting digitally with the public.

92% want clarity on who to contact for technical support.

83% want training in digital tools.

79% want protocols in place on providing services or information digitally.



Key findings – professionals

Professionals need policy direction and guidance on clinical note taking prior to feeling comfortable sharing their clinical notes.

66% of professionals are comfortable sharing clinical notes but professionals need policy direction and guidance on clinical note taking.

I do think that going forward there would have to be some kind of formal mandatory training for healthcare professionals on how to conduct themselves on note taking....

Pharmacy perspectives on digital care

Professionals want decisions around digital delivery to be person centred and informed by the healthcare need and patient's choice:

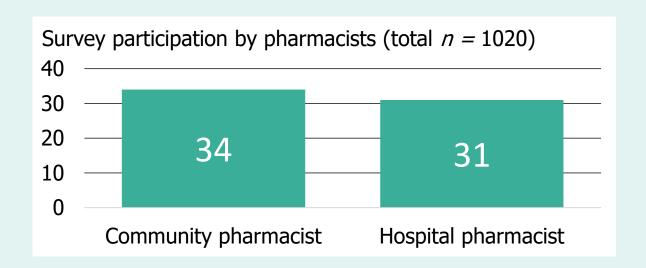
"it is always about the patient and the personal interaction, it's important not to lose that in the rush to digitise." (Pharmacist)

Professionals feel that digital access to healthcare records will improve transparency and trust in the system:

"I think there needs to be some degree of informed consent with the patient and it has to be voluntary. It should never be mandatory that you must allow your data to be aggregated across multiple sources, or if it is, that they are in plain language told why that is being done and how that helps." (Pharmacist)

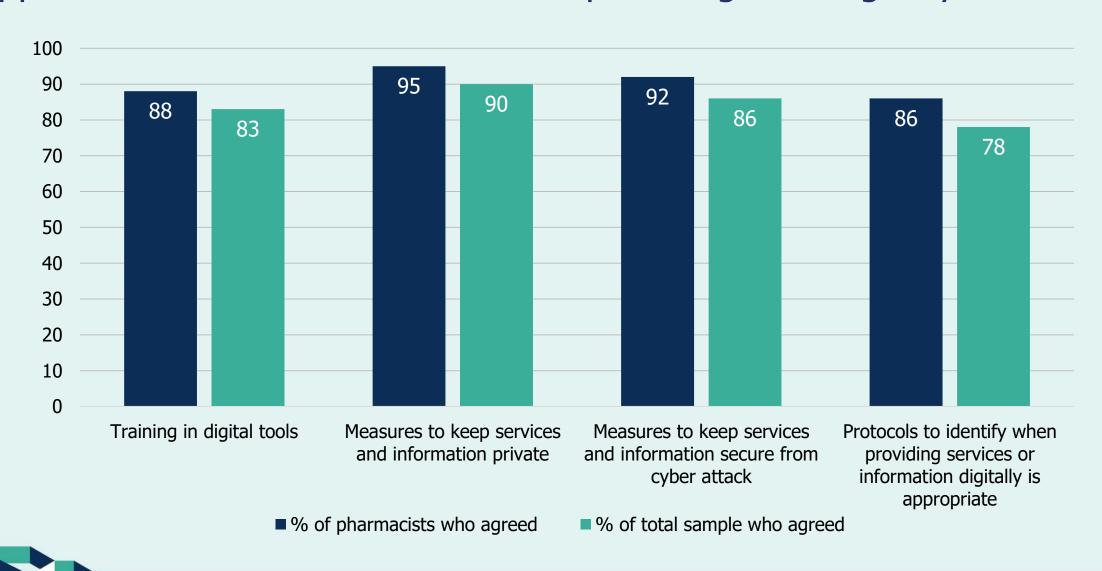
Professionals think that online records will empower people to be more in control of their health:

"We have seen in community pharmacy sometimes the way in which the vaccination record for example is presented that the person may not actually realise that they received a flu vaccine for example, because it might be the generic name of the flu vaccine. Then they go to their GP to seek the flu vaccine again" (Pharmacist)



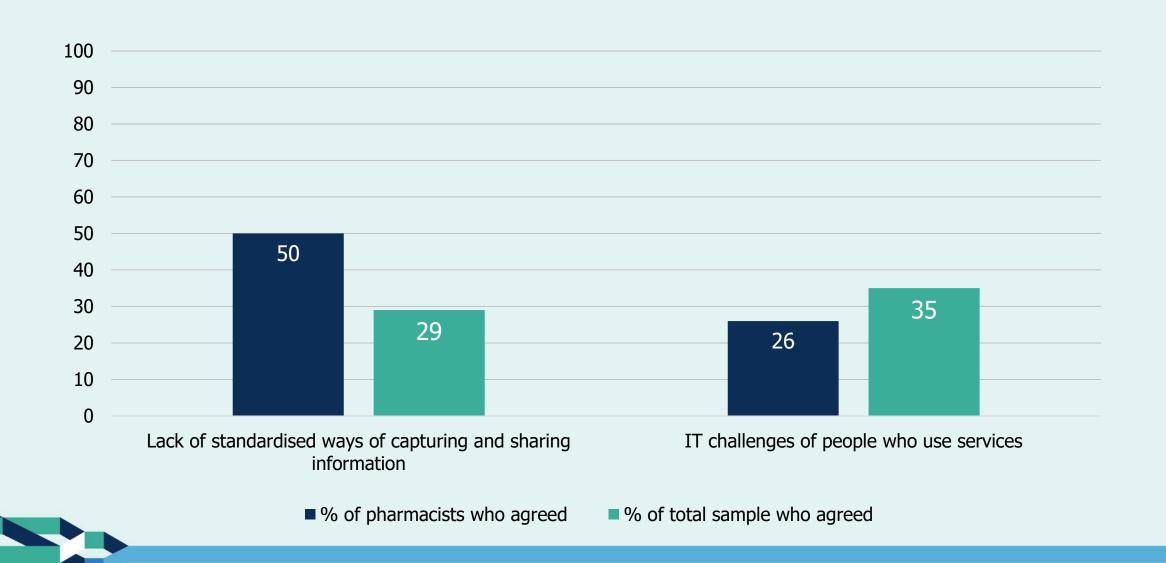
Pharmacy perspectives on digital care

Supports that would increase comfort providing care digitally



Pharmacy perspectives on digital care

Challenges to delivering care digitally



Translating the findings into action



Department of Health is using the findings to inform legislation, national policy in digital health and social care being progressed under the Health Information Bill 2024 and the National Digital Health Framework 2024-2030.



The **HSE** is using the findings to inform the delivery of key elements of the National Digital Health Strategic Implementation Framework 2024-2030 and Sláintecare vision including the patient app, patient feedback platform, digital health capacity building and electronic health record.



HIQA is using the findings to inform their programme of work in relation to health information including:

- development of national health information standards
- promotion and implementation of the National Standards for Information Management in Health and Social Care (6)
- the dissemination, training and support to progress goals to inform the establishment of a data access body.



2

National Guidance for the Responsible and Safe Use of Artificial Intelligence (AI) in Health and Social Care

What is Artificial Intelligence (AI)?

Artificial Intelligence (AI) is defined as the ability of machines or systems to perform activities that mimic human intelligence such as recognising patterns or making decisions based on data. Artificial Intelligence already plays a role in our day to day lives.

Below are some examples of how AI is currently used:

- **Interact:** When you speak to Siri or Alexa, you're using an AI-powered voice assistant. These systems rely on speech recognition and natural language processing to interpret your request and respond appropriately.
- **Recommend:** Recommendation systems, like those on Netflix and Amazon, use AI to analyse your past behaviour and suggest content or products tailored to you.
- Optimisation: AI can predict traffic patterns to optimise routes in navigation systems.

Context: EU AI Act 2024

- AI in Ireland will be governed by the EU AI Act 2024. The AI Act ensures that AI is developed and deployed in a way that is trustworthy and addresses the risk of AI to citizens' health, safety, wellbeing and fundamental rights.
- The Act provides the developers and deployers of AI technologies with clear requirements and obligations regarding specific uses of AI.
- The EU Act categorises the risks associated with specific uses of AI. AI systems
 identified as high-risk that may relate to healthcare include:
 - Safety components of products (e.g. AI application in robot-assisted surgery)
 - Access to essential private and public services including healthcare (e.g. evaluate eligibility)
- High risk AI systems are subject to strict obligations, such as, adequate risk assessment and mitigation systems, clear and adequate information to the deployer, appropriate human oversight and measures to minimise risk.

Prohibited Al Systems (Unacceptable Risk): Al systems that pose a threat to people's safety, rights or livelihoods are banned apart from some limited exceptions.

High-Risk: These systems are subject to the most stringent regulations. They must comply with strict requirements and obligations.

Limited Risk: These are AI systems that present only limited risks (e.g. chatbots or AI systems that generate content). These limited risk AI systems are subject to transparency obligations so the enduser is aware that content was generated using AI.

Minimal or no Risk: These are AI systems that pose minimal or no risk (e.g., AI in video games). AI systems with this risk level are not regulated or affected by the EU AI Act

What work is being done to support the responsible and safe use of AI in health and social care?

Department of Health and HSE:

The Department of Health and the HSE are developing an AI in Health Strategy, as committed to in the Programme for Government 2025, to promote and support innovation and digital transformation in health and the responsible and safe use of AI in health and social care services.

HIQA:

The Department of Health commissioned HIQA to develop national guidance to promote and drive the responsible and safe use of Artificial Intelligence (AI) in health and social care services to ensure safer, better care for people using health and social care services.

The guidance will sit within the wider context of legislative, policy and service delivery requirements and initiatives.

What is the purpose of HIQA's National Guidance?

- The national guidance will support services to promote and drive a responsible and safe approach to the use of AI in the health and social sector in Ireland, underpinned by the principles of:
 - a human rights-based approach
 - safety and wellbeing
 - responsiveness
 - accountability.
- All services and organisations that provide health and social care services can use this guidance to develop and embed good practice to ensure safer better care for people using health and social care services.
- The guidance will be used to promote awareness and build good practice among service providers and staff about the responsible and safe use of AI in health and social care services.
- The guidance will also be of use to people using services by educating and empowering them on what their expectations should be, in respect of the responsible and safe use of AI while engaging with health and social care services.



Approach to developing the National Guidance

Public Scoping Consultation

 Provided people an opportunity to give their initial input on the development of a guidance for the responsible and safe use of AT.

Co-production Working Group

- Working collaboratively on the development of the guidance to support the responsible and safe use of AI in health and social care.
- Facilitating engagement with stakeholders during focus groups, stakeholder meetings and public consultation.

Evidence Review

- Synthesised available international literature on the safe and responsible use of AI in health and social care to inform national guidance.
- Identified what guidance, frameworks, and principles are available to facilitate responsible and safe use of AI in health and social care services.

Focus Groups and Interviews

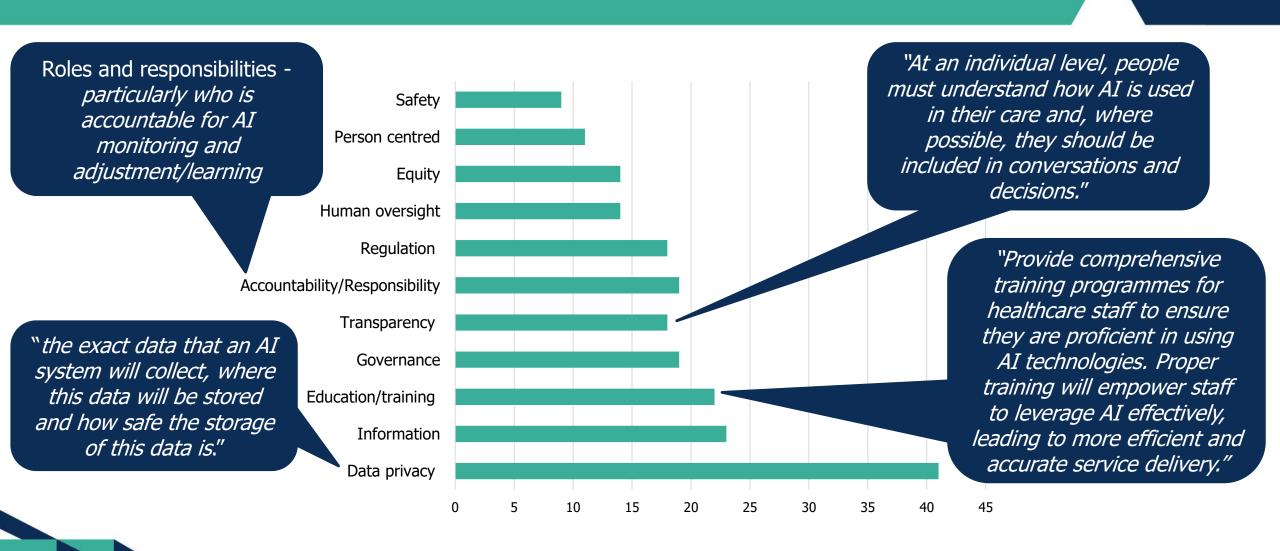
 Conducted focus groups and interviews with stakeholders including public and patient representatives, people who deliver care and people who manage services, exploring their perspectives on the guidance.

Public Consultation

 A public consultation will be undertaken to invite all interested parties to make submissions on the draft guidance document.

Evidence-based and collaborative approach

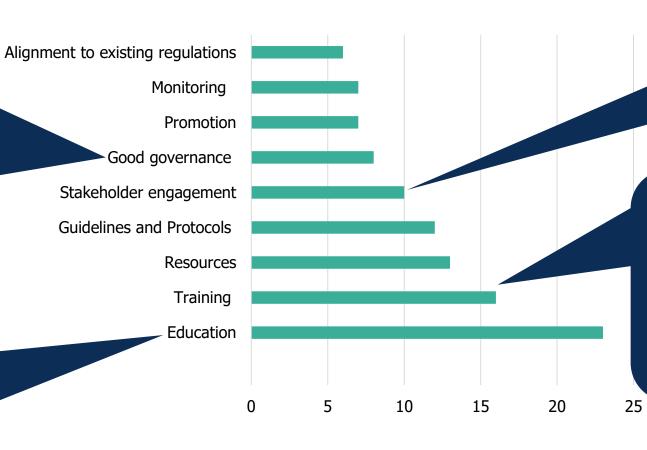
Scoping consultation:Key areas the guidance should address



Scoping consultation:What will support implementation of the guidance?

"The guidance must outline clear lines of responsibility for AI decision-making. There should be robust governance mechanisms, including a national AI oversight body to handle audits, safety reviews, and ethics compliance."

"Building public confidence in AI's ability to enhance the provision of highquality and timely care is crucial before it can be introduced across health and social care services."



"Stakeholders need to be involved in the process of implementing the guidance."

"Clinical and non-clinical staff need to be adequately equipped with the knowledge and skills to integrate AI into their workflows before it can be rolled out across health and social care services."

Scoping consultation: Feedback from pharmacy perspective

AI-enabled clinical decision support systems are being used in pharmacies to "identify potential drug-drug interactions, dosing errors, and contradictions".

Automated dispensing robots are being used in pharmacies "a proven example of how AI can support safe and efficient medicine supply. These systems reduce the risk of human error, improve stock rotation, and streamline daily operations"

Submissions from:

- Irish Institute of Pharmacy
- Irish Pharmacy Union
- Areas the guidance should cover included:
 - Patient safety and clinical governance
 - Professional oversight and accountability
 - Data privacy and security
 - Bias and Equity
 - Education, Training and AI literacy
- What will support implementation of the guidance:
 - Continuous evaluation
 - Public and professional trust
 - Education, training and workforce upskilling

Some pharmacies have implemented AI-enabled messaging platforms or chatbots to provide patients with reminders, basic service information, or refill alerts. Where these tools are implemented ethically with clear consent and transparency they have been shown to enhance service accessibility and improve medicine adherence. Human pharmacist intervention is always available for more complex queries, ensuring safe patient triage.

Evidence review

- 55 sources
- Mix of academic papers, frameworks, guidance documents and position papers from a range of international bodies including public and patient representative bodies
- Key findings:

| HIQA principle | Key themes to uphold the principle in relation to the responsible and safe use of AI in health and social care |
|-------------------------|--|
| Human Rights-Based Care | Inclusivity, Upholding Human Rights, Human Connection, Data Privacy, AI Literacy |
| Safety and Well-being | Safe care, Security, Trust |
| Responsiveness | System Responsiveness, Education and Training, Eco-responsibility, Research |
| Accountability | Oversight, Responsibility, Transparency, Human-in-the-loop, Compliance |

Focus groups and interviews Key stakeholders

Focus groups and individual interviews were conducted with 29 participants to gather perspectives on guidance for the responsible and safe use of AI in the delivery of health and social care services.

Qualitative data analysis using thematic analysis, guided by the four HIQA principles:

- a human rights-based approach
- safety and wellbeing
- responsiveness
- accountability

People who use **Professionals Professionals** health and social care working in direct care working in services roles management and administration Experience using Assistant director of Chief information health and social care officer nursing services Clinical nurse Clinical information Experience using specialist manager mental health Clinical psychologist Corporate governance Community Data and analytics services Living with a longpharmacist Data protection term condition Dermatologist officer General practitioner Director of nursing Living with a rare disease Laboratory manager Patient safety Medical student Experience caring for strategy manager a child living with a Senior staff nurse Professional long-term condition Social worker regulation Experience as a Service feedback young person manager

(+ academic researcher)

Next steps

Prepare draft National Guidance in collaboration with co-production working group

Conduct public consultation and further stakeholder engagement on draft National Guidance (due to commence in early November)

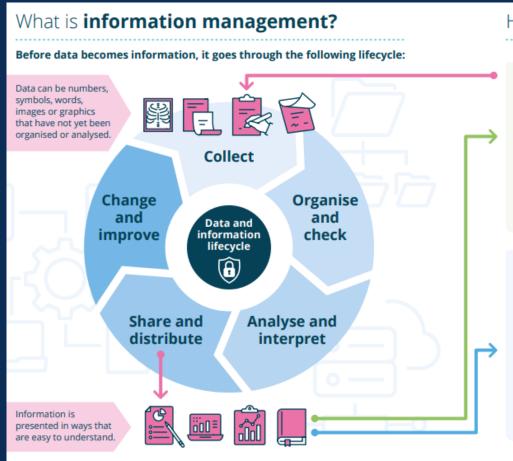
-> key opportunity for pharmacists to contribute your views

Finalise National Guidance in response to stakeholder feedback



3

National Standards for Information Management in Health and Social Care



How data and information are used?

Primary use of information:

Use of a person's health information to inform their care.



Individuals use their health information to make decisions on their own health and well-being, for example, managing a chronic (ongoing) condition.



Health and social care professionals use health information to decide on what care, support or treatment is best for the

Secondary use of information:

Re-using a person's information to help plan and manage health and social care services, inform public health, guide policy-making, and perform research.

EXAMPLES:



Healthcare organisations, such as hospitals, use information to manage services and plan for future needs with the aim of continuously improving quality of care and achieving better value for money.



National data collections use information to inform policymaking, improve public-health and undertake research to compare treatments and services.

Good information management will:

All health and social care professionals are responsible for managing information appropriately.

by promoting the use of accurate, relevant and timely data to inform good decisionmaking for both primary and secondary use.





BUILD TRUST

by adopting a 'rights-based approach' to information management by effectively engaging with individuals, groups and communities, and using information in a way that respects privacy and promotes equity.









by managing information in line with international best practice by following data security, data quality and data standards requirements.









Information Management Standards

Information Management Standards for National Health and Social Care Data Collections

 National health and social care data collections/national repositories of health and social care data

National Standards for Information Management in Health and Social Care

 All services and organisations that collect, use or share health and social care information (within HIQA remit, excluding designated centres)





V1.0 (2017) V2.0 (2024)

Approach



Quality Assurance Framework

Principles underpinning the National Standards

- HIQA's principles-based framework is used for the development of all national standards.
- Standards are presented under the four principles:
 - a human rights-based approach
 - safety and wellbeing
 - responsiveness
 - accountability



Overview of information management standards



1.1 Uphold people's rights relating to information

1.2 Protect privacy and confidentiality



2.1 Optimise the accessibility, use and value of information

2.2 Undertake effective stakeholder engagement



3.1 Align with best practice regarding standards and agreed definitions

3.2 Enhance data quality

3.3 Ensure data security

3.4 Develop staff capability and capacity for information management



4.1 Develop strong organisational governance, leadership and management

4.2 Implement strategy for information management

4.3 Promote effective performance assurance and risk management

4.4 Ensure compliance with relevant legislation and codes of practice

Supporting documents x3

Self-Assessment Tool

Self-Assessment Tool

Phasith information and Quality and Gloridates

DRAFT NATIONAL STANDARDS FOR Information Management in Health and Social Care

Safer Better Care

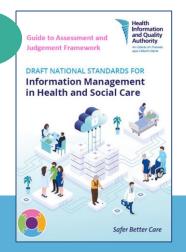
Purpose: To determine the extent to which organisations are in compliance with the standards and identify areas of good practice and where improvement is needed

Assessment and Judgement Framework (AJF)



Purpose: To set out lines of enquiry to assist organisations and reviewers in assessing compliance with the standards

Guide to AJF



Purpose: To set out how compliance will be assessed and provide detailed guidance on on how organisations can achieve compliance to the standards



4

Revision of:

- National Standard for a Demographic Dataset for Health and Social Care
- National Standard for Hospital Discharge Information

National Health Information Standards

- For information to flow in and between health and social care systems, it needs to be collected, organised and recorded in a consistent way every time.
- We are working collaboratively to set health information standards that outline what information needs to be gathered in a particular situation, or 'use case' (e.g. GP referral to outpatient department) and a standardised way to record this information.
- These standards are fundamental to support the move from fragmented, often paper-based systems to seamless interoperable digital systems.
- Work programme will be informed by engagement with stakeholders, the EHDS regulation and relevant legislation and strategies developed by the Department of Health in order for Ireland to meet the requirements of the EHDS regulation.



National Standard for a Demographic Dataset

National Standard for Hospital Discharge Information



Revised Draft National Standard for a Demographic Dataset Aim, purpose and composition

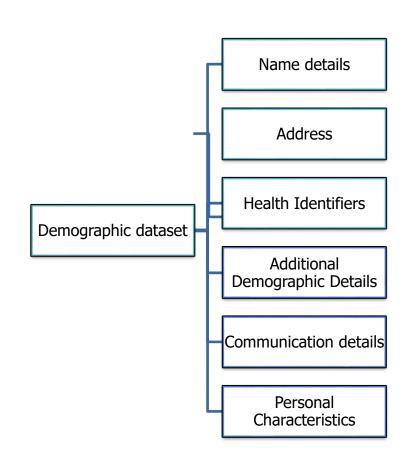
Aim:

The National Standard for a Demographic Dataset for Health and Social Care defines the core set of data elements required to identify an individual uniquely, in order to provide safe, quality care and support.

Purpose:

The standard aims to promote safe, quality care and support by:

- ensuring that an individual using services is identified correctly, and all of their health information is correctly associated with them.
- assisting service providers to collect standard core demographic data about individuals using their services for:
 - Administrative functions
 Clinical purposes
 - Service planning Secondary use



Health information standardsStructure and content

- Data elements
- Description
- Conformance or optionality (identifying whether data elements are mandatory, required if available or options)
- Cardinality (the number of instances)
- ➤ **Value sets** (identifying existing international standards such as ISO and SNOMED standards and defining how data should be captured if no international standard exists)
- Guidance for use (providing examples or how to use the standard in practice in an Irish context)

Revised Draft National Standard for a Demographic Dataset Stakeholder input

- 6-week public consultation in June July
- 46 responses
- Submission from Pharmaceutical Society of Ireland
 - Positive regarding guidance, conformance and cardinality
 - Potential challenges regarding implementation:
 - Legislative misalignment pharmacies are subject to multiple legislative requirements
 - What will support the standard in practice?
 - Education and training
 - Practical resources for example case studies

Draft Revised National Standard for a Demographic Dataset Next steps

Refine draft standard based on stakeholder feedback

Bring updated draft standard back to Standards Working Group

Testing of standard

Final standard submitted to Minister for Health for approval

Revised Draft National Standard for Hospital Discharge Information Aim, purpose and composition

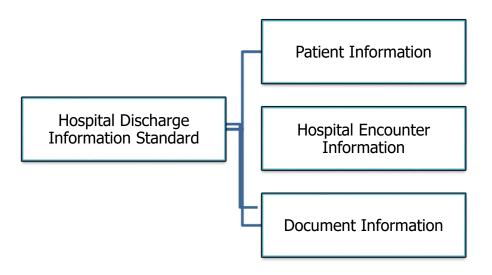
Aim:

The National Standard for Hospital Discharge Summary Information defines the core set of data elements, required when a person is discharged from an acute hospital back to the care of their primary healthcare professionals, in order to provide continued safe quality care and support.

Purpose:

The standard aims to promote safe, quality care and support by:

- Ensuring the relevant and appropriate data elements are included in a hospital discharge dataset to ensure the correct information about the person is shared in a safe, appropriate and timely manner in order for ongoing care be provided.
- Providing guidance on how data elements should be defined, structured and documented.



Revised Draft National Standard for Hospital Discharge Information Next steps

6-week public consultation due to commence at the end of September

Refine draft standard based on stakeholder feedback

Bring updated draft standard back to Standards Working Group

Testing of standard

Final standard submitted to Minister for Health for approval



Questions?

Contact us

Head office

Unit 1301, City Gate, Mahon, Cork, T12 Y2XT (021) 240 9300

Regional office - Dublin

George's Court, George's Lane Dublin 7, D07 E98Y (01) 814 7400

Regional office - Galway

One Galway Central Forster Street, Galway H91 NHH9

Email

info@hiqa.ie

hist@hiqa.ie (Health Information Standards Team)



HIQA



@hiqa



@hiqaireland



@hiqaireland



@hiqa

Thank you



George's Court, George's Lane Smithfield, Dublin 7 D07 E98Y

T: 01 814 7400 W: www.hiqa.ie E: info@hiqa.ie

