

RECOMMENDATIONS ON

ICT Enablement of Older Persons Services Stakeholder Involvement Report



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, Equality, Disability, Integration and Youth, 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 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 costeffectiveness of health programmes, 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 Programme Carrying out national serviceuser 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

Healthcare is information-intensive, generating large volumes of data every day. Health and social care professionals spend a significant amount of their time handling information, collecting it, looking for it and storing it. Therefore, it is essential 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 medicine, a nurse needs to be sure that they are administering the appropriate dose of the correct medicine to the right patient and that the patient is not allergic to it. Similarly, a 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 at all.

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

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 the 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 drive 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. Further to this, it can 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 prevents the safe and effective transfer of information. This results in people using the service being asked to provide the same information on multiple occasions.

In Ireland, information can be lost, documentation quality varies, and there is overreliance 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, understandable and trustworthy information on which to base our decisions.

As a result of these deficiencies, there is a clear and pressing need to develop a coherent and integrated approach to health information based on standards and international best practice. A robust health information environment will allow all stakeholders, the general public, patients and service users, health and social care professionals and policy-makers to make choices or decisions based on the best available information. This is a fundamental requirement for a high reliability healthcare system.

Through its health information function, HIQA is addressing these issues and working to ensure that high quality health and social care information is available to support the delivery, planning and monitoring of services.

An older person's patient journey typically has a high number of transitions across care settings, requiring very close coordination between the different health and social care domains. The information needed to provide care to older persons is typically held in a number of IT systems or in paper records, distributed across those settings in silos, creating challenges for those providing care. The COVID-19 pandemic intensified these challenges and led the COVID-19 Nursing Homes Expert Panel to call for the implementation of an integrated IT system for older persons (Recommendation 6.3).

The integrated IT system was intended to ensure the effective sharing of information across residential settings, home support services and day care, and to incorporate needs assessment and care planning. It was also intended to support the management, delivery, and reporting of services, and to enable planning of alternate service provision and capacity development.

Following the publication of the COVID-19 Nursing Homes Expert Panel Examination of Measures to 2021, HIQA undertook a significant programme of work to implement the recommendations in the report. Given the complexity of the current situation, and the multiplicity of initiatives and projects, it was not clear that the introduction of another system would resolve these issues. Therefore, HIQA developed a set of recommendations to the Minister for Health that take account of both the current national situation and the future goals of the Sláintecare Implementation Plan, and that are informed by international best practice.

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Executive summary

An older person's patient journey typically has a high number of transitions across care settings, requiring very close coordination between the different health and social care domains, but with their information typically held in a number of IT systems or in paper records in silos across those settings.⁽¹⁾ Getting a full picture of the older person's care can be challenging.

The COVID-19 pandemic intensified these challenges and, in August 2020, led the COVID-19 Nursing Homes Expert Panel to call for the accelerated implementation of an integrated IT system for older persons.⁽²⁾ The system was intended:

- to ensure the effective sharing of information across residential settings home support services, and day care, and to incorporate needs assessment and care planning
- to support the management, delivery, and reporting of services
- to enable planning of alternate service provision and capacity development. (2)

A number of programmes and initiatives related to these capabilities are already underway. Therefore, the Health Information Quality Authority (HIQA) has undertaken to develop a set of broad, strategic recommendations to the Minister for Health on the ICT enablement of older persons, which concerns the delivery of these capabilities in light of that ongoing work. This report sets out the involvement of all stakeholders in this process.

HIQA seeks to develop high-quality, evidence-based recommendations in collaboration with all stakeholders. To that end, these recommendations follow HIQA's quality assurance framework, which involves stakeholders fully in the development process.

As part of that process, HIQA initially undertook reviews of national and international evidence. The international review looked at ICT enablement of older persons services in eight jurisdictions that are considered to have made significant progress in the areas of eHealth and digital health. International experts are listed in Appendix A. The national review set the ICT enablement of older persons services in the context of current strategic policy, under Sláintecare, and related structural, service and other reforms. It also looked at examples of current enablement across settings and roles.

A special Advisory Group was also convened, with 32 members drawn from across the domains of health and social care, and of ICT enablement – these are listed in Appendix B. On the advice of the group, a mapping of governance structures was

also undertaken and those findings, together with the national and international evidence, informed the draft recommendations for consultation.

A full, six-week public consultation was then undertaken. Information sessions were also held with Age Friendly Ireland's older persons' councils, the HSE's Health and Social Care Professions Office, and the CHO Digital Managers network, to encourage members of those networks to make submissions. Additionally, key informants in the Department of Health and in the Health Service Executive (HSE) were engaged, to socialise the Recommendations.

23 submissions were received, with eight submissions from individuals and 15 submissions from organisations – these are listed in Appendix C. Most submissions provided a substantial response and raised several important themes. The feedback led to the addition of two new Recommendations.

The first new recommendation (**Recommendation 1**) outlines the need for a national health information strategy, among other measures highlighted in The Need to Reform Ireland's National Health Information System position paper (HIQA, 2021). The second new recommendation (**Recommendation 4**) called for the development of criteria against which the overall programme for the ICT enablement of older persons services can be evaluated.

Feedback also resulted in several recommendations being redrafted. The recommendations on strategy were drafted to indicate the need for an overall strategy, with identified priorities and associated funding, for ICT enablement of older persons services and, separately, for the national heath information system. The recommendation on stakeholder mapping (**Recommendation 6**) now identifies older persons as a core stakeholder group, to ensure that the representatives and champions of that group are engaged fully.

Additionally, the recommendation on national health identifiers has been redrafted to align more closely with the terminology used in the Health Identifiers Act 2014 and 2021 statutory instrument (**Recommendation 12**). In the area of standardised sharing of information, the recommendation has been revised to indicate that, where Health Level 7 (HL7) version 2 is in use, a move to HL7 FHIR should be considered, in line with international best practice (**Recommendation 13**).

A number of themes had an impact on the broader document. Some were relevant to the ICT enablement of services for all populations, including older persons. These include the need for legislation and information governance, for data security and for citizens' access to their own health information. These themes are covered by the measures outlined in HIQA's position paper and therefore, **section 4.1**, which deals with those measures, has been updated. Similarly, remote monitoring and disruptive

technologies are expected to plan an increasing role in the delivery of services, and sections in **Chapter 6 Strategy and Governance**, have been updated.

The third meeting of the Advisory Group provided an opportunity for members to provide advice on the amended draft recommendations after the public consultation. After all feedback had been considered, the final recommendations were drafted ahead of submission to the HIQA Executive Management Team and the HIQA Board for approval. The

Chapter 1 Introduction

This chapter outlines the origins of HIQA's project to develop recommendations on ICT enablement of older persons services, and the methodology used (known as the 'HIQA quality assurance framework') for the development of high-quality, evidence-based recommendations.

In common with many other countries, Ireland is facing the challenge of an ageing population, with those aged 65 years or more expected to account for 50% of all healthcare activity by 2031.⁽¹⁾ An older person's patient journey typically has a high number of transitions across care settings, requiring very close coordination between the different health and social care domains, but with the older person's information typically held in a number of IT systems or in paper records in silos across those settings.⁽¹⁾ Getting a full picture of the older person's care can be a challenge.

For example, following discharge to the community, the discharge summary is the GP or public health nurse's sole source of information regarding treatment administered, medications prescribed or discontinued, or additional care requirements related to the older person's acute stay. The quality of this data varies and discharge summaries can be delayed so GPs, public health nurses and other health and social care professionals* would benefit from more timely and effective sharing of this information.

The COVID-19 pandemic intensified these challenges and, in August 2020, led the COVID-19 Nursing Homes Expert panel to call for the accelerated implementation of an integrated IT system for older persons.⁽²⁾ The system was intended:

- to ensure the effective sharing of information across residential settings home support services and day care and to incorporate needs assessment and care planning
- to support the management, delivery and reporting of services
- to enable planning of alternate service provision and capacity development.

HIQA has a long-standing programme of work in the area of eHealth and has developed national standards, guidance and recommendations in areas that include patient summaries and electronic prescribing in the community. Through this programme of work, HIQA was aware that the capabilities requested by the Expert Panel are extensive and that they are unlikely to be provided by a single integrated IT system. It is also aware of existing programmes and initiatives that are intended to deliver those capabilities.

^{*} The term, 'Health and social care professionals' is used to indicate healthcare professionals and social care professionals working in acute, primary, and community care.

HIQA has therefore developed a set of recommendations to the Minister for Health on the ICT enablement of older persons services. These recommendations provide an analysis of the current situation nationally and of best practices in the area internationally. Informed by that evidence, the recommendations outline measures that would ensure that the capabilities requested by the Expert Panel are provided in line with national priorities, including Sláintecare.

Chapter 2 Stakeholder involvement in the development of the draft recommendations for consultation

This chapter provides more detail on the development of the draft for consultation of the recommendations, outlining the stakeholder involvement in the compilation of national and international evidence and as part of the specially convened Advisory Group, in the pre-consultation stages of the development process.

2.1 Compilation of evidence base

During the initial stages of the project, HIQA undertook a review of international best practice and an analysis of the national situation. Evidence was compiled through a review of materials and research produced by authoritative organisations, online interviews with subject matter experts (national and international) and review of published academic articles, where relevant and available. After analysing this evidence, a number of themes were identified.

2.1.1 International evidence

A review was undertaken of comparable international scenarios, identifying eight countries that had significant eHealth development and were seeking to transform the national delivery of older persons services, supported by ICT enablement. Full international findings are discussed in the Best Practice Review, while a brief summary is presented here.

Australian national strategy aims to establish a national eHealth ecosystem, similar to the Irish National eHealth Strategy (2013) and subsequent strategic policy. The Australian Department of Health provided information regarding the My Aged Care Programme, which is the Australian programme for older persons services. A Royal Commission review of the dedicated national record for older persons services, My Aged Care Record, showed a 'fragmented ecosystem', and this experience provides learnings that are relevant to the Irish context.

Several meetings were held with key decision-makers in the New Zealand Ministry for Health, as well as in the Data and Digital Directorate. In the early 2000s, the InterRAI Assessment was adopted as the national standard for New Zealand and has been in use as a software service for almost a decade. Experiences from these programmes highlight the importance of user-centred principles of design.

Semi-structured interviews[†] were also held with NHS Healthcare Improvement Scotland and with the Digital Health and Care section of the Scottish Government. Scottish national strategic policy is seeking to ensure that each citizen's health and social care can be captured digitally. National initiatives on digital inclusion for those aged 65 years and older, and on digital care homes, among others, were shown to be essential enablers for the successful introduction of eHealth and digital health initiatives.

Interviews were also held with the Canadian Institute of Health Information and with the Continuing Care Branch of the Government of Alberta. Canadian health information reporting systems are mature and well regarded internationally.⁽³⁾ The latest versions of InterRAI Assessments were adopted recently, to support point-of-care, organisational and system decisions in a near real-time reporting system. However, experience there shows the lead-in time for the new InterRAI Assessment for homecare to mature (five to 10 years) and the need for additional personnel and resourcing to realise benefits fully.

The CEO of Medcom Denmark provided information regarding the Danish national strategic approach. Denmark has found the sharing information to be more effective than sending information using a national messaging broker: for example, when a handover of information did not occur or when uncertainty arose over where the most up-to-date information. Therefore, national strategy is now focused on the creation of shared national records.

Semi-structured interviews were held with the former CEO of the Estonian EHealth Foundation and with the Chief Medical Officer from the Finnish Institute for Health and Welfare. Estonia and Finland are both early adopters of eHealth and national digital services. However, in both jurisdictions, standards are ageing out, creating compatibility issues with systems using newer standards and placing limitations on the usefulness of data in the national patient data repositories.

Additionally, in Finland, health centres have a broad range of health and social care services, similar to that envisaged by Sláintecare. However, issues still occur with continuity of care, owing to a lack of clear care pathways.

And, finally, key decision-makers from the Health and Social Care Business Services Organisation in Northern Ireland were interviewed. In Northern Ireland, challenges still remain in the sharing of information between acute and community settings: for example, the Northern Ireland Electronic Care Record is often hosted in an acute setting and typically cannot be shared with nursing homes.

[†] In a semi-structured interview, some questions are defined beforehand while the remainder are asked in response to the direction of the conversation.

2.1.2 National evidence

With respect to the national situation, national strategic policy, national clinical and integrated care programmes, current national delivery structures and other aspects were reviewed. Key stakeholders were identified from across these domains and interviews were conducted. Many of these expert stakeholders were members of the Advisory Group, which is described later. These national findings were compiled as an As Is Analysis.

First, a review of national strategic policy was undertaken. For almost a decade, health and social care services have been undergoing a transformation at national level to an integrated care model, consolidated in the Sláintecare vision. Supporting structural, service, financial and other reforms are also being implemented across all health and social care services.

Specific to older persons services, the National Clinical Programme for Older Persons (NCPOP) made key recommendations for the establishment of a Specialist Geriatric Service, including making the InterRAI Assessment the national standard. Building on that work, the Integrated Care Programme for Older Persons (ICPOP) developed a 10-step framework for the implementation of integrated care pathways and a national service model. Programme managers for ICPOP and NCPOP provided expert input and guidance during the development of recommendations.

National strategic eHealth and digital health initiatives have also been undertaken to support the transformation of health and social care services to an integrated care model under Sláintecare. Initial findings from ICPOP also indicated core requirements, which included case management functionality and shared record functionality. Again, senior decision-makers from national strategic eHealth programmes, from Community ICT and from other areas were involved in the development of the recommendations.

The review then sought to understand current levels of ICT enablement in selected Community Health Oragnisations (CHOs) through interviews with key informants, and, in acute settings, through a HSE digital maturity assessment. The review also outlined examples of ICT enablement across settings, services and roles. National representatives of key roles — including GPs, public health nurses, occupational therapists, and other health and social care professionals — were also involved over the development of the recommendations.

2.1.3 Identification of themes

Review of the national and international evidence led to the identification of five themes:

- **Strategy:** The need for a short-term and long-term strategy to ensure good interoperability, that systems are future-proofed and integrated into national initiatives.
- Governance to understand current governance structures and to understand the coordination, across older persons services including at local and national level.
- **Crucial ICT enablers** to understand the roles that different national systems and initiatives will play in ICT enablement of older persons services.
- Standardised sharing of information to understand what needs to be done to ensure effective sharing of information across older persons services, in line with national standards.
- Improvement of user experience to ensure that the information needs of all health and social care professionals delivering care are fully understood and met and that patients and their carers are comfortable and confident using the systems.

These themes informed the initial development of the draft recommendations.

2.2 Convening of a special advisory group

A special Advisory Group was also convened over several months in mid-2021. Twenty-seven stakeholder organisations and programmes, in the domains of health and social care and of ICT, were initially identified and invited to nominate representatives.

At the first meeting of the Advisory Group (in September 2021), HIQA's Project Lead presented an overview of the national and international findings and outlined the five themes that had been identified. The Advisory Group members identified five further organisations to be invited to join, giving a total of 32 members. A full list of membership is presented in Appendix A. The Advisory Group requested that a governance mapping exercise be undertaken.

2.2.1 Governance mapping

A desktop review of governance documentation was undertaken and HIQA contacted key stakeholders to source further documentation.

HSE corporate and governance structures were in transition and little documentation was available. Therefore, one-to-one interviews were conducted with members of the Advisory Group, as well as with other individuals that they identified as having relevant knowledge.

From these interviews, HIQA developed an understanding of current governance structures, any gaps in those structures and measures that the stakeholders considered appropriate to address those gaps. The findings informed the development of the draft recommendations that were presented to the Advisory Group in 2022 but were not published separately.

2.3 Development of draft recommendations for public consultation

At the second meeting of the Advisory Group, the text of the 18 Draft Recommendations was presented together with a briefing note. Both were informed by the findings of the national and international reviews and of the governance analysis. The briefing note was also informed by other key documents, including the position paper, The Need to Reform Ireland's National Health Information System paper (HIQA, 2021). The position paper outlined deficiencies in Ireland's national health information system and also made recommendations to fix them, to ensure a robust national health information system.

Advisory Group members provided expert guidance and feedback, which HIQA considered fully before amending the recommendations appropriately. The recommendations were largely welcomed and it was considered that, overall, the document had identified best practice and covered the many challenges facing older persons services. The strategic, quality-driven focus on ICT enablement was also welcomed. The recommendations were also noted to be relevant to many other cohorts of health service users and locations.

Key informant interviews also yielded additional feedback. As a result, changes were made to ensure that the ICT enablement of older persons services is understood to be part of the broader ICT enablement of services for all populations in community, including older persons. Requirements for specific ICT enablers were removed and further information regarding the ICT Community infrastructure and solutions was added.

Finally, the previous categorisations of short term, medium term, long term and general were removed and, instead, the recommendations were categorised under the following themes:

- **Strategy and governance** the need for an overall strategy to be developed for ICT enablement of older persons services and for appropriate overall governance structure(s) to be identified.
- **Vision and roadmap** the need for a clear vision of the ICT enablement of older persons services to be developed, in collaboration with all stakeholder groups, and for a corresponding roadmap to be defined.

- **Standardised sharing of information** the need for the standardised sharing of information, through analysis of the actual information needs of practitioners and the collaborative development of national standards.
- **User engagement** the need for ongoing engagement of all stakeholders, especially core end user groups, in the development of systems and practices that comprise the ICT enablement of older persons services.

The resulting draft recommendations for consultation were presented to the HIQA Executive Management Team, which approved a full, six-week public consultation.

Chapter 3 Analysis of responses from public consultation and resulting changes

A six-week public consultation ran from 16 March to 29 April 2022 to gather feedback on the 20 recommendations outlined in the draft recommendations for consultation document. The draft recommendations for consultation were grouped as follows:

- Strategy and governance (Recommendations 1 to 5)
- Vision and roadmap (Recommendations 6 to 12)
- Standardised sharing of information (Recommendations 13 to 16)
- User engagement (Recommendations 17 to 20)
- General feedback.

The draft recommendations for consultation document was made publicly available to download on www.hiqa.ie together with the Best Practice Review and As Is Analysis. A consultation feedback form (in editable PDF) was developed to assist people to make submissions. Submissions could be made using an online survey tool, emailed to a dedicated email address or posted to HIQA.

A press release about the public consultation was shared with a broad range of stakeholders early on 16 March 2022. More than 150 stakeholder organisations and individuals were directly emailed, inviting them to respond to the consultation. HIQA announced the launch of the consultation via HIQA social media channels, including Twitter, Facebook, LinkedIn and Instagram, and continued to promote it during the six-week period.

During the public consultation, targeted network engagement was undertaken. The Project Lead identified three existing networks and engaged with a core contact in each network to organise an information session for each network. The purpose of each information session was support network leaders to support and encourage other members their network to respond to the public consultation.

The following table describes the information sessions that were held:

Network	Date	Summary
Health and Social Care Professionals (HSCP)	11 April	HSE HSCP Office Advisory Group, therapy managers with interest in digital health attended. Generally supportive and interested.
Older Persons	12 April	Six chairs of Age Friendly Ireland older persons' councils and two regional managers attended. Presentation was considered very complex. Concerns were raised about

		unauthorised access to data and the potential for another cyber-attack.
HSE CHO Digital Health Managers' Network	13 April	Four CHO Digital Health Managers from the CHO Digital Health Managers' network attended. Principally concerned that interoperability standards not focus exclusively on HL7 standards.

The Project Lead also identified key informants – that is, individual stakeholders with responsibility for developing policy and delivering services and who will continue to engage with key stakeholders in this regard – in the Department of Health and the HSE. The purpose of the engagement was to promote awareness of the Draft Recommendations among individuals in key strategic roles and to understand their perspectives on the document.

It should be noted that these recommendations were undertaken in response to a recommendation made by the COVID-19 Nursing Homes Expert Panel for the introduction of an integrated IT system for older persons services. The project began in January 2021, approximately six months after the publication of the Expert Panel's report.

Much work was already underway on all recommendations, and some of this work pre-dated the COVID-19 pandemic. As a result, national stakeholders tended to be aware of the Expert Panel's report and were very willing to engage with the process.

The Project Team also sent reminders to the distribution list on two occasions.

Following the close of the public consultation, all of the feedback gathered during the public consultation was reviewed and considered by the Project Team and, where relevant, incorporated into the revised recommendations.

3.1 Overview of feedback received

A total of 23 responses were made to the public consultation – just under one third (eight submissions) were made in a personal capacity and just over two thirds (15 submissions) were made on behalf of an organisation. See Appendix B for a list of organisations that responded to the public consultation.

All responses were considered and broken into constituent comments. This yielded 233 comments, which can be broken down as follows:

- Strategy and governance 42 comments
- Vision and roadmap 57 comments
- Standardised sharing of information 49 comments

- User engagement 47 comments
- General comments 38 comments.

After analysis of these comments, a range of themes were also identified.

3.2 Themes identified

3.2.1 Older person's voice

Feedback noted that older persons data is being shared and, therefore, older persons should have full and meaningful engagement in each aspect of the ICT enablement of older persons services. The older person's concerns were noted to be separate to those of health and social care professionals. It was noted that the older person's voice, together with that of their families and caregivers, should be properly represented by appropriate organisations and that champions should also be appointed.

3.2.2 Older person's access to their data

Feedback called for older persons to have access to, and the ability to control, their own information at all times. Older persons should be able to maintain their own data, as person-centred data improves many aspects of care, and should own their own data. It should be noted that this theme is relevant for ICT enablement of health and social care services for all populations including older persons.

3.2.3 Legislation and governance

Feedback identified the need for a legislative framework for the sharing of information across the national health information system, with sharing between private and public entities considered to be essential. It was considered essential that data privacy and confidentiality be guaranteed in any ICT systems. Related concerns were expressed that older persons should have full control over sharing of their data and that only those authorised to do so have access to their information, including authorised family members only. Data and information governance principles, data privacy, and an appropriate consent model were also raised. Again, this theme is relevant for ICT enablement of health and social care services for all populations including older persons.

3.2.4 Awareness, education, literacy and inclusion

Feedback noted that many staff in the home care and nursing homes sectors may require additional training and supports to participate in the development and implementation of new arrangements. Varying levels of technological literacy were noted among staff and the need for education, as well as peer learning and knowledge sharing between sites and settings, was highlighted. An assessment of technological literacy levels and use among older persons was also suggested. The role of clinical leaders of technology in the embedding of technology within clinical practice was also emphasised.

Health literacy and digital inclusion were identified as areas where broader initiatives could be beneficial. Such initiatives are likely to apply across the ICT enablement of all health and social care services, including older persons services, and therefore are part of national level measures and initiatives to improve the national health information system.

3.2.5 Scale and scope of ICT enablement of older persons services

The scale and scope of the recommendations on ICT enablement of older persons services was described as 'very ambitious'. It was also noted that that changes to the work practices and the introduction of technology related to the ICT enablement of services (including those for older persons), will have a very significant impact on staff.

3.2.6 National health identifiers

Concerns were expressed at perceived delays in the rollout of national health identifiers, and the resulting impact, as national health identifiers are considered to be a core enabler for the ICT enablement of older persons services.

Feedback also asked for the recommendation to be updated using language from the Health Identifiers Act 2014 and the 2022 statutory instrument, S.I. No. 156/2022 - Health Identifiers Act 2014 (Health Service Providers) Regulations 2022. Comments also requested that the minimum data sets and other specifics outlined in the Act and in the Statutory Instrument be included in the draft recommendations.

3.2.7 Interoperability standards

Feedback indicated the mistaken understanding that, as only HL7 FHIR was mentioned, only HL7 FHIR standard should be used in all circumstances. This was not the intended meaning. Given the international trend to move from HL7 version 2

to HL7 FHIR, the recommendation is that a similar move should be considered for ICT enablement of health and social care services for older persons, where applicable and appropriate.

3.2.8 Disruptive technologies and related areas

Several comments mentioned telehealth, personal health monitoring, wearables and disruptive technologies. Some comments called for more detail around telehealth as a pillar of the 'ICT Spine' and its provision as part of the remote hubs. Other comments referred to remote monitoring with inbuilt 'smartness', and its expanding role as an adjunct to the formal health and social care services. Telehealth is a pillar of the HSE's 'ICT Spine' and therefore is already covered. The other technologies mentioned have the potential to provide huge benefits to patients and health and social care professionals alike, and are expected to play an increasing role in the delivery of health and social care services.

3.2.9 InterRAI Assessments

Feedback has highlighted the importance of InterRAI Assessment, which is considered to be starting point of the older person's journey and of engaging with the international InterRAI organisation and network. To realise the benefits from the InterRAI Assessment, 'tried and trusted intercommunicating ICT' is considered essential. The significant change to work practices is also highlighted as well as the risks should the InterRAI Assessment not be introduced in an effective manner.

Feedback noted that InterRAI Assessment was selected as the national standard in 2011 but remained to be implemented as an information system and to be adopted as a work practice nationally. Concern was also expressed over the current approach, where InterRAI assessors will be appointed to each community health network.

3.2.10 Data Security

Feedback noted the role of data security – in both the storage and the transmission of data – to ensure public trust, by ensuring the confidentiality of data. All population groups, including older persons, are likely to be increasingly concerned about data security following cyber security attacks on HSE systems and in light of measures they have been asked to take to protect their personal financial data and other personal data.

3.2.11 Funding and investment

Feedback noted the need for dedicated financial resourcing and investment associated with the overarching strategy, the vision and the roadmap.

3.2.12 Other changes

Following feedback from the public consultation and from key informant interviews, factual accuracy corrections were made and updated information was included. Examples include corrections of typos, changes to references regarding the National Shared (Care) Record, and updated information on the formal evaluation of the National Integrated Care Programme for Older Persons.

3.3 Resulting changes to the recommendations

This section describes the changes to the text of the recommendations and to the broader document as a result of feedback and themes from the public consultation.

It should be noted that these recommendations are strategic in nature. Some of the comments received are valid but were too detailed for inclusion or are outside the scope of the recommendations, and therefore did not result in any amendments.

3.3.1 Changes to Strategy and Governance recommendations

Some of the feedback received covered themes that are applicable across the broader ICT enablement of health and social care for all populations, including older persons. Feedback highlighted that a proper legislative basis for the sharing of health information, securely and appropriately, between public and private sector entities is needed, along with other legislative measures. Information governance and a consent model were also considered essential, as was data security, in particular during storage and transmission.

These themes are covered by measures that HIQA has outlined to ensure a robust and fit-for-purpose national health information system, in The Need to Reform Ireland's National Health Information System position paper (HIQA, 2021). Therefore, a new recommendation has been added (**Recommendation 1**), informed by the measures recommended in the position paper and calling for a national health information strategy. Section 4.1, which deals in brief with the position paper, was also revised.

HIQA has also undertaken dedicated programmes of work related to two of these areas. National policy-makers have recognised the urgent need to revise and deliver on new health information strategy, policy and legislation. In response, HIQA has

developed key policy considerations to drive the transformation of the collection, use and sharing of health information in Ireland. In partnership with the Department of Health and the HSE, HIQA is also undertaking a national engagement with Irish public and health and social care professionals in relation to the digitalisation of health and social care services. This new research will gather evidence on opinions, attitudes, gaps and comfort levels around digital services and systems and also aims to identify the purpose of a health and social care portal for professionals and the public.

As already discussed, some of the measures mentioned are common to the ICT enablement of services for all populations, while other measures are specific to the ICT enablement of health and social care services for older persons. Additionally, the goal of these Recommendations is to inform and support the delivery of the capabilities described by the COVID-19 Nursing Homes Expert Panel, without the requirement that a single IT system be used. Therefore, **Recommendation 2** calls for an overall strategy specifically for the ICT enablement of older persons services.

For the same reason, **Recommendation 3** looks for an overall governance structure (or structures) for the ICT enablement of older persons services to be identified. This entity or entities will have responsibility for the development of the overall strategy for the ICT enablement of older persons services and for oversight of its implementation.

The second new recommendation (**Recommendation 4**) indicates that this overall governance structure (or structures) should ensure that criteria are developed against which the overall strategy for the ICT enablement of older persons services will be evaluated, at appropriate intervals. This will help to ensure that the scale and scope of the overall programme are appropriate, a concern that was also raised in feedback.

Several comments noted that the necessary finance must be assigned to realise the overall strategy, the vision and the roadmap. **Recommendation 1** specifies 'a national health information strategy, with identified priorities and associated funding'. Similarly, **Recommendations 2 to 4** mention 'an overall strategy with identified priorities and associated funding [for the ICT enablement of older persons services]'.

Feedback also looked for a more detailed recommendation on the governance of InterRAI and acceleration of the InterRAI programme. The **Strategy and governance** recommendations text now also acknowledges that the InterRAI Assessment is the starting point of the older person's patient journey. However, it accelerated implementation of the InterRAI Assessment information system, out of

step with other strategic elements, could lead to another paper-based output. Therefore, no amendments were made.

3.3.2 Changes to Vision and Roadmap recommendations

Many comments supported and welcomed the recommendations on vision and roadmap. However, some feedback indicated that older persons should be fully represented at all stages of the ICT enablement of older persons services programme. To ensure that older persons are represented fully, **Recommendation 6** has been updated to state that older persons should be considered as a core stakeholder group in the stakeholder mapping exercise and that their representative groups should be engaged accordingly throughout the process. The appointment of champions for older persons should also be considered.

As noted earlier, the recommendations are strategic in nature and so while some comments received may be valid, they may not result in a change to the recommendations text or the broader document. Feedback supported the use of national health identifiers but concern was expressed at the perceived slow pace of implementation. Requirements for specific national programmes, such as InterRAI and the IHI programme, were considered to be part of overall strategy for ICT enablement of older persons services. Therefore, no change was made.

It was also noted that the recommendation on national health identifiers should be aligned with the language of the 2014 Act and should mention the statutory instrument from 2021. **Recommendation 10** was updated accordingly.

Feedback called for specific groups or sectors to be listed as stakeholder groups. However, to avoid omissions of one group or another, no stakeholder groups are identified in the recommendations, so there was no change.

Feedback also showed the need for a clear understanding among all those concerned of the scale and potential impact of the ICT-enabled transformation. However, this was considered to be covered by the recommendation on a clear vision shared by all stakeholders (**Recommendation 7**) and by the performance criteria and evaluations outlined in **Recommendation 4**.

Finally, comments also asked that the audit of existing hardware, electronic systems and data sets (**Recommendation 8**) be modified to include peripheral devices and minimum datasets. Each area is significant in its own right and could expand the scope of the audit substantially. Therefore, no change was made.

3.3.3 Changes to Standardised Sharing of Information recommendations

Again, many comments supported the recommendations on the standardised sharing of information.

Feedback mentioned the implementation of the integration engine and the XDS repository, which were considered too detailed for the Recommendations. Feedback also queried whether HL7 FHIR was the only standard to be used. To resolve this misunderstanding, Recommendation 13 has been updated to indicate that, where HL7 version 2 is used, a move to HL7 FHIR should be considered, reflecting the international trend.

3.3.4 Changes to User Engagement recommendations

Again, many comments supported the recommendations on user engagement, noting the importance of principles of user-centred design and of reviews of usersatisfaction, among other related areas.

Feedback noted the need for assessment of technological and digital literacy to identify further requirements for digital awareness and education, as distinct from targeted user training on new systems and from health literacy. The necessity for digital inclusion was also raised, to address issues around understanding of safe usage and around practicalities such as connectivity and hardware. Similarly, this theme is relevant for ICT enablement of health and social care services for all populations including older persons.

National programmes of work are already underway in this area. The HSE was noted to recognise fully the need for the training and support during transformation of work practice and to ensure that users are supported throughout the process, as standard practice: for example, through the work of the Change and Innovation function and Long Term Change, Development, and Innovation section. The HSE has also developed a digital health capability framework for nursing and midwifery, which is being extended to other health and social care professionals nationally. Other local, regional and national initiatives are also underway.

Recommendation 18 is strategic in nature and allows those devising the overall strategy (with oversight from the overall governance structure):

- to identify all appropriate initiatives in awareness, education, digital literacy, health literacy, digital inclusion and other areas, as they see fit and cognisant of national initiatives in those area,
- to include all such initiatives in the overall strategy as well as in the vision and roadmap, as appropriate.

Therefore, this recommendation was not amended. Other comments also related to specifics of user-centred design principles that required no changes.

3.3.5 Other changes

Data security: Data security, in storage and in transmission, was identified as a critical omission. Stringent safeguards were also identified as necessity for protecting an individual's health information and ensuring that it is used only for the intended purposes.

As such, data security was noted to be a key consideration for the wider ICT enablement of all health and social care services, including for older persons. Therefore, rather than requiring a separate recommendation, data security was considered to be part of strengthening of the national health information system and was added to the section on The Need to Reform Ireland's National Health Information System (HIQA, 2021).

The introductory text for the **Strategy and governance** recommendations now also notes the need for the overall strategy for ICT enablement of services for all populations (including older persons) to comply with all national standards and good practices in the area of data security and privacy

InterRAI Assessment: Another comment noted that the roadmap would need to take account of the service transformation inherent in the full rollout of the InterRAI Assessment information system as a major change for GPs, public health nurses and others. The text added to the introduction to the **Strategy and governance** recommendations noted that, in line with best practice, implementation of the InterRAI Assessment information system should be used to support the broader service change, but should not drive that service change.

Disruptive technologies: The introductory text to the **Strategy and governance** recommendations has been updated. That text notes that personal health monitoring, telehealth and disruptive technologies are all expected to play a larger, and increasingly important, role in the provision of health and social care services. It indicates that these technologies should be evaluated and incorporated into the overall strategy, vision and roadmap for ICT enablement of services for all populations (including older persons) over time.

Legislation and governance: It was pointed out that the necessary legislation was required for the storage and sharing of data between private and public sectors, as well as appropriate audits for record access, updates and sharing.

Again, this affects the ICT enablement of all health and social care services and, as such, is part of the national health information strategy. Therefore, it was covered in

the section describing The Need to Reform Ireland's Health Information System (HIQA, 2021). Information was also added on HIQA's Key Policy Considerations for the Collection, Use and Sharing of Health Information, which is intended to inform policy and legislation in this area.

A number of measures were recommended to ensure the successful implementation of ICT enablement of older persons services in practice, as part of the ICT enablement of all health and social care services. These include:

- communications to older persons and others, that the systems is an essential step in developing a seamless health and social service for older persons,
- clarifying the purpose and limitations as well as the which health and social care staff (and under what conditions) will have access to the information held on the system,
- outlining potential advantages and potential risks of the system.

These measures are considered essential as part of an effective stakeholder engagement and communications plan, which will be developed as part of **Recommendation 6**. Therefore, no amendment has been made.

The mechanism for engagement of the public and private sectors was also highlighted as a key requirement for the proper functioning of the national health information system and, therefore, is a key element of the national health information strategy. While Recommendation 1 outlines the need for a national health information strategy, with identified priorities and associated funding, it does not specify the areas that the strategy should cover and, therefore, this mechanism is not called out. However, throughout the recommendations, this theme is addressed in the context of the ICT enablement of health and social care services, including those for older persons.

Chapter 4 Conclusion and next steps

The *Recommendations on ICT Enablement of Older Persons Services* were developed in response to the COVID-19 Nursing Expert Panel's call for an integrated IT system for older persons services. As such, a broad range of stakeholders, from across the domains of health and social care and of ICT, were involved in the development of the draft recommendations for consultation.

The Project Team undertook significant stakeholder engagement as part of evidence synthesis, to inform both the scope of the project and the findings of the national and international research. A broad cross-section of programmes and organisations were also engaged through membership of the Advisory Group. That expert advice and guidance shaped the development of the Draft Recommendations and also helped to ensure awareness of, and broad support for, the strategic measures outlined in the Draft Recommendations for Consultation.

The Project Team also undertook a full public consultation, directly inviting more than 150 organisations and programmes to respond. The team hosted information sessions for key networks, to support and encourage them to provide responses to the public consultation. The team also held a number of key informant interviews, to raise awareness of the draft recommendations for consultation and to seek the views of these key informants on the recommendations. HIQA senior leadership also engaged senior decision-makers in the Department of Health and the HSE regarding these recommendations and other work.

Feedback from this public engagement phase consultation, targeted network engagement and key informant interviews covered many important areas and resulted in a number of changes to the draft recommendations. The post-consultation draft recommendations were presented to the Advisory Group for a third time and, following analysis of that feedback and appropriate amendments, the final recommendations were drafted.

Subsequently, the final recommendations were approved by the Executive Management Team, the HIQA Board, before being submitted to the Minister for Health and published on the HIQA web site.

HIQA would like to thank all of those who contributed to the development of these standards through the Advisory Group, information sessions and the public consultation, as well as key informant interviews. This involvement will help to ensure that maximum value is derived from the excellent work undertaken to date and the success of the overall ICT enablement of older persons services.

The following table shows the roles of the experts who were engaged in each of the countries reviewed, as part of the Best Practice Review:

Appendix A International expert contributors

Country	Stakeholders		
Australia	Department of Health - Assistant Secretary, Aged Care Access - Community Services Group Head		
New Zealand	internation of para concession. Solvies harragely tradicital pignar convices		
Canada	Canadian Institute of Health Information – Director Specialized Care Provincial Seniors Health and Continuing Care, Alberta Health Service – Provincial Program Director Quality Management Alberta Health, Continuing Care Branch, Government of Alberta – Manager, Continuing Care Information		
Denmark	Medcom – CEO		
Estonia	Estonian eHealth Foundation – GP and former CEO		
Finland	Finnish Institute for Health and Welfare – Chief Medical Officer		
Northern Ireland	 Health & Social Care Northern Ireland Head of Community & Primary Care Systems, Business Services Organisation – Information Technology Services eHealth Advisory 		
Norway	Norwegian Summary Care Record Programme – GP and Clinical Advisor		
Scotland	 NHS Healthcare Improvement Scotland – Portfolio Lead Digital Health and Care, Scottish Government Interim Director Head of Technology Enabled Care and Digital Healthcare Innovation Head of International Engagement, Technology Enabled Care and Digital Healthcare Innovation 		

Appendix B Advisory Group Membership

Twenty-seven organisations nominated representatives before the first meeting of the Advisory Group. At the first meeting, members of the Advisory Group requested that five more organisations be invited to nominated representatives. These organisations were:

- All Ireland Gerontological Nursing Association
- HSE Digital Transformation
- HSE Health and Social Care Professions Office
- HSE National Clinical Information Officer for Nursing and Midwifery
- Irish Association of Directors of Nursing and Midwifery.

Following consultation, a representative of the HSE Change and Innovation function was also nominated.

The following representatives comprised the Advisory Group:

Nominee
Catherine McGuigan, CEO
Mary Foley, Chair
 Genevieve O'Halloran, Board Member Melika Khandanian, Registration Policy Manager
Gerard Balfe, Assistant Principal
Deirdre Hyland , Patient Safety Surveillance Office
 Louise McGirr, Principal Officer Paul Rowe, Principal Officer Rachel O'Donoghue (dep) Linda Finnan (dep), Higher Executive Officer
Andrew Hannigan, Assistant Principal
Manuela Cristea, Regional Director
Ken Fitzgibbon , Director of Strategy Transformation and Service Improvement Ireland East Hospital Group
Denise Tighe, General Manager (OP Services)
 Mary Cooke, Deputy Delivery Director Barry McKenna (dep), Programme Manager
 Yvonne O'Neill, Interim National Director Priscilla Crombie (dep), National Digital Health Lead
Martin Curley, CEO
Brian Donovan, Interim Head
PJ Harnett, National Programme Manager
Mike O'Connor, Clinical Lead, Unscheduled Care (OP)
Catherine Devaney, Clinical Advisor (OP)

[‡] The CORU representative changed shortly before the third meeting of the Advisory Group.

[§] The Department of Health Older Persons Strategy representative changed after the first meeting.

HSE National Shared Record	Kathryn Kissane, National Programme Manager
HSE National Transfer of Care Document**	Deirdre Lang, National Lead on Nursing
HSE Office of the Chief Clinical Officer	Loreto Grogan , National Clinical Information Officer for Nursing and Midwifery
HSE Primary Care Operations	David Hanlon , National Clinical Advisory Primary Care
HSE Public Health Nursing	Virginia Pye, National Lead on Public Health Nursing
Irish Assoc of Directors Nursing & Midwifery	Karn Cliffe, Director of Nursing and Midwifery
Irish College of General Practitioners	Lucinda Dockery, GP Principal
Irish College of General Practitioners – GPIT Group	Brian Meade, GP
Irish Medical Organisation	Paul Finucane , Head Graduate Medical School, University of Limerick
Mental Health Commission ^{††}	Alison Connolly , Regulatory Practice and Standards
National InterRAI Office	Natalie Vereker, National Programme Manager
National Patient Forum – Age Action	Celine Clarke, representative
National Patient Forum – Sage Advocacy	 Bibiana Savin, representative Helen Fitzgerald (dep), representative
Nursing Homes Ireland	 Deirdre Shanagher, Strategic Clinical Nurse Expert Tadhg Daly (dep), CEO
Royal College of Physicians of Ireland	Des O'Neill , Chair, Irish Society of Physicians in Geriatric Medicine

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^{**} After the first Advisory Group meeting nursing representation was reviewed. The HSE National Transfer of Care Document was represented at the first Advisory Group meeting only.

^{††} The representative of the Mental Health Commission left that organisation following the second meeting of the advisory group and no representative was available for the third meeting.

Appendix C Organisations and programmes that responded to the public consultation

The following organisations and programmes responded to the public consultation:

- Central Statistics Office
- Citizens Information Board
- HSE
 - Access to Information Programme
 - Change and Innovation (Older Persons) function
 - Community Healthcare Organisation 1
 - Older Persons Services
 - Other
- HSE Office of the Chief Clinical Officer response, which included feedback from:
 - National Integrated Care Programme for Older Persons
 - Office of the National Lead for Integrated Care
 - Office of the Chief Information Officer (CCIO)
 - National Clinical Advisor and Group Lead, Acute Operations.
- School of Medicine, University College Dublin.
- Irish Society of Physicians in Geriatric Medicine (ISPGM)
- Nursing and Midwifery Board of Ireland (NMBI)
- Nursing Homes Ireland
- Pharmaceutical Society of Ireland

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