



Digital Health & Care
Northern Ireland

DELIVERING CARE TOGETHER

Digital Care Home Plan



THE ENHANCING CLINICAL CARE
FRAMEWORK
FOR ADULTS LIVING IN CARE
HOMES

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1 Executive Summary

The Digital Care Home Plan (DCHP) responds to the current and emerging need of care home providers, their residents and their families, to realise the benefits of digital technologies. The DCHP supports delivery of the NI Digital Health & Care Strategy and is aligned and informed by a wide range of regional strategies, plans and programmes, most immediately Enhancing Clinical Care Framework (ECCF).

Specifically, the DCHP is

- Person centred, informed by needs and with equality of access for different residents
- For all care homes, all sectors, all care groups
- Supporting delivery of wider work on care homes
- Meeting immediate priorities arising from Covid-19 and setting out a longer-term agenda
- Shaped by and consistent with regional and professional standards
- Recognising the range and variety of care homes and providers and their varying needs
- Taking account of emerging priorities and pressures on care home teams and providers
- Recommending Co-design with the care home community and stakeholders

2 Introduction/Background

There are 483 registered independent nursing and residential homes in Northern Ireland, 235 residential facilities and 248 nursing home facilities. In total the sector has 16,000 beds; this compares with an estimated 6,000 hospital beds in the HSC acute sector. 99% of nursing care beds (10.5k) are provided in the independent sector and 80% of residential care homes beds (5.5k). All are commissioned by Health and Social Care (HSC) Trusts normally within the tariff agreed by the HSC Board on an annual basis, however this is uplifted to meet additional needs of residents if required.

There has been an important shift in the complexity of care provided in care homes over recent years. A greater proportion of care home residents have complex clinical health and care needs than would have been the case in the past. Residents who would have been in hospital five years ago and receiving palliative or end of life care are often now cared for in nursing and residential homes. Residential homes are often now providing a level of care that would have previously been found in nursing homes. Individuals in our care homes should receive the highest standards of care that holistically addresses these complexities (DOH, 2021).

The impact of COVID-19 on society in general and for those living and working in care homes, has been considerable. The World Health Organisation (WHO) has identified people living in care

homes as a vulnerable population, more susceptible to infection from COVID-19 and for subsequent adverse outcomes. The level of risk most likely relates to age and associated underlying long-term conditions. This is compounded by the risks of communal living with unavoidable levels of physical contact from carers and consequent increased probability of contagion across residents and staff.

The learning over the past year has highlighted the need for much greater system and professional resilience with digital at its core. Therefore, it is timely to review how we build on the wide range of measures deployed to protect residents, during the COVID-19 pandemic and support them digitally going forward.

3 Understanding and aligning the requirements of digital

The DCHP is both influenced by, and influences strategies across the HSC ecosystem. No single team or organisation can deliver digital transformation in isolation, which is why alignment to wider HSC objectives and the Quadruple Aim¹ will help us deliver on the ground. The approach to care home digital transformation will be driven from multiple sources and rely on a joint effort to develop and implement improvements.

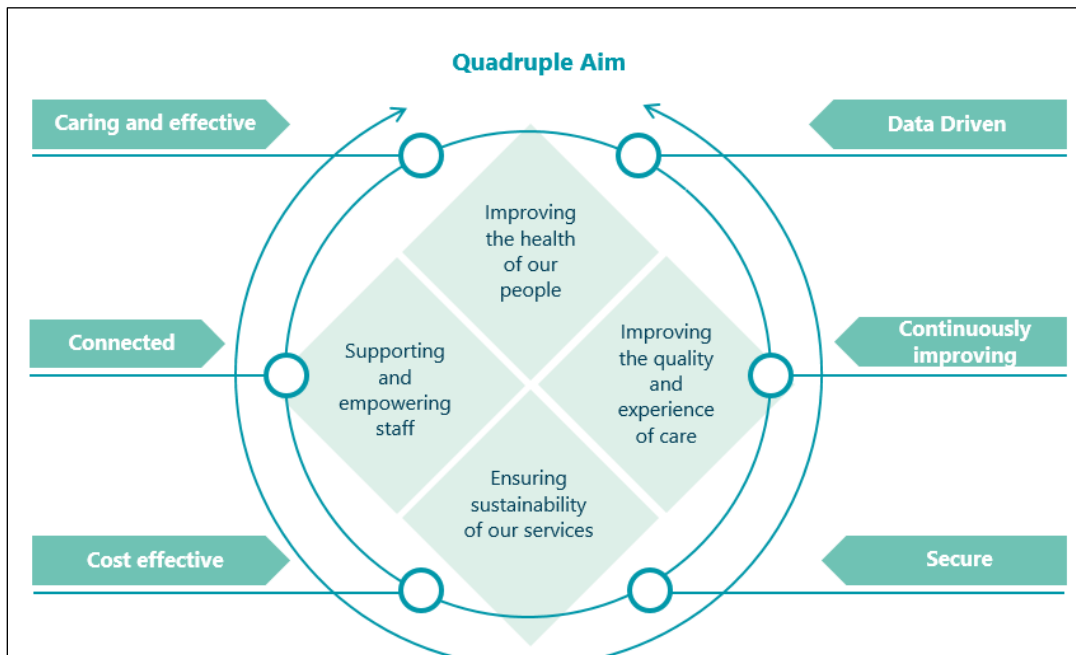


Figure 1 Digital Interventions enabling Quadruple Aim

¹ [Health and Wellbeing 2026 - Delivering Together | Department of Health \(health-ni.gov.uk\)](https://www.health-ni.gov.uk)

COVID – 19 has further highlighted the importance of digital connectivity. During the pandemic work was ongoing to ensure care within the care home sector was supported by a number of identified key priorities.

The 10,000 More Voices Care Homes & COVID-19 - the Lived Experience of care Home Residents and Staff survey included that residents and relatives both reflected upon the importance of staying connected throughout the pandemic. Technology has been an important resource to support the Health and Wellbeing of residents of Care Homes to remain connected with relatives and the wider community during wave 1².

The Inquiry Report on the Impact of COVID-19 in Care Homes ordered by the Committee for Health³ makes particular mention to digital technology in its findings, stating

The Committee has been impressed with the rapid innovation and scaling up of the use of technology, to provide safe, timely and effective care during the pandemic;

In addition, recommendation 1 is that safe and meaningful visiting be facilitated and resourced through the identification, development and implementation of innovative measures.

² [Care-Homes-COVID-19-final-2.pdf \(hscni.net\)](#)

³ [Committee for Health - Inquiry Report on the Impact of COVID-19 in Care Homes \(niassembly.gov.uk\)](#)

The graphic below demonstrates a number of digital innovations that have developed during the pandemic.

Emerging Insights – What we are learning from COVID -19

Technology has supported the care home sector

to connect and communicate

By enabling connection between care home residents and their loved ones during lockdown through video technologies. Social media has enabled connection to be maintained with the community and provided an opportunity to share the continuation of care home life. Our person-centred virtual visiting approach is enabling those really important conversations to happen between those using health and social care services and the people that matter most to them in their lives.



to become flexible and responsive

The implementation of a remote monitoring system to support the management of patients at risk of COVID enabled input from primary care and district nursing
New models of prescribing initiative has led to the implementation of a remote monitoring system to support the management of patients at risk of or who have been identified as malnourished.



to change ways of working

In everyday care practice, forms and frequency of communication have been supported using technology (such as Teams, Zoom, Facetime). There are also specific examples of ways technology has enabled real time access to information about services, through virtual tours (within care homes) and recruitment processes through virtual interviews and induction. Where digital care planning has already been in place (predominantly in care at home), this has been beneficial in supporting the sharing of information among staff, relatives and people supported.

to support well being of residents & staff

The use of online resources and additional opportunities to connect with colleagues and wider networks of support, and care home residents through activities and online entertainment.
By supporting collaboration with wider health and social care partners to enable virtual assessments and consultations, communication among staff and access to information and support



Figure 2 Care home digital interventions COVID - 19

How can Digital enable the Enhanced Clinical Care Framework (ECCF) programme?

Key priorities

The work within the ECCF programme identified key priorities that, if addressed, would together achieve an enhanced responsiveness of health and social care services to the needs of Care Home residents and provide a dedicated streamlined acute service response tailored to those needs. The scope and size of the project is considerable and to progress and coordinate the various strands of work to support delivery of the project within the available timeframe, activity has been further sub-divided into work streams for key elements of the Wellness Pathway - the First Focus Actions (FFA).

General Medical and Proactive Care

Facilitation of more efficient processes of working with the use of remote monitoring platforms and wearable devices have the potential to enhance proactive care. The collection of data which is proactively monitored by staff, families and residents themselves can indicate the need for early intervention.

Technology may be used to help prevent falls, improve nutrition and hydration and monitor vital signs. Digital health will also assist with maintaining infection prevention control measures by facilitating virtual consultations of in-reach health care professional services.

Anticipatory Care

Digital technologies should be available to ensure that care home lead staff, primary, community and secondary care are enabled to share information across services and professions avoiding duplication and ensuring clarity around shared care goals for the resident.

Development of the Care Home Lead Staff Role.

Care Home Lead Staff need to be supported to have skills, confidence, competence and clinical equipment to deliver effective care and to monitor residents' health care status. The inclusion of digital and data awareness in educational programmes and access to online resources will enable adoption of digital interventions within the care home sector.

Response to Deterioration in Health

DoH have advocated for Care Homes to provide monitoring to residents' through a "symptom checklist" to include clinical observations and a series of questions relating to the resident's activities of daily living. During the pandemic a pilot using digital data collection tools for remote monitoring was evaluated favourably by care home staff. The implementation of further remote monitoring interventions could further facilitate the response to deteriorating health.

Digital health can facilitate e-records, associated management of records and improved data sharing with relevant health and care professionals within and external to the care homes thereby leading to improved resident care.

End of Life Care

End of life care needs will be identified and preferentially met within the Care Home setting, drawing in additional palliative care services as required. Care needs will be anticipated, documented and shared with the family and Care Home lead staff through the end of life care plan. Utilisation of electronic care planning which is shareable across all those providing care has the potential to enhance communication, identification of care need and involvement of families could be assured by utilising patient portal technology.

Acute Care Needs and Accessing Hospital Services via Clinical Pathways

Acute care needs should be preferentially delivered within the care home, minimising the need for the resident to attend an acute care setting unless this is in their best interests. This requires implementation of established tools for the identification, monitoring, escalation and de-escalation of the acutely deteriorating adult.

The DCHP

The role of digital in Health and Social Care has never been more important. As society becomes more digitally advanced, the expectations are that the care system will keep pace – virtual appointments, accessing personal health data on the go, and managing health through a personal device or piece of wearable technology are just some of the basic expectations of 21st century users. COVID-19 has further accelerated the adoption of digital technologies, and has been vital in enabling people to access the services they need virtually during the regional lockdown periods.

Digital touches upon almost everything we do in health and social care – from enabling the operational delivery of functions through to supporting those on the front-line. The transformation programmes that HSC, including ECCF, is implementing will fundamentally change the way that health and social care services can be delivered, as well as changing how users of the systems are able to work and receive care.

In addition to the front-line benefits that will be achieved through the implementation of digital programmes within the care home sector, they will also support “back-office” transformation activities that will create new efficiency opportunities and help to change the way people work (*e.g. introduction of collaboration tools, data analysis and remote working solutions that will allow more services and functions to be delivered from anywhere*).

The DCHP outlines the vision, mission, and objectives for digital care homes in Northern Ireland, and what capabilities will be required across the ecosystem in order to successfully deliver upon these. The plan is built on three core elements, namely, foundations, services and skills.

What is the Vision?

To provide a regional standardised approach to deliver excellent digital health and care services with care homes, putting people at the heart of everything we do.

What is the Mission?

While our vision outlines our ambition, our mission focuses on how we deliver it. It communicates our direction of travel and the principles that will guide us.

To co - design, develop and deliver digital services for care homes that help everyone get the best care, support staff at work, streamline information sharing across systems, and optimise the use of data to improve the safety and quality of care.

What are the objectives?

The outcomes for the DCHP

-  Digital will provide residents and their carers greater visibility and control over treatment and care journeys
-  Digital solutions will put quality and safety at the heart of all new processes, systems and ways of working
-  Effective and joined up care through systems integration and streamlined information flows
-  Digital will enable care home and supporting HSC staff to work more efficiently and collaboratively across standardised systems
-  Intelligent use of data will optimise performance and harness health and care insights, whilst ensuring robust data protection standards
-  Digital will support the acceleration of research and innovation to gradually embrace system leading disruptive and cutting edge solutions

What this means for those who live and work in care homes?

For our residents and their nominated carers, digital holds the potential to provide greater visibility, control and personalisation of care, including access and use of health data and care pathways. A single electronic patient record will empower people to take an active role on care decision making developing new digital ways for patients to access health services. This includes easier online communications, virtual assistance and consultations.

John’s journey (below) reflects and summarises how digital health through the implementation of the DCHP could transform and support care homes and their residents.



Meet Sam ...

Sam is 85 years old and has been living in Hollytree care home for just over 18 months. He has had a recent hospital following a fall, has ongoing urology problems and memory loss. His son visits him at Hollytree and he enjoys spending time with his great grandchildren.



“As I live in Australia, I don’t often get the opportunity to attend Dad’s care meetings - being able to add notes to Dad’s patient portal about my concerns and being able to send text messages to his carers means I feel connected”

– Niamh, Sam’s daughter



“Sam receives care that is well informed and up to date with his current condition, as all his care information is stored in one place so I am able to see his latest hospital events and other test results as well as reports from other members of the MDT” – Isla, Care Home Nurse



“Sam has really benefitted from the care plan we drew up together to ensure he remains socially connected and as independent as possible. I have assisted him to remotely and he is using apps on a tablet device to keep his mind active” – Aaron, Sam’s OT



“Sam’s risk of hospital readmission is lowered because any issues are escalated to me quickly by the care home team via the portal, and I can track changes in his condition by accessing details about all the care John is receiving in one place.”

– Erin, Urology Consultant

How will we digitally enable care homes?

Our aim is that all care homes in Northern Ireland become ‘digitally enabled’ and have all of the features set out below.

Digital Foundations	Digital Services	Digital Leadership & Skills
There is broad band connectivity or the equivalent into and within all areas of the care home	A range of digital services to support the health, wellbeing and independence of residents are available	Care Home sector leaders support adoption of digital solutions and building capabilities
Devices and technical support are available for all residents to support their health and wellbeing and for staff to provide quality care to support the needs of individuals	Residents are supported to choose how and when to use these.	Staff have digital skills and knowledge to provide the care and support needed by residents
Relevant data about the care home residents and services is collected, held and shared digitally; data and systems are secure; and reporting requirements are standardised regionally	New services are designed with residents, their families and staff	Residents and their families have the skills and confidence to benefit from the digital services that are available

Figure 3 DCHP Priority Area

4 Priorities for Change & Improvement

Each priority area has a number of key objectives

Digital Foundations

- Ensure the underpinning connectivity and devices in care homes can support digital technologies for person centred services and wellbeing for residents and staff
- Identify needs and develop approaches for data gathering that supports better individual care planning, the provision of services, supports activity and reduces the reporting burden on care homes

Digital Services

- Improve access for residents to integrated health and care services and ensure appropriate response
- Support, develop and maintain social connections for residents
- Enable staff and residents to maintain their emotional wellbeing

Digital Leadership & Skills

- Develop the skills and confidence of residents so they can use and benefit from digital technologies
- Support staff to develop skills so that they can use digital technologies and procure technologies and services that support effective delivery

5 Recommended Actions

5.1 Digital Foundations - Connectivity to, and within, the home

- Connection capability: Identify care homes that currently lack capability of superfast connection. Support providers to identify solutions so that care homes have connection throughout every care home
- Financial support options: Explore application of existing grant/voucher/infrastructure schemes for potential to address connectivity issues in care homes
- Devices: Develop a sustainable and flexible approach that ensures that devices that meet their needs are available for residents and staff. Support and promote local initiatives to provide devices on a volunteer, charitable basis.
- HSC email: up to 3 email addresses made available and used for each care home
- Identify opportunities for including the adoption of Office 365 across the care home sector

5.2 Digital Foundations - Data collection, data sharing & security

- Care Management Tools: Support the adoption and use of tools as required and maintain connection with future developments
- Digital care planning: Identify options that can improve individual care and support planning, including co-managed Anticipatory Care Plans, supporting local initiatives that can inform wider application
- Data collection and data sharing: Scope options for improving collection, holding and sharing of information about residents and care home operations with HSC providers, including electronic health records, sharing Key Information Summaries. Develop an associated action plan.
- Data security: Explore and identify actions to support effective information governance and cyber-security.
- Knowledge exchange: Facilitate the exchange of knowledge and experience of different systems and services that can support care home providers in making investment decisions

5.3 Digital Services – Access to Digital Services

- Support adoption and effective use of video conferencing in care homes
- Care Home Tools : Rapidly develop and test tools to improve local operational decision-making in Care Homes, aid communication in situations where external clinical support from Primary Care or Trusts is required via digital means
- Remote health pathways: Review options for vital signs monitoring and other appropriate care pathways within care homes
- Telecare: Identify how best to support care homes to optimise the use of telecare (including the use of bed, chair, enuresis and universal sensors) to enable and enhance care and support.
- Other relevant initiatives: Maintain a watching brief on any national or local initiative that offers learning and potential for adoption across the sector

5.4 Digital Foundations - Social connections and activities for residents

- Test the benefits in improving wellbeing for residents and families, by providing the opportunity to use a secure video messaging technology

- Existing social media tools: Support care homes to help residents to use existing digital tools, such as Skype and Zoom to maintain social contact and communications with families, friends, spiritual care
- Residents' activities: Identify opportunities to offer activities (physical and emotional) for residents using digital tools

5.5 Digital Foundations - Wellbeing support for staff

- Review content of current staff wellbeing resources and adapt to ensure relevance to the needs of care home staff, promoting and supporting use. Consider use of HSC App Library
- Digital therapies: Support wellbeing for staff in care homes by offering a range of online health and wellbeing programs
- Other relevant initiatives. Maintain a watching brief on any national or local initiatives that offers learning and potential for adoption

5.6 Digital Leadership & Skills - Skills and confidence of residents, staff and providers

- Residents: test, develop and roll out an approach building on that used in the Go On NI programme to build the confidence and skills of residents and their families
- Staff: Collaborate with CEC, NISCC and Higher Education in the application and modification of digital learning tools for care home staff, including as part of the initiative to address digital exclusion
- Knowledge exchange: Facilitate the sharing and exchange of experience to raise awareness of use of technology allow outcomes and impact, and practice and financial implications to be understood.

Implementation

The remit of the ECCF project was the development of a plan. Matters around the implementation of the framework will require further Ministerial approval and be subject to available resources, including funding. The fact that care homes are individual business entities must also be forefront when thinking about the implementation of this DCHP.

The following key factors relating to the implementation of the DCHP have been identified:

- **Joint planning** - Department of Health, HSCNI and the independent care home sector need to continue and further develop their collaboration at strategic level on digital policy and planning relevant to care homes, for example HSC Digital Strategy and joined up commissioning between HSC and independent care home providers. Where strategic decisions are being made about the independent sector, care home providers should be working in partnership to design and deliver digital change. Trusts should continue to partner with care homes to focus Trust planning for the independent sector on the wellbeing of residents, based on achieving long term sustainability for the outcomes residents have said they want including digitalisation. Trusts should also continue to support further digitalisation and the development of IT infrastructure within care homes to enable care homes to maximise the opportunities for enhancing the health and wellbeing of their residents from work being undertaken around the digitalisation of HSCNI service provision. Trusts should also continue to partner with care homes to further define individual and mutual ownership and accountability for obtaining the DCHP outcomes, including funding and resourcing requirements.
- **Strategic level recommendations from the Rapid Learning Initiative** - This initiative considered the learning from the first surge of the transmission of Covid-19 into and within care homes in Northern Ireland that could mitigate the impact of subsequent surges. The recommendations at strategic level remain relevant for the ECCF project and the DCHP which will address many of the issues raised under digital services, digital foundations and leadership within the plan.
- **Data and digital technology** - Access to and use of data and technology focused on understanding and delivering clinical and social care needs of residents needs to be developed and embedded at care homes and HSC strategic level. Ongoing work to agree data sharing arrangements between the sectors and appropriate levels of access are underway. Datasets for long-term care need developed with the aim of improving the quality of care received by residents. This should include considering learning in all four jurisdictions that may be relevant for Northern Ireland, such as recommendations of the DACHA (Developing resources and minimum dataset for Care Homes' Adoption) study.

Funded by the National Institute for Health Research, this four year project began in 2019 and is being led by University of Hertfordshire.

Work to develop commissioning of services from care homes to which include the utilisation of digital technologies needs to be taken forward.

- **Workforce Training and development** – In order to achieve the objectives set out in the DCHP, training and development for care home managers and staff and Trust staff involved in providing in reach or other support to care homes will be required. This training must link to the core competencies required for care home staff and each of the professions involved in providing multidisciplinary team support to care homes to ensure they have the knowledge, skills and competencies needed to use digital technologies and data to provide health and wellbeing support for residents in care homes.
- **Culture** - Implementing the DCHP will involve a change in culture and practice across a range organisations and professions to ensure the implementation of Digital Leadership & Skills.
- **Skills and confidence of residents & their families** – achieving the objectives for residents and their families will require the care home sector in partnership with HSC, residents and their families to identify learning and confidence building requirements. It should be considered by commissioning organisations to include the training and use of digital technologies by residents and families as part of a care home implementation plan.

Funding

Given the financial demands on Departmental funding and the ongoing constraints for public sector finance, no assumption can be made that additional funding will be available for the implementation of DCHP recommendations, outside the original allocation to develop the framework.

While funding may be required to achieve regional coverage for some elements of the DCHP, not all of the recommendations need additional funding.

Therefore, funding for DCHP recommendations needs to be considered in light of existing funding provided for clinical care to support the health and wellbeing of residents in care homes, for example, funding provided to Trusts for core services, transformation funding from the Department and bids under the NMS project.

Work will continue to identify funding requirements and to take account of the interplay of the DCHP with other work being taken forward to ensure funding is not duplicated and is targeted where it will be most effective in producing the outcomes envisaged by the plan.

Next Steps

Buy-in and real promotion by leadership teams is essential in order to cascade enthusiasm for digital through an organisation. This means the leadership teams within HSC and the care home sector should not just be promoting digital transformation but be willing to promote the resources (physical, human, intangible and financial (PHIF)) to making it happen. This will require clear communication of goals and intentions in promoting digital, and an implementation programme to ensure people are empowered to take on and be creative with the digital tools they could have at their disposal.

Work will continue in **partnership with key stakeholders** to inform the recommendations in the DCHP.

There is a recognition that the objectives will only be achieved **with collaborative working with residents and their families**; Care Home providers; managers; staff and the organisations who support and those that commission the Care Home sector.

Development of implementation plan in partnership with key stakeholders to identify key milestones and ownership.