Scotland’s Digital Health and Care Response to COVID-19

2021 update

Date: October 2021

Digital Health & Care Scotland
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Report</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Making It Possible</td>
<td>7</td>
</tr>
<tr>
<td>Information Governance and Assurance</td>
<td>9</td>
</tr>
<tr>
<td>COVID-19 Digital Response</td>
<td>13</td>
</tr>
<tr>
<td>Inclusion and Participation</td>
<td>18</td>
</tr>
<tr>
<td>Accelerating and Extending Access</td>
<td>22</td>
</tr>
<tr>
<td>Continuity of Service</td>
<td>29</td>
</tr>
<tr>
<td>Conclusions</td>
<td>36</td>
</tr>
</tbody>
</table>
The Report

This report has been prepared by the Digital Health and Care Directorate of the Scottish Government July 2021.

It provides an update on the scale-up and adoption of digital health and care solutions in Scotland, in response to the COVID-19 pandemic. The document builds upon a previous report that was prepared by the Scottish Government Digital Health and Care Team in June 2020.¹

This report is intended to:

- Inform our stakeholders of activity undertaken as part of the Scottish Government's COVID-19 response.
- Enable decision makers to identify areas for further prioritisation.
- Inform the identification of key lessons learned.
- Share learning with other countries.

The initiatives included in this update have been delivered through collaboration with national partners and the significant efforts and commitment of local delivery organisations. Our partners include:

- The Convention of Scottish Local Authorities (COSLA)
- The Digital Health & Care Innovation Centre (DHI)
- The Digital Office for Local Government (LGDO)
- Healthcare Improvement Scotland (HIS)
- Scottish Health Boards and Health and Social Care Partnerships
- NHS24
- NHS Education for Scotland (NES) and National Digital Service (NDS)
- NHS National Services Scotland (NSS)
- The Scottish Council for Voluntary Organisations (SCVO)
- The Scottish Government (SG)

Additional information and documentation can be found at www.tec.scot

Introduction

Our experience of the COVID-19 pandemic has demonstrated the importance of working in partnership to deliver health and care services that are person-centred, innovative, accessible and resilient. Using co-design approaches to work with people is a key aim of our approach in Scotland.

For the people who use digitally enabled services, they allow additional ways to access support. For the health and care providers, digital solutions support service delivery and continuity.

In March 2020, following the WHO declaration of COVID-19 as a global pandemic, the public health advice in Scotland, as in other countries, was aimed at reducing contact, transmission and hospitalisation. The advice to members of the public was to “stay at home” and people who were particularly vulnerable began shielding. Many routine healthcare services were put on hold and many staff were redeployed to support the NHS Scotland COVID-19 response.

The disruption throughout 2020 and 2021 required staff who were not working at the point of care to work remotely, and service providers needed to adapt as we managed our response to the pandemic. The important role of digital tools, the use of data and digitally enabled services has been highlighted from the beginning of the Scottish Government's response to COVID-19.

Specifically, the Digital Health and Care Directorate team have worked in partnership with organisations including NHS24, NHS National Services Scotland, the Digital Health & Care Innovation Centre, NHS Education for Scotland, National Digital Service and Public Health Scotland to oversee the delivery of the core COVID-19 response elements around shielding, Test and Protect, the Proximity App and the vaccination programme.

Key areas where digital has supported service continuity and new solutions include primary care; mental health; remote health monitoring; social care; care at home; supporting individuals shielding; and peer support and workforce solutions.

Being able to use digitally enabled services requires people to have access to devices, connectivity and the skills to use the device. The importance of digital inclusion has been underscored and, along with the raised awareness across all policy areas, resulted specifically in the Connecting Scotland initiative. The objective of this Scottish Government initiative, managed by the Scottish Council for Voluntary Organisations, is to increase the number of individuals and families who are digitally connected.
This experience has demonstrated we can deliver services in new and sustainable ways. Learning from the acceleration of digital solutions during the pandemic response is reflected in a variety of recent publications. For the purposes of this report, the following were of relevance:

- Re-mobilise, Recover, Re-design: the framework for NHS Scotland (May 2020)
- Framework for Supporting People through Recovery and Rehabilitation during and after the COVID-19 Pandemic (August 2020)
- A Vision for Technology and Digital in Social Care – Scottish Care (August 2020)
- Coronavirus (COVID-19) – Near Me video consulting service: evaluation 2020; summary report
- Coronavirus (COVID-19): mental health – transition and recovery plan (October 2020)
- Diabetes care – Diabetes improvement plan: commitments 2021-2026
- Recover, Restore, Renew – Chief Medical Officer for Scotland Annual Report 2020-2021
- A changing nation: how Scotland will thrive in a digital world (March 2021)
- The Seventh Citizens' Panel for health and social care – Healthcare Improvement Scotland, Community Engagement (March 2021)
- Protecting Scotland, Renewing Scotland: The Government's Programme for Scotland (2020-2021)
- Securing a positive healthcare technology legacy from COVID-19: Health Foundation (March 2021)
- DHI's Response to COVID-19 Pandemic Emergency Years (2020-2022)
- Embracing digital: is COVID-19 the catalyst for lasting change? (2021) Imperial College London's Institute of Global Health Innovation, sponsored by EY.

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3 Framework for Supporting People through Recovery and Rehabilitation during and after the COVID-19 Pandemic August 2020
13 Digital Health & Care Innovation Centre Response To COVID-19 Pandemic Emergency Years (2020-2022)
There are many lessons evident from these reports which are applicable for all public sector organisations responding to COVID-19. They include:

- **Understanding the service** – data and digital tools have key roles in the provision of high quality services.
- **Collaboration** – working in partnership builds sustainable services.
- **Communicating** and engaging about the need for change is challenging and essential.
- **Continuity** – digital solutions have a role to play in maintaining service continuity.
- **Scale** – digital solutions accelerated or implemented in response to COVID-19 can be part of remobilisation planning.
- **Users** – understanding the needs of and involving the people who use services to develop digital pathways will result in more robust services.
- **Routine** – (where appropriate) models which incorporate digital options should be considered part of business as usual.
- **Learning** – a one-size digital solution does not fit all: consideration of the service objective, users, local context, and digital inclusion is essential.
- **Sustainability** – as the imperative to use digital options to provide access to services recedes the momentum will decline. The benefits to all stakeholders, of options such as a hybrid or blended models of care, must continue to be assessed and demonstrated.

At the time of writing this document the situation is improving. The majority of the adult Scottish population have now been vaccinated against COVID-19. The significant disruption to our daily lives is receding. Health and care organisations are planning for winter 2021 and, in the longer term, for recovery and renewal. The organisations across Scotland that have used digital technologies to maximise the opportunities to work differently will continue to do so with greater assurance and creativity.
Making It Possible

On 11 March 2020, the World Health Organization declared COVID-19 a global pandemic. The response by the Scottish Government’s Digital Health and Care Directorate was immediate. All active work programmes were subject to a refocusing of priorities, with the objective to identify and extend digital solutions to support the COVID-19 response.

Reflecting on the Directorate’s response to COVID-19, the features that characterise this response demonstrate an enabling culture and infrastructure that made it possible to progress the deployment of digitally enabled services more rapidly. These characteristics include:

**Culture**

- Recognition of the value of existing programmes and established partnerships provided the foundation for increased capacity and scale-up of services.
- Leadership provided by the Scottish Government Digital Health and Care Directorate provided clear direction.
- Communication facilitated rapid learning with senior stakeholders from policy, health, care, third sector, housing, and technology supplier organisations.
- Providing support for partner organisations around service continuity strengthened relationships and fosters new collaborations across sectors.
- Knowledge exchange with Scottish, UK and international colleagues working on the COVID-19 response supported reflection and identification of key insights.
- Continued engagement and consultation with the public and groups of interest throughout the pandemic was achievable and valuable.

**Governance**

Emergency COVID-19 governance arrangements for Digital Health and Care, to monitor progress via the governance structure of the Gold, Silver and Bronze command. Two Silver Command groups facilitate decision making pertaining to digital applications and systems and data with implementation being driven through Bronze-level partnerships. This structure to support governance has facilitated early consideration of priorities and quick decision making to support delivery of digital tools and approaches.
Infrastructure

Rigour and resilience

A supportive culture is essential, but the rigour provided by the following practical steps and agreements allowed the innovation to be realised. Including:

- Accelerated procurement processes to support the roll-out of solutions supported by:
  - national Information Governance templates, for rapid assessment of risk (to enable agility) and assessment of impact of solutions.
  - utilising Tests of Change for new digital solutions and to shape new services.
- Shift to remote working for the Digital Health and Care Directorate, facilitated by the roll out of Microsoft Teams and a range of online collaborative working tools.

The sections of the report which follow provide updates on the Directorate’s work programmes that have been extended, maintained, scaled-up and commenced as part of the Scottish Government’s response.
Information Governance and Assurance

The delivery of digitally enabled solutions, whether initiated directly in response to COVID-19, an expansion of provision, or an entirely new initiative, has been facilitated by underpinning activities around information governance.

The work has been made possible in a context of being able to work remotely and in a truly collaborative manner with our partners.

In addition to providing essential practical solutions, efforts have focused on establishing a more strategic approach to data that can be implemented across Scotland. Key steps undertaken to support and facilitate the scale of our digital health and care response to COVID-19 are outlined in this section.

Contributions to the COVID-19 response

- From March 2020 onwards regular updated guidance was provided via the COVID-19 Information Governance Advice website.
- This resource became a key reference point for staff working to deliver services. Including:
  - COVID-19 Privacy Statements and Privacy Notice updates.
  - Guidance on text messaging.
  - Guidance on using email and video consultation.
  - Information Sharing Accord.
  - Records Management Code of Practice.
- In March 2020, a simplified tool the COVID-19 Rapid Data Protection Assessment form and associated guidance were circulated.
- A (short life) National Health and Care Information Governance (IG) contact centre was put in place to respond to IG issues arising.
- Rapid IG Assessments and Data Protection Impact Assessments were devised and carried out to support developments.
Whilst data sharing agreements had been established between organisations, there was no common agreement or associated Data Protection Impact Assessment (DPIA). Senior management from across the Scottish Government, Local Government and Health worked together to enable the ‘joining up’ of data across sectors through two key activities.

- Establishing the Data & Intelligence Network supporting the implementation of data linkages across sectors.
- Strengthening of cyber security and network monitoring. A regular Cyber Resilience Notice was produced. For business organisations, public sector organisations, charities and the general public, raising awareness of measures to be safer and more resilient online.

**Supporting New Facilities and Initiatives**

By collaborating with multiple partners, a ‘privacy by design and by default’ approach has been deployed across all stages of the COVID-19 response, including:

- The COVID-19 Hubs, Testing and Assessment Centres.
- The NHS Louisa Jordan Hospital.
- Supporting vulnerable groups who were shielding.
- Advance Care Planning for end of life.
- Supporting the delivery of the ‘Connecting Scotland’ initiative to reduce digital exclusion.
- Developing our Test, Trace and Isolate and the Protect Scotland app solutions.
- Vaccination systems.

**Supporting the Workforce**

Information Governance principles and approaches have underpinned initiatives to support the workforce including:

- A self-reporting service.
- Remote working.
- The recruitment portal.
- Supporting staff wellbeing and learning resources for COVID-19.
Remote Working

At the outset of the COVID-19 response the roll-out of Microsoft Teams and wider support for remote working was accelerated as part of the O365 Programme that was already underway. By the end of March 2020, the majority of the 160,000 NHS Scotland workforce was able to access Microsoft Teams and work remotely.

The accelerated roll out has had a major impact across NHS Scotland and the wider Public Sector. Completion of the NHS mail migration at pace was a major achievement. A new Enterprise License Agreement is in place for the next four years.

The benefits of using MS Teams to support teams to connect and continue working remotely include:

- Using MS Teams supported dispersed teams to connect remotely and provided a single platform for all members of the team (and invited guests) to connect.
- Access to collaboration tools to facilitate programme continuity and development, including voice, and video calling.
- Access to shared folders to host and share up to date project materials.
- Immediacy – access to colleagues on line status and availability.
- The removal of interoperability/multiple platform challenges.
- The ability to record updates and necessary content to provide access on demand.

In addition to the national programme of work to support remote working and project-specific calls, within the Directorate, a weekly ‘all team call’ was initiated using MS Teams. This relatively small step has provided a forum for discussion, allowed for spotlight presentations on new work, increased understanding of the breadth of the work underway and strengthened relationships across the team.

Ethical Processing of Data

The combination of rapid tools and processes allowed a focus on core ethical and compliance requirements. Speeding up data-sharing or processing of data considerably while ensuring data controllers can rapidly assess data protection and privacy risks and assure that due diligence has taken place.

As noted above, COVID-19-specific guidance has been issued with support from the Information Commissioner’s Office and all regulators, making it clear that it could be more harmful not to share information (with the agreed governance) than to share it.
Other significant steps taken to support the overarching information governance and assurance work and associated ethical processing of data include:

- Revised guidance to determine data controllership roles in complex health and care settings.
- Revised template for DPIAs, particularly advisable when wide publication is intended rather than for internal experts’ use.
- A Toolkit to determine DPIA and Privacy Notice compliance.
- A Toolkit for automated decision making.
- Enhanced guidance on data protection risk assessments and management.
- To reflect and record digital ethics considerations on digital and data measures taken during COVID-19. The tool is available [here](#).
- An ethics framework.
- Revised criteria for IAO (Information Asset Owners) of NHS national information assets (systems and data).
- A new CHI Management Board with a governance structure, which incorporates lessons learned from the management requirements of national information systems during COVID-19, is now in place.
COVID-19 Digital Response

In March 2020, the Digital Health and Care Directorate undertook rapid prioritisation and engagement work.

Teams working across the Scottish Government Directorates worked with colleagues across the health and care, third and independent care sectors and industry, to develop and deploy solutions and to recycle learning into service delivery. These included:

- Test and Protect.
- Extending sampling centres.
- Public engagement and communication.
- Restriction of movement.
- Treatment.

The Scottish Government team has taken a lead on Information Governance, Cyber, and the People’s Pathway. NHS National Services Scotland colleagues have taken a lead on the Clinical Authority and Technical Portfolios, and Public Health Scotland is leading on the Data Portfolio.

The benefits of this approach ensured key teams were actively involved in programme delivery and resources were shared by taking a more collaborative approach.

Products delivered by the using this approach are:

- National Vaccination Scheduling Service (NVSS).
- Albasoft and GPIT – played a key role in obtaining data out from GPIT systems into the NCDS.
- Cohort data for scheduling.
- Clinical Portal (Orion).
- Vaccination Management Tool (VMT) – developed by NES Digital.
- National Clinical Data Store (NCDS) – developed by NES Digital.

This section contains further information on the background of the following programmes:

- Test, Trace and Isolate – later referred to as Test & Protect.
- Check In Scotland.
- Proximity App.
- Symptom Checker App for NHS24.
- COVID-19 Vaccination Programme.
Test and Protect

There are a number of strands of work which contrite to this development. In April 2020, the Digital Health & Care Innovation Centre published a Rapid Review of Contact Tracing Methods for COVID-19 followed by Global Examples of COVID-19 Surveillance Technologies: Flash Report.

Wider collaboration on data flows and privacy by design took place. New models for enhanced engagement were adopted with the public and interested groups including:

- The Open Rights Group.
- The Scottish Privacy Forum.
- The Children’s Parliament.
- Young Scot.

An example of the way in which Transparency information is being used is provided on the Test and Protect website.

Check In Scotland

The Check In Scotland App is another tool in NHS Scotland’s Test and Protect Service. It is a digital support designed to help businesses, for example, entertainment, leisure or cultural venues, to collect information for contact tracing purposes. The service will allow people visiting participating locations to provide their contact details by scanning the official Test & Protect Check In Scotland QR code poster via their smartphone camera or by downloading the Check In Scotland app. The details collected are held in an encrypted data store for 21 days only. Unless information is requested by public health officials as part of their contact tracing efforts, visitor data is automatically deleted thereafter.
Proximity App

In September 2020, the Protect Scotland App was launched as free to download. Within 24 hours the App had been downloaded 600,000 times and by Summer 2021, it had over 2 million downloads. The Protect Scotland App is an anonymous digital contact tracing tool that acts in addition to manual contact tracing and uses the same Public Health Scotland definition of a close proximity contact – 2 metres or less for 15 minutes or more. The App does not store an individual user's details or location. It uses encrypted, anonymised codes exchanged between smartphones to determine all close contacts.

Using a process to calculate individual risk of exposure based on two parameters or questions:

- Was the contact two metres or closer for a period of 15 minutes or more (which can be accumulated over a 24-hour period)?
- Was the contact during the infectious period of the person that tested positive (defined as 2 days before the onset of symptoms or, for those with no symptoms, 2 days before their test date)?

For more information about Protect Scotland select How it Works | Protect Scotland.

NHS24 Symptom Checker App

The Directorate team supported our partners at NHS24, who deliver the public-facing information and guidance in our national response to deliver a Symptom Checker App. The content on the free to download App provides accessible, mobile and up-to-date information which is derived from NHS Inform.
COVID-19 Vaccination Programme

It is useful to set the context for this activity. Immunisation policy in Scotland is determined by Scottish Ministers and follows advice from the Joint Committee of Vaccination and Immunisation (JCVI) and other appropriate bodies. The JCVI advises the UK Government and the NHS in the four nations about all aspects of immunisation; and supports implementation of all immunisation programmes.

The complexity of the data flows and information systems used across boundaries between all NHS Scotland organisations and beyond (e.g., care homes, Social Security Agency, Armed Forces etc.) presents particular challenges to be managed when dealing with a response of this scale. The strategic planning and decisions have been translated into specific priorities and areas of work within the COVID-19 programmes, including Test & Protect, Vaccinations and Certifications.

A UK-wide Information Governance group, with four-nations collaboration, has been operating throughout this period to reach agreement on COVID-19 joint work required to ensure fair, secure and lawful sharing of data between devolved nations and the UK Government. The work has been focused on data-sharing required for testing and the Test, Trace and Isolate programme, Proximity Apps, Data Privacy, etc.

The role of the Flu Vaccines and COVID-19 Vaccinations Delivery Programme (FVCV) is to ensure the readiness of Scotland for the implementation of the flu vaccination programme and the delivery of a COVID-19 vaccination as per recommendations by the Joint Committee for Vaccinations and Immunisations (JCVI) and Scottish Government (SG). The FVCV Programme is made up of 9 core workstreams, one of which is Digital & Data (D&D).

The FVCV Digital & Data Delivery Board will retain a focus on planning across the workstream, to help ensure:

- Approval and sign-off of key items across the workstream to progress work.
- Coordination across the workstreams, four thematic portfolios –
  - Assurance
  - Technical
  - People Pathway
  - Data.
- Links into the main FVCV Programme are made and maintained.
- Products are identified, designed, and deployed in a coordinated and joined-up way. Live product enquiries will be coordinated through the Operational Board.
- Links and connections with the Operational Board are maintained.

Self-Registration Example

Whilst the majority of invitations to receive a vaccination have been delivered to citizens via letters, a small part of the roll out of the vaccination invitation has been the self-registration service offered to unpaid carers who may have the risk of transmission of the virus to the person or people for whom they provide care. In this model, unpaid carers access the self-registration services or use the national helpline. At registration, they are asked for their preference for contact. Registration is confirmed by receipt of an SMS text or email. The self-registration service for unpaid carers enabled around 200,000 people to identify themselves as carers. The unpaid carer self-registration service is an example of how technology across multiple platforms and organizations can be used to improve service delivery and citizen experience.
Inclusion and Participation

Digital Approaches in Care Homes

During the first phase of the response to COVID-19, it became clear that the impact on the residents, the staff and the care home providers was significant. An emerging need for the utilisation of digital technologies was identified. In the Summer of 2020, the work started to consult on and shape an Action Plan to support this significant new piece of work. The subsequent Action Plan supported the Digital Health & Care Strategy and is aligned with national strategies, plans and programmes.

The collaborative approach involves partners from:

- The Convention of Scottish Local Authorities (COSLA).
- The Scottish Social Services Council.
- Scottish Care.
- Connecting Scotland.
- The Care Inspectorate.
- The Scottish Council of Voluntary Organisations.
- The Coalition of Care and Support Providers in Scotland.


Contributions to the COVID-19 response

- Consultation with key stakeholders.
- Consultation closed in October 2020.
- Action Plan for 2020-2021 developed.
- The final Plan was launched in November 2020.
Digital Inclusion in Care Homes

In collaboration with the Connecting Scotland Programme, the aim of this work has been to put in place the digital foundations in terms of devices and connectivity along with the skills for staff and residents. There are two strands to this work.

- Completed a deep dive in six care homes in Aberdeenshire to understand and support skills development for residents and staff. This was a collaboration with Care Inspectorate, Scottish Care, the Scottish Social Services Council (SSSC) and Connecting Scotland.

- A national programme, launched in November 2020, to offer devices to care homes, supported with funding from Scottish Government Digital Health & Care and the Connecting Scotland initiative as the **Connecting Care Home Residents initiative**; led by Scottish Government delivered with Connecting Scotland, in collaboration with COSLA, Care Inspectorate, Coalition of Care Providers Scotland, Scottish Social Services Council and Scottish Care.

This work was undertaken in tandem with the **Adult social care – winter preparedness plan: 2020 to 2021** and the **Digital Approaches in Care Homes Action Plan 2020-21**. The Scottish Government committed funding to ensure, that all of Scotland’s care homes would access to digital devices for use with or by residents, and, connectivity and support to help their residents. The digital package consists of a combination of the following:

- A tablet (iPad)/laptop. A mifi dongle and a data package for 4G connection.
  - Staff skills development opportunities
- A mifi dongle enabled with a data package for care homes without wifi. Priority was initially given to registered care homes that have the necessary connectivity but lack sufficient devices for use by or with residents.

**Sector uptake – 76% of all Scottish Care homes (1,056) = 91% of care home residents (ca. 31,500 people).**

- Continued to deliver a £1.5 million programme of work, which to date has dispatched 1,961 iPad devices to 1,056 care homes (746 mifi devices).

- Developed and assessed options to address the connectivity challenges. The work has identified 132 homes with no devices (approx. 9% of all homes) which is impacting 3,500 residents (approx. 10% of resident population).

- The numbers of staff and residents using the devices has grown gradually. The team continue to raise awareness and establish a care home learning community for care home staff and enhanced the range of services available to staff and residents.

- Updated resources on the [TEC website](#) to share and promote the work.

- Established an approach to evaluating the digital inclusion initiative.

- Leveraging our in-team skills, the team have worked with the Near Me team to establish Near Me as a tool for undertaking care reviews.
Additional digital service developments

Practical steps to make connection and communication easier for those working in care homes were taken. For example, work to address connectivity problems, and the provision of NHS email (up to 3 addresses); and work to support skills development and knowledge exchange was undertaken. Other initiatives included:

- NHS Education for Scotland led a collaboration with Scottish Government and care providers, to develop the Care Home Safety Huddle tool, built by NHS Education for Scotland (NES Digital) teams working with stakeholders. It is a web-based, accessible-anywhere tool which allows staff to capture and collate data that can be used for multiple purposes to plan, manage resources, and provide a directed response. The initial focus was around outbreak management; the tool demonstrated that care homes could use the data to identify factors that may impact on the health, safety and wellbeing of residents.

- Work led by the Digital Health & Care Innovation Centre was undertaken to use the Care Homes Assessment Tool (CHAT): to improve local operational decision making in care homes.

Connecting Scotland

The subject of digital inclusion and the related challenges around digital literacy and digital health literacy has been the focus of a range of different initiatives in recent years. Many organisations have worked with individuals and within communities to help tackle these issues.

With the shift to providing services digitally, digital inclusion has been more important than ever. The recognition of this issue and the momentum to do something nationally as part of our response to COVID-19 resulted in the Connecting Scotland initiative.

The objective of the Scottish Government Digital Directorate initiative, which is managed by the Scottish Council for Voluntary Organisations and local authorities, is to increase the number of individuals and families who are digitally connected. The programme aims to get 60,000 digitally excluded households online by the end of 2021. This initiative has provided a very welcome opportunity to collaborate for the Digital Health and Care Directorate.

Since April 2020, Connecting Scotland has provided access to devices, connectivity and dedicated support to get people connected. The programme also works to develop individuals who become Digital Champions and support the objectives of the programme in their setting.

Building on learning from initiatives, the programme is a partnership with local authorities and local third sector organisations already working with the target groups to provide support. Applications to the Connecting Scotland programme for funding are via the organisations (who apply on behalf of the people they are working with).
The first phase of the programme focused on:
- People who were identified as being clinically at high risk from COVID-19. These individuals were very likely to be in the shielding group and isolating at home.

The second phase of the programme focused on:
- Households with children.
- Care leavers up to the age of 26 (in line with eligibility for aftercare support).
- Older and/or disabled people.

The most recent phase of the programme has focused on:
- A fast track – for organisations who have identified up to 10 people they are currently working with at risk of social isolation and loneliness.
- A social housing fast track – for housing associations and other social housing providers to rapidly distribute up to 100 devices to tenants at risk of social isolation and loneliness.

The support provided includes:
- Kit – internet-enabled devices.
- Connectivity.
- Training and support.

The Connecting Scotland initiative has also underpinned the Digital Inclusion – Connecting Residents in Scotland’s Care Homes initiative outlined in the previous section of this report.

The Connecting Scotland programme has, to date, reached over 36,000 Scottish households. For the work of the Digital Health and Care Directorate improving digital access and digital is and will continue to be an important factor in our success.

The Digital Citizen Delivery Plan (May 2021) has set out our aims to build upon the success achieved and to focus on digital inclusion and supporting some of the most vulnerable people in society, to create the conditions for sustainable change, and will be delivered with the public at the centre of its delivery.
Accelerating and Extending Access

Remote Health Pathways

The Remote Health Pathways (RHP) programme has been adapting and expanding since the first wave of the COVID-19 response. The RHP programme builds on the national TEC Home and Mobile Health Monitoring workstream. More recently, particularly in our response to COVID-19, it includes work undertaken with the Modernising Patient Pathways Programme and the Primary Care Directorate.

While the foundations of this work have been to support people with long-term health conditions, during the past year the RHP team considered how existing technologies can be re-purposed; used the rapid procurement process; worked closely with Clinical Advisory Groups and technology providers to ensure the developments are anchored in sustainable governance. In addition, they have applied these capabilities and developed new services in different areas.
Key priorities for Remote Health Pathways include:

- Testing and rolling out COVID-19 response and recovery initiatives.
- Maintaining and supporting further adoption of national scale-up of BP (hypertension) management.
- Ensuring continued support for key work programmes.
- Nurturing the pipeline of emerging opportunities.
- Formalising the programme and transitioning the governance arrangements to align with the Digital Citizen Delivery Board.

The Remote Health Pathway’s work came into sharper focus when the Scottish Programme for Government was published in September 2020, which reinforced the intention to support people who are dealing with a diagnosis of, and longer-term effects of, COVID-19. The RHP team have also contributed to the digital support for the Long COVID Cross-Directorate workstream led by the Scottish Government Clinical Priorities Team.

Contributions to the COVID-19 response

- Completed the emergency procurement of a Remote Health Monitoring solution (InHealthcare).
- Developed a tele-COVID-19 self-monitoring pathway (for patients at risk of deterioration to self-monitor at home).
- Implemented a remote perinatal care pathway.
- Approved funding to expand digital dermatology asynchronous appointments.
- Approved funding for Phase 1 scale-up of Dynamic Scot in NHS Greater Glasgow and Clyde.
- Approved tests of change using the vCreate platform and using the vCreate platform for remote neurological consultations and for families of care home residents.
- Agreed priority areas with the Modern Patient Pathway programme (MPP) to support national and local mobilisation and recovery plans: COVID-19 symptoms, heart failure, respiratory (asthma and COPD) and peri-operative assessment.
- Established Clinical Advisory Groups (CAGs) for each of the priority pathways.
- Increased service development capacity by training ‘Pathway Developers’ using the InHealthcare platform, and established the governance and flow for the new platform delivery.
- The team have supported the RHP Community of Practice to share good practice and review progress.
Following the first phase of the COVID-19 response, the RHP team have refreshed the national initiative – the Scale Up BP programme, working with GP Practices across Scotland to diagnose, treat and monitor hypertension.

This initiative has exceeded the current target, with over 25,000 people recruited and over 50% of general practices participating.

The procurement of an upgraded Remote Health Monitoring and Communications System is being completed. This will enable further adoption and scale as part of local service redesign and remobilisation activities.

More information is available about the RHP programme on the [TEC website](TEC website).

**Digital Mental Health**

The demand to provide tools to support mental health services has been substantial during the pandemic response. The scale up of digital mental health programmes has included the expansion of computerised Cognitive Behavioural Therapy (cCBT) and deployment of Internet-enabled CBT (ieCBT) services across all territorial Health Boards.

In Spring 2020, the first national Digital Mental Health Advisor was appointed to the Scottish Government's Mental Health Directorate. This role has provided an opportunity to work strategically on the planning and implementation of digitally enabled mental health services.

As a result, digitally enabled services to support mental health, for staff working in health and care and for people using health and care services, have been a consistent feature of the response to COVID-19.

As part of this new role, a Digital Mental Health programme has been established which addresses the increased demand for mental health services by taking full advantage of technological solutions to provide greater choice to people accessing treatment options.

The Digital Mental Health programme consists of five parallel workstreams covering:

- Development of digital therapy.
- Self-management and video-enabled therapy.
- Development of infrastructure, innovation, management, governance, and long-term sustainability of digital within mental health setting.
- Establishing a Test of Change Programme of digital mental health.
Contributions to the COVID-19 response

- The rapid expansion of Computerised Cognitive Behavioural Therapy (cCBT) in all territorial Health Boards and the introduction of self-referral options.
- Deployment of Internet-enabled CBT services across all territorial Health Boards.
- Development of national programme governance structures.

In addition, working with partners to identify areas of demand has resulted in new work being initiated in relation to:

- Suicide prevention.
- Post-COVID-19 recovery.
- Development of young person services.
- Remote one-to-one and group therapy.

Digital Mental Health has also seen significant growth of cCBT and deployment of Internet-enabled CBT services across all territorial Boards.

- The total number of cCBT treatment increased from a single treatment in 2019 to 14 in 2020.
- The expansion of access to cCBT has resulted in the growth in the number of referrals to (currently) over 3,900 per month.
- A total of 40,718 referrals were made to the digital therapy services (ieCBT and cCBT), an increase of 16,203.
- Access to self-help and self-management resources for people in Scotland is now more standardised, with clear access on national platforms: NHS Inform and the national Wellbeing Hub for staff.
- A total of 308,834 self-help guides on mental health have been accessed through NHS Inform and over of 4,600 health and care staff have access cCBT support through self-referral.
- Continued development and promotion of cCBT services has taken place at local levels.
- The development and monitoring of clinical and service monitoring and developing clinical and service structures for the Test of Change programme which is active in eight Health Boards. The projects which are part of the programme include digitally enabled services for: anxiety disorder, perinatal conditions, and insomnia.
  - The Young Person cCBT service is now available in five Health Board areas
  - Perinatal cCBT is being rolled out to five Health Board areas
  - Over the next period the potential for expansion and mainstreaming of individual Test of Change projects will be examined.
- Continued ieCBT national roll-out. This facility is now available in 13 of the 14 Health Board areas with 240 referrals being received a month.
- Complete programme infrastructure development through introduction of national programme board.

In parallel with the initiatives described in this snapshot update, the work to appraise the potential of the impact of digital in priority mental health areas will continue.

Learning from ongoing work and the establishment of a national evaluation reference group is a requirement for the Digital Mental Health programme.

Creating a space to assess new opportunities for digital mental health will be achieved with the establishment of an innovation hub. Further information about the Digital Mental Health programme can be found on the TEC website.

**Near Me Video Consultation**

Near Me is a video consulting service which enables people to attend health and care appointments from home or wherever is convenient. To participate, a patient requires a device such as a tablet, laptop or smartphone and an internet connection. It is a secure form of video consulting approved for use by the Scottish Government.

The Near Me video consulting service has been developed over several years and was undergoing a gradual expansion at the beginning of 2020. The delivery of video-enabled consultation has been transformed by the rapid scale up of this service because of the refocusing priorities at the beginning of the COVID-19 pandemic.

The acceleration of roll out plans, in collaboration with an expanded team involving Healthcare Improvement, NHS National Services Scotland, and the Access Collaborative, has changed the model of video-enabled access across Scotland. Working initially with Health Boards, General Practice teams and many secondary care services, social work teams and care homes and social care partners, has resulted in the growth of Near Me consultations, from a starting point of around 300 a week in February 2020, to around 1,400 a week by May 2020 and to around 20,000 a week by April 2021.
Contributions to the COVID-19 response

- The Near Me Covid-19 Response National Group led the roll-out and awareness raising in General Practice (in collaboration with Healthcare Improvement Scotland).
- Work with care homes and support their use of Near Me (in collaboration with the Care Inspectorate).
- Focus was agreed on key outpatient priority areas in secondary care – haematology, oncology, mental health, obstetrics, paediatrics and respiratory illness.
- An awareness with citizens about access to services using Near Me was undertaken utilising the public-facing website [https://www.nearme.scot](https://www.nearme.scot).
- Guidance and training materials were developed for primary care, care homes, outpatients, inpatients, prisons and telepsychiatry.
- In May 2020, a [Vision statement for the future of Near Me](https://www.nearme.scot) was agreed by the Cabinet Secretary, with detailed requirements to embed use of Near Me in routine delivery.
- In June 2020, a [summary of the 12-week scale-up](https://www.nearme.scot) was produced.
- In collaboration with NHS Education for Scotland and the Digital NMAHP Network, a programme of webinars which targeted staff working in different settings was delivered. The webinars were attended or viewed by over 5,000 NMAHPs.
- Additional resources to support the implementation and guidance for different uses of video consultation were developed and added to the TEC website to disseminate.
- A public consultation was completed, in parallel with the development of an Equalities Impact Assessment (EQIA), both of which inform the next steps in the roll out of Near Me.
- In July 2020, the initial [evaluation report of the video consulting programme](https://www.nearme.scot) was published. Fieldwork for the evaluation was completed prior to COVID and the rapid scale-up.
- In November 2020 a licence extension was agreed along with a wider Public Services Roll-out, in collaboration with COSLA and the Local Government Digital Office. Providing free access to the platform across all public services.
From January 2021 the expansion focused on a wider roll-out across a range of public services. Including:

- Work with Citizen Advice Scotland has been progressed with a pathfinder group of Citizens Advice Bureaux.
- In March 2021, the additional evaluation of the Near Me COVID roll-out period commissioned to follow up on the pre-COVID data collection, was published.
- In April 2021, additional resources, including a leaflet about using Near Me aimed at children developed by NHS Lothian, were disseminated.
- Continued working with the national Redesign of Urgent Care programme to direct urgent care requests to the 111 service, supporting the roll-out of Near Me within Minor Injury Units, Emergency Department and Assessment Units.
- Work continued with the Office of the Chief Social Worker (OSCWA) to roll out use of Near Me in order to care home residents (where appropriate).
- Work with the Office of the Chief Social Worker and Iriss, has accelerated to support the roll-out of Near Me within Social Care.
- Workstream 3 of the Redesign of Urgent Care Programme was completed.

Further information about the Near Me programme can be found on the TEC website.
Continuity of Service

The digital response to the pandemic has demanded significant shifts in priorities and unprecedented demand on digital resources.

However, the need for delivery of major digital programmes of work that were underway prior to March 2020 is undiminished, and work has continued to move these programmes forward within this new context. This includes:

**CHI and Child Health Programme**

The programme to replace the national patient demographic system and the national child health systems has continued. Outside of the programme, a parallel workstream was initiated to put in place a separate instance of the new CHI EMPI (enterprise master patient index) system, specifically to facilitate the timely provision of demographics data for vaccination scheduling.

Within the programme, the start date for the availability of the new CHI EMPI was brought forward to provide the facility to look up and validate basic demographic details in support of the COVID-19 response. A core component of the Child Health system is the functionality to schedule and record vaccinations. The digital response to the pandemic has resulted in significant new national capabilities to support the vaccinations process, including self-booking.

**GP IT Reprovisioning Project**

The programme to provide access to modern GP systems has continued to be delivered during the response to COVID-19.

**HEPMA National Implementation Programme**

The implementation of Hospital Electronic Prescribing and Medicines Administration (HEPMA) has been ongoing for a number of years. HEPMA has been successfully implemented in four Health Boards across Scotland and all remaining Health Boards are on track to roll it out within the next three-to-five years. COVID-19 has delayed HEPMA implementation progress and has been included in Board recovery plans.

**National eRostering Programme**

A national eRostering solution is to be deployed on a ‘Once for Scotland’ basis. This solution will provide a single source of real-time workforce demand and fulfilment data that NHS Scotland has not had access to in the past. This will be hugely informative for strategic workforce planning and a provide business critical support in any future pandemic situation.
PACS Reprovisioning Programme

The national Picture Archiving and Communications System (PACS) has continued to make progress towards procurement.

International Engagement and Knowledge Exchange

The International Engagement Team’s remit is to seek out and maximize opportunities for engagement and collaboration with international stakeholders to support the development and delivery of digital health and care services for the people of Scotland. The team works closely with national and international organisations from: health, social care and housing, third sector, policy and academic sectors to develop sustainable digital health and care services.

Throughout the period March 2020 to June 2021, the team continued to make connections between the current knowledge base and policy, in relation to the digital health and care response to COVID-19.

Contributions to the COVID-19 response

- In partnership with the LGDO Digital Telecare and TEC Telecare, South Norway and Andalusian Telecare teams, obtained funding from Digital Health Europe, for a twinning project about transition to digital telecare.

- In partnership with the Near Me team and the Basque Country, obtained funding from WE4AHA for a knowledge exchange twinning project focused on ‘scaling up video consultation’. These twinning activities were conducted during the COVID-19 response and provided a forum for exchange and discussion about the impact of COVID-19 on service delivery.

- In June 2021 the team hosted a virtual Digital, Health, Housing and Care Learning Network. The programme provided an opportunity for the Scottish and international stakeholders to share their experiences of delivering services during the COVID-19 pandemic.
Shared Scottish TEC experience in response to COVID-19 via tailored international knowledge exchange sessions, including:

- Southern Denmark – Video Consultation Roll-Out in Primary Care
- Maccabi, Israel – TEC Response to COVID-19
- Ontario Health – Telecare, Remote Health Pathways and Near Me
- American Health Information Management Association Masterclass – Scottish Digital Response to COVID-19
- UK Digital Leaders Lounge – Digital Health and Care Leadership during COVID-19
- European Connected Health Alliance (ECHA) – Pop-Up Ecosystem Webinars on COVID-19-related issues.
- New Zealand Telehealth Network – Scottish Digital Health and Care Response to COVID-19
- Norwegian Welfare Tech conference – Transition to Digital Telecare

- Responded to horizon scanning request from Scottish Government colleagues on international examples of digital inclusion initiatives.
- Provided support to Scottish stakeholders through targeted knowledge exchange activities related to COVID-19 and vaccination programme.
- In December 2020, delivered DigiFest2020. More than 1,600 speakers and delegates participated in a nine-day virtual programme of digital health, housing and care content with Scottish, UK and international speakers and delegates.
- mPower – the Interreg VA-funded project redirected almost all their efforts to support the scale-up of digitally enabled services, including support for national Remote Health Pathways, Mental Health and Digital Access. mPower staff provided video connectivity and digital training to care homes’ staff and residents in their localities and staffing support for community helplines was provided.
- Building on our international relationships, mPower supported the training and helpdesk function for the HSE eHealth Ireland Video Consultation service, which benefitted from the expertise of Near Me in Scotland.
- The EU Health Programme funded SCIROCCO Exchange Knowledge Transfer Programme undertook a specific COVID-19 response knowledge exchange session with speakers from Denmark and Scotland. The session showcased the National Wellbeing Hub and the mental health and wellbeing support provided for staff in response to COVID-19.
Telecare

The provision of technology-enabled support for people at home, ensuring connectedness for those who may be frail or vulnerable came into sharp focus during the past year. From the initial COVID-19 response, and the review of urgent priorities, the TEC Telecare programme in collaboration with the Telecare Lead and the Local Government Digital Office Team (LGDO) have continued working together to support Scottish Telecare service providers on the essential work with local authorities and Integration Joint Boards (IJ Bs) to:

- Establish remote working.
- Continue to support the analogue to digital transition.
- Facilitate continuity of service for Telecare providers.
- Identify opportunities to provide proactive/wellbeing calling for people who use Telecare.

Contributions to the COVID-19 response

- COVID-19 Telecare Service Continuity Information.
- COVID-19 Telecare Updates.
- Telecare Outbound Calling Report.
- Publish a report on the Proactive Telecare Services Study.
- Produced a report on: Delivering Telecare Services during the COVID-19 Outbreak.

The Telecare team have worked with Third Sector partners, Alzheimer Scotland, to review technology enabled support for individuals and families living with dementia to better support them during the COVID-19 pandemic. This provided opportunities to:

- Refresh and relaunch the new Purple Alert App.
- Work with Telecare Call Handlers accessing the Alzheimer Scotland for specialist support.
- Produced a report on the use of consumer technologies, based on learning from the About Digital and Me (ADAM) case studies and, to further develop the About Digital and Me online assessment tool.

The transition from Analogue to Digital Telecare workstream is a critical work programme led by the Local Government Digital Office's Digital Telecare team. Work on the transition has continued while navigating the COVID-19 response across Local Authority areas. For more on this work go to the TEC website.
Proactive Telecare Test of Change, led by TEC, working with the Digital Health & Care Innovation Centre and the Care Inspectorate (accelerated in response to COVID).

- Four funded sites are developing and testing proactive outbound calling as an enhancement of an existing telecare service.
- Linking and sharing expertise with the Connect Project in West Wales, and the Andalusian Telecare Service.
- Publication of FarrPoint’s Proactive Telecare Services report, which focuses on the practicalities and benefits of proactive calling and is informing the tests of change.

The team is also working with the University of Strathclyde on a research project to investigate telecare services users’ experience of the COVID-19 pandemic. Further information about the Telecare work is available on the TEC website.

Transforming Local Systems – Pathfinder Projects

The Transforming Local Systems four pathfinder projects were selected for the programme from April 2019. The objective of the projects is to use the Scottish Approach to Service Design (SAtSD) to facilitate local partnerships to design – with and for citizens – preventative and digitally enabled services.

The approach of working in equal partnership is crucial to the programme which is being progressed in different geographic areas and with different groups of people. A national model of support has been developed and each of the pathfinders have adopted the SAtSD in different ways.

The programme is being delivered as a collaboration between the Scottish Government’s Digital Health and Care Directorate through the TEC Programme, Healthcare Improvement Scotland’s ihub, the Office of the Chief Designer, Scottish Government Mental Health and Social Care Directorate, and the Digital Office for Local Government.

The pathfinders are:

- Aberdeen City – Exploring, define and co-designing multi-agency services for people who experience domestic abuse.
- East Ayrshire – Enabling transformation health and social care provision for people living with long-term conditions.
- Highland – Exploring the end-to-end life circumstances and journey for people who experience respiratory symptoms.
- Midlothian – Improving the experience of people with frailty, their families, carers, and staff.
Contributions to the COVID-19 response

During the COVID-19 response, the team have continued to support digital adoption while ensuring the co-design principles and engagement continue to shape the programmes. Support work has included critical friend and individual coaching support in service design and provided additional capacity to the pathfinders.

The impact of the pandemic for each pathfinder area has varied. The biggest challenges have involved the redeployment of some staff and the inevitable barriers presented to organising citizen engagement activities. A shift to redesign virtual engagement has been required.

The learning from the TLS pathfinder projects and the methodologies used will provide insights which will be valuable in the recovery and remobilisation of services.

Further information about the work and a webinar recorded about the TLS project is available to view on the TEC website.
TEC in Housing

The aim of the TEC in Housing (TECH) programme is to raise awareness across the housing sector about the potential of TEC and to increase the use of digital technology to deliver services and support their tenants/customers’ health, support and wellbeing. The TECH programme shares cross-cutting areas of delivery with the Telecare programme.

During the response to COVID-19 the team have:

- Increased the number of signatories to the TECH Charter.
- Further developed the TECH Community network to share good practice and support housing providers to further develop their contribution to TEC and provided one-to-one support as required.
- Identified and promoted TECH opportunities with academia.
- Improved understanding of the levels of digital readiness across social landlords in relation to the transition from analogue to digital telecare and identified appropriate support for the sector.
- Provided support to the new Digital Telecare Housing Transition Manager.
- Delivered, in partnership with the Digital Telecare team, a series of Analogue-to-Digital events for the housing sector.
- Ensured the ongoing integration of housing into established digital health and wellbeing programmes.
- Supported the expansion of Near Me use with housing providers to facilitate people to make use of online consultations.
- Continued to deliver TEC training to Digital Champions.
- Commenced Phase 1 of the Healthier Homes initiative.
- Supported the ‘Reimagining Telecare’, Telecare procurement framework activity.

Further information about the TECH programme is available on the TEC website and the Scottish Federation of Housing Associations TEC in Housing website.
Conclusions

During the response to COVID-19 the Digital Health and Care Directorate, working with our partners, has been able to deliver innovative digital services, to extend, maintain, and develop new services. All of which have underscored the importance of strong partnerships and joined-up approaches to facilitate meaningful collaboration across organisations and sectors.

The Directorate will continue to deliver on the existing action plan commitments and, going forward, the work of the Directorate will be guided by the Digital Health and Care Strategy refresh (2021), which (in addition to existing programmes) will build on the experience of accelerated delivery because of COVID-19, and the learning from this period.

The successful expansion remote working for staff and of digitally enabled services including those supporting the vaccination programme, Near Me, Remote Health Pathways, and others described in this report, have provided an even stronger knowledge base for future development.

The recognition of digital inclusion, and the Connecting Scotland initiative, led by the Scottish Government’s Digital Directorate in partnership with the SCVO and local authorities has emphasised the importance of connectedness.

This experience has demonstrated that organisations working across Scotland to deliver health and care, when supported, have demonstrated a willingness to use digital technologies. When digital solutions enable service priorities - to provide access to services, to connect to colleagues, and to connect with the people who use the services, we can work differently with confidence and innovation. This culture of collaboration will be also support plans for service renewal and future delivery.