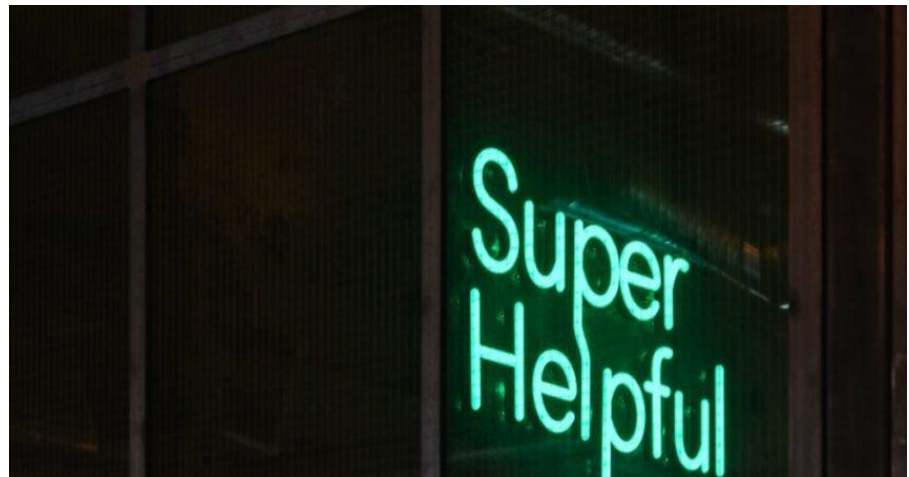


The Impact of Technology in Adult Social Care Provider Services

July 2020



The Impact of Technology in Adult Social Care Provider Services

Executive Summary

To better understand the changing use of technology during the response to the Covid-19 pandemic, NHSX commissioned Digital Social Care, working with the Institute of Public Care (IPC) at Oxford Brookes University, to carry out rapid action research and analysis of adult social care provider services. The aim of the research was to share learning on how technology is being used, and to capture the barriers, enabling factors and benefits of adopting technology.

The use of technology has changed rapidly since the pandemic started. Information governance compliance requirements have been temporarily relaxed, a new quick process to give care providers free access to NHSmail and Microsoft Teams has been set up, some free digital tools have been made available to care providers, and all care homes have been asked to start using the Capacity Tracker as a priority. More information is available on the [Digital Social Care Covid-19 pages](#).

A key principle of the research was that it should not impose a burden on the system with additional requests for information at this time. To that end Digital Social Care set up a new [helpline to support the adult social care sector to use technology](#) during the pandemic. The Institute of Public Care undertook telephone interviews with helpline callers who opted-in to the action research and with other sector stakeholders. In addition to the helpline, Digital Social Care and the Institute of Public Care supported Herefordshire and Worcestershire CCG with their project to disseminate iPads to all care homes in their area.

The research was undertaken in an eight-week period from 20 April to 19 June 2020. During this time the helpline was contacted by 176 individuals, most of whom had queries about NHSmail. The average time taken to resolve queries was 13 minutes. However, there were some callers who needed significantly more input in order to resolve their query, often due to their low level of digital literacy. The helpline is a valued, practical support to the sector that has complemented the resources and support provided by NHS England and Academic Health Science Network regions, Clinical Commissioning Groups (CCG), local authorities and existing product specific helplines such as for NHSmail and the Capacity Tracker.

The number of visitors to the Digital Social Care website more than doubled from the end of February to the end of April 2020, reflecting the rapid increase in social care providers starting to use NHSmail, video conferencing and other digital technologies. This rapid onboarding and digital adoption was not without problems, resulting in very variable experiences for providers. In particular, the process for application, registration and activation of NHSmail is still challenging and slow for many care providers, even with the simplified requirements.

However, digital adoption did bring benefits:

- Access to NHSmail improves providers' communication with NHS organisations and therefore supports better coordination of care around the person's needs - where NHS organisations are using NHSmail with providers.
- Use of NHSmail by care home providers and digital rostering and visit logging systems by homecare providers is viewed as reducing administrative effort.
- Adoption of video conferencing is seen as a significant benefit, if not a necessity, by providers during the pandemic.
- The Capacity Tracker, whilst useful to NHS organisations and easy for providers to implement, was not perceived by providers as of benefit to them.

There has been a step change in the use of technology over this time and providers are keen that this is sustained, becoming the new normal for the sector. Availability of advice and technical support as well as funding and clear guidance from local and national bodies supports the sector to change. A coordinated approach will be needed if digital adoption and innovation is to continue.

Based upon the action research, stakeholder interviews, learning from the helpline and analysis of system data, we make the following recommendations:

1. Recognise the scale of the support needed by the sector to adopt digital technology safely.
2. Ensure knowledge gained during this period of intensive care provider digital support is captured.
3. Continue to resource ongoing technical support to help social care providers access secure email, video conferencing and other common digital solutions.
4. Provide a safe place for social care providers to go for independent, strategic digital advice that can support the development of a bigger 'digital community'.
5. Be cautious about supplying hardware to care providers as a digital solution.
6. Broaden NHS digital support and engagement to include homecare, extra care and supported living providers to realise benefits for vulnerable people living in the community.
7. Better understand the level and nature of digital literacy across the adult social care workforce.
8. Conduct a review to ascertain how to prepare the adult social care workforce to deliver the digital future: a [Topol Review](#) for social care.
9. Develop a forum for new and existing digital leaders to form a digital community.
10. A clear national stance on the software which will be used for each application area should be set out, including information standards and interoperability requirements.

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The Impact of Technology in Adult Social Care Provider Services

1 Introduction

NHSX commissioned Digital Social Care, working with the Institute of Public Care (IPC) at Oxford Brookes University, to carry out rapid action research and analysis of the impact of using technology in adult social care services in England during the response to Covid-19. The research was undertaken in an eight-week period from 20 April to 19 June 2020.

During the pandemic we expected there to be an increase in people using technology and needing technical help and support. The aim of the research, therefore, was to:

- provide practical support to the sector;
- rapidly collate shared learning on how technology is being used;
- better understand the barriers and enabling factors in relation to the uptake of technology; and
- capture the benefits of adopting technology in these circumstances.

The use of technology has changed rapidly since the pandemic started. Information governance compliance requirements have been temporarily relaxed, a new quick process to give care providers free access to NHSmail and Microsoft Teams has been set up, some free digital tools have been made available to care providers, and all care homes have been asked to start using the Capacity Tracker as a priority. More information is available on the [Digital Social Care Covid-19 pages](#). The scope of the research included the following key technology interventions during the response to Covid-19:

1. Uptake and use of NHSmail or other secure email.
2. Use of Microsoft Teams or other technology for video conferencing.
3. Use of remote care and monitoring such as apps and wearables, personal alarms, sensors and memory aids.
4. Adoption of capacity tracking tools to provide better management information.

A key principle of the rapid action research was that it should not impose a burden on the system with additional requests for information at this time, but to use existing or supportive interactions with the sector. To that end Digital Social Care set up a new [helpline to support the adult social care sector to use technology](#) during the pandemic. The Institute of Public Care provided follow-up support to provider enquiries that could not be resolved or signposted by the helpline. The Institute also undertook telephone interviews with helpline callers who opted-in to the action research or with other care providers that were identified through other channels. The research questions built upon a logic model and from this the research instrument or 'script' for semi-structured phone calls with providers was agreed. The script is shown in Appendix 1.

Interviews were also conducted with people who are either providing NHSmail or Microsoft Teams onboarding support or are relevant sector stakeholders. These included: Digital Social Care helpline operatives; members of NHS England Aging Well and regional teams; Academic Health Science Networks (AHSN); Clinical Commissioning Groups (CCGs); local authorities; a voluntary sector provider membership body and a CQC digital champion¹.

2 Digital Social Care website and technical helpline

Digital Social Care is a partnership project between the Care Provider Alliance and Skills for Care and funded through NHS Digital's Social Care Programme. From the sector and for the sector, Digital Social Care provides support on technology and drives sector engagement with digital tools. All resources are open source.

Digital Social Care launched a technical helpline on 6 April 2020 to support the adult social care sector with harnessing technology during the Covid-19 outbreak. The helpline can be contacted by phone or email and is open between 9am and 5pm Monday to Friday. The helpline gives social care providers access to practical advice to troubleshoot a technical problem or give one-to-one support.

This section will discuss both the helpline and the materials produced and hosted by Digital Social Care to support Covid-19 responses. This section will also discuss Digital Social Care website analytics.

In addition to the helpline, Digital Social Care supported Herefordshire and Worcestershire CCG with their project to disseminate iPads to all care homes in their area. CCG staff and Institute of Public Care associates gave telephone support to care homes that needed help with the initial iPad set up and getting started with NHSmail and Microsoft Teams. See section 3 for more details.

2.1 Digital Social Care helpline

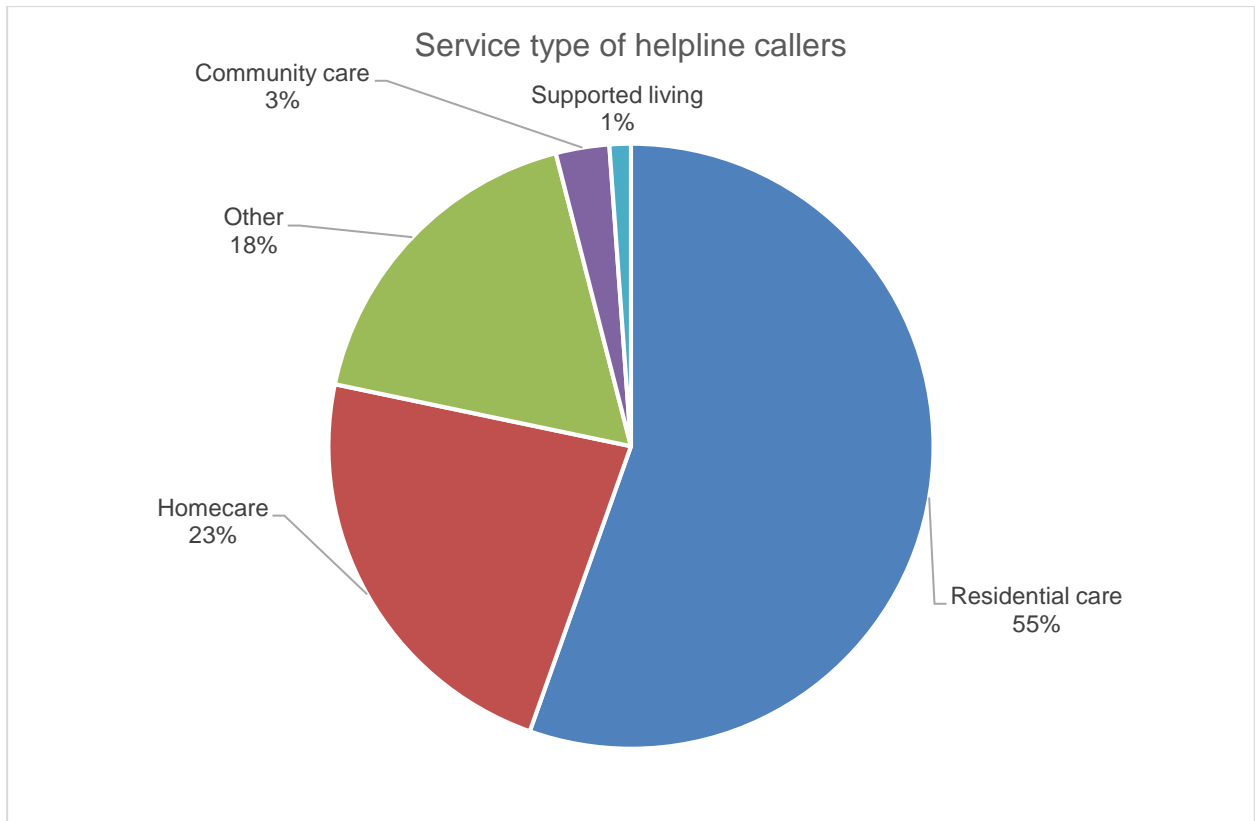
Between 20 April and 19 June 2020², the helpline was contacted by 176³ individuals, most of whom (47%) are registered managers with the next largest group being care service owners at 10%. Most people (112) contacted the helpline via phone and others (64) via email. Approximately 32% of participants agreed to be contacted for research purposes (as discussed in section 5). The full details of contacts logged can be seen in Appendix 2.

As shown in the graph below, most respondents (55%) were from residential care, 23% from homecare and a significant minority (18%) from other services, including other provider services and commissioning organisations. This 'other' category includes commissioning organisations and other parts of the system that are supporting care providers to register for NHSmail such as CCGs / Commissioning Support Units (which spanned commissioner, IT and pharmacist staff and represented 6% of total), local authority commissioners (2%), and GP practices (2%).

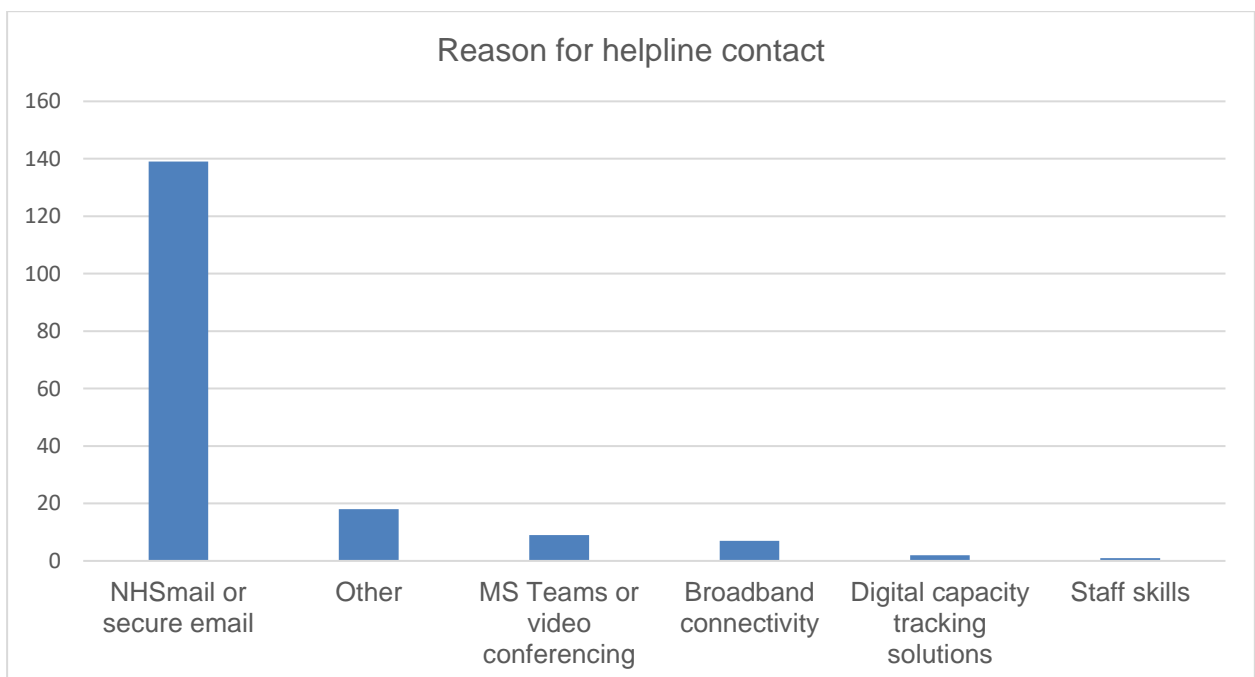
¹ A CQC inspector who raises awareness of how to inspect in a digitally mature provider.

² While the helpline started on 6 April, the contract duration for this research ran from 20 April to 19 June. Data from calls pre and post-dating this period did not significantly alter the data reported here.

³ This does not include repeat callers, who accounted for 10% of the total of 196 callers in this period.



The positioning of the helpline has been to support care providers' use of technology during Covid-19. As shown in the graph below, nearly four fifths (79%) of contacts were about NHSmail or secure email whilst 18 calls (10%) were for other reasons. This 'other' category included a wide range queries such as: how to access PPE or coronavirus testing, advice about the Data Security and Protection Toolkit or [ODS](#) codes, how to set up an iPad, and advice on digital solutions e.g. Facebook Portals, Alexa Show or care planning software. Five percent of calls were about Microsoft Teams or other video conferencing technology, and four percent of callers wanted to discuss how to improve their broadband or wifi connectivity.



The helpline operatives' observations on the nature of the NHSmail related calls were that most of them related to a range of registration and activation problems and delays, and that a large number of calls were about accessing and use of the shared email address and additional users. Callers were often either the registered manager or their office manager/ administrator. The registered managers who contacted the helpline typically, though not always, appear to have lower digital literacy or digital skills and in a number of cases delegated to their administrator/office manager the NHSmail query.

The most common issue about NHSmail was that individuals had not received the email with their new NHSmail address or the text message with their password. To resolve this, a manual workaround process was developed with NHS England Ageing Well Regional Leads and Accenture. This added additional burden to staff from Accenture who had to manually reset passwords.

There is also the option to call the NHSmail Helpdesk (0333 200 1133, Mon-Fri, 9-5) to request a password reset. Calling this helpdesk often caused a lot of confusion for care providers. There are multiple options to choose from and they struggled to navigate these options. If they did get through to an individual from this helpdesk, some providers were told that they could not have their passwords reset and would have to contact their local administrators. This seems to have been because the staff on this helpdesk were not familiar with social care organisations. There was also a period when, if care providers chose the social care options (ext. 1 then 1), the phone automatically hung up on them. Some callers chose to go through the longer manual process with us to get password resets as they did not want to try and speak to the NHSmail helpdesk again.

There was no discernible difference in the reason for the call to the helpline between different sorts of care providers i.e. between care home and homecare providers, except when contacted by a care provider's IT department as this usually related to more complicated multi-site set-up questions. Enquiries from IT departments accounted for less than 5% of calls.

In a number of locations, other organisations have been taking the lead in supporting care providers (particularly care home providers) to register for NHSmail e.g. NHS England and Academic Health Science Network (AHSC) regional teams, CCGs, GP practices and local authorities, and some queries are coming from these organisations when trying to address their care providers' NHSmail problems.

Where CCGs have supported care provider registrations en masse (not via the fast track process) the helpline is not able to address care providers' problems and they have to be directed to the local CCG administrator. This is because accounts are created via a local administrator at a cost to the CCG / Commissioning Support Unit (CSUs) and cannot be managed centrally.

The helpline operatives' observations and reflections on other aspects of calls include:

- Language is an issue at two levels. Firstly, some callers lack of digital literacy meant that terminology usually used to explain standard desktop or laptop actions and tasks were not always familiar and understood by the callers. Secondly, for some callers English is a second language which meant it could be challenging ensuring a common understanding of the actions and tasks they needed to perform under the

guidance of the helpline operative. Both aspects were particularly challenging in the context of helpline operatives not having remote desktop access to the caller's screen.

- There were some calls seeking guidance on equipment purchases. Only very generic advice could be given and though callers were signposted to further resources, providers would benefit further from equipment minimum specifications and guidance on what they can be appropriately used for.
- There were a few enquiries from care providers who wanted more strategic advice on digital solution selection and implementation, or support in considering the different technical solutions. For example, advice on transferring to secure cloud document storage and sharing, use of Echo Show devices versus tablets for both client and practitioner video conferencing, and implementation of care planning, recording and eMAR systems.
- Helpline operatives found the most useful resources to signpost to were the evolving suite of Digital Social Care resources, particularly the videos which were developed by Accenture, and for those wanting a more strategic oversight, the CASPA Whitepaper: [Guidance and Best Practice for Adoption of Electronic Care Management System](#).

2.1.1 Time spent to resolve issues raised with the helpline

The average time taken to resolve calls/emails was 13 minutes. However, there were some callers who needed significantly more input in order to resolve their query.

There were two calls that were both an hour long. The first was a conversation with the registered manager of a homecare organisation. The manager initially called about how to access NHSmail, but this evolved into a broader conversation about their digital roadmap. They were already using electronic care planning software and were concerned about the number of apps and systems they were using and how they could align their current systems. They reiterated that they were committed to digital transformation but were concerned about how to do this properly. This call was referred on to the Institute of Public Care for a further conversation / additional time.

The other hour-long call was from the registered manager of a small care home with fewer than 50 staff. They were trying to use Microsoft Teams but were having significant issues with functionality and understanding how to make it work. After an hour on the phone, we arranged for the Microsoft Teams specialist in Accenture to call the provider as the issue appeared to be to do with set up.

20 people (10% of callers) were repeat callers to the helpline. Of the individuals who called the helpline multiple times, half were from residential care settings, a quarter from homecare and the remaining callers were: a supported living organisation, a hospice at home, and a CCG working to support care homes. All repeat callers wanted help with NHSmail. The average time spent by helpline staff on repeat callers was 45 minutes. Repeat callers can be categorised into two types:

1. Registered managers or admin staff with low digital skills who had been asked by commissioners to set up NHSmail and were struggling. They required significant support and guidance to feel confident with using NHSmail.
2. IT staff or digitally literate staff who were setting up NHSmail on behalf of their organisation. They generally had either a complex organisational structure and were

attempting to implement NHSmail across multiple sites remotely or were from part of the sector which the fast track registration was not initially designed for e.g. hospice at home or supported living.

Case study: Digital Social Care helpline caller

One caller who we spoke to multiple times was a registered nurse working in a small charity homecare agency in London. She did not use any technology day to day at work and was not confident in her digital skills. English was not her first language, and this did cause some communication issues when staff were trying to provide more technical directions as support.

Initially, there had been an error in her application form for NHSmail which caused delays in the application being processed. This took several calls to resolve. Her application was then delayed as NHS Digital/Accenture were told to stop processing NHSmail homecare applications. As the helpline team were not allowed to share publicly that this decision had been made, it became difficult to explain why there were issues with her account application and she was under pressure to get NHSmail from her commissioners and local GP.

Once the application was processed, the helpline staff also helped her with how to send an email and what the shared mailbox should be used for.

To get her and her team up and running with NHSmail took multiple calls over a period of three weeks. While the situation was not helped by the suspension of homecare applications, over an hour was spent in helping her to develop basic digital skills.

2.1.2 Helpline feedback

We did not explicitly ask people who contacted the helpline for feedback on the service. If the helpline is to be integrated into a core service offering for Digital Social Care, we would consider requesting feedback after calls have been resolved to assist developing the service. However, some people did choose to contact us with feedback of their own volition. Their comments included:

- “Very impressed with the service from you and your team!”
- “Video was perfect. Job done, thanks.”
- “Excellent service!!! You are right – absolute legend. Daniel fixed it - 😊”.

2.2 Digital Social Care website

The Digital Social Care website contains a range of resources for care providers that support rapid adoption of NHSmail and Microsoft Teams in response to Covid-19, as well as providing a broader range of advice and support to the sector on technology and data protection in general. New resources were developed and made available based upon learning and trends from helplines enquiries. Examples include:

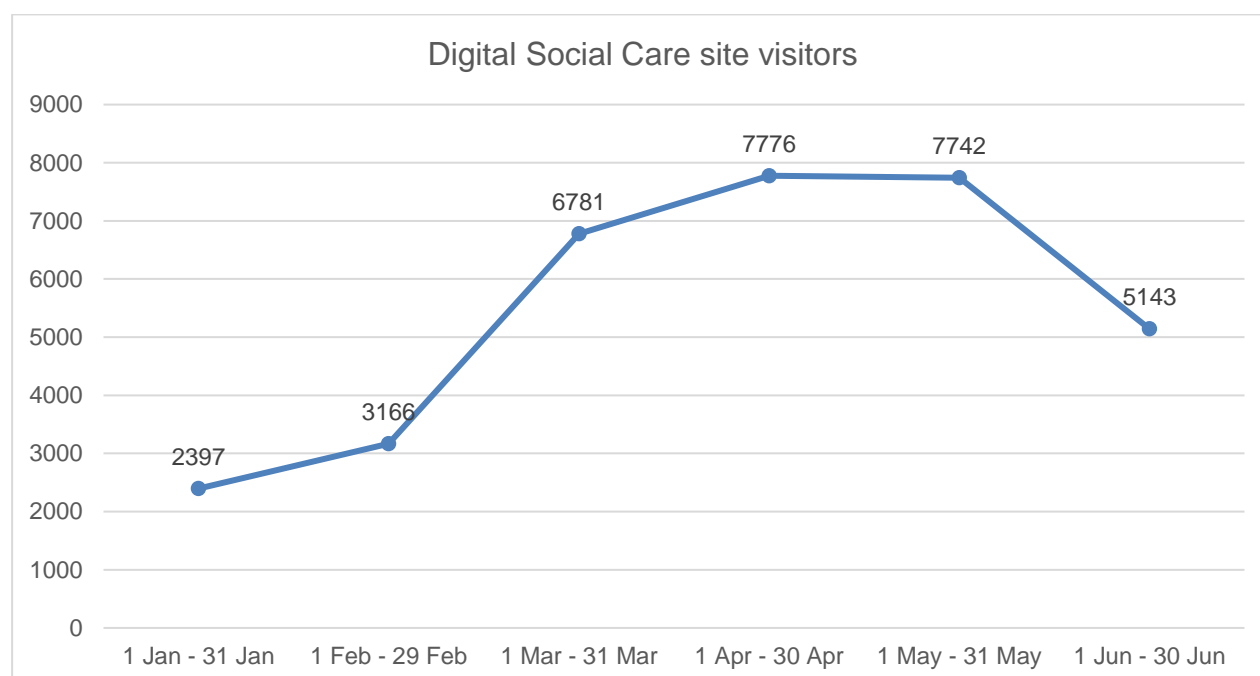
- Guidance for GPs on how to email a link to an AccuRX meeting:
<https://www.digitalsocialcare.co.uk/latest-guidance/guide-on-how-to-email-a-link-to-an-accurx-meeting/>

- The helpline ‘crib sheets’ which can be developed into FAQs.
- Video guides on how to use NHSmail – from Accenture: <https://www.digitalsocialcare.co.uk/covid-19-guidance/covid-19-quick-access-to-nhsmail/how-to-access-and-activate-your-nhsmail-account/>
- A Quick Guide on How Technology Can Help During Covid-19 – with Skills for Care: <https://www.digitalsocialcare.co.uk/covid-19-guidance/digital-solutions-for-covid-19/>

These will be of benefit on an on-going basis as further adult social care providers from other parts of the sector sign up to NHSmail and increase digital adoption, and as more care home providers start using NHSmail in earnest.

2.2.1 Website analytics

Digital Social Care had 14,230 unique visitors between 20 April and 19 June 2020 and the website broke its records for the largest number of unique visitors of all time in April.



The number of visitors to Digital Social Care had been increasing steadily since our launch in June 2018. However, as shown in the graph above, the numbers more than doubled from the end of February to the end of March 2020. This is likely to have been driven by the need to switch to using digital tools because of the pandemic and people searching for a trusted source of information.

From 20 April to 19 June 2020, 38% of website users accessed the website directly, 29% were referred from other sites (including from NHSX, .gov.uk, Care England, the National Care Association and the Data Security and Protection Toolkit website), and 31% found the site through search engines. If you compare this to the same period last year, when only 5% of users accessed the website by searching for key words, there is a clear increase in people looking for information on technology in social care.

Digital Social Care website analytics show that the most commonly accessed page on the website, and similar to the helpline enquiries themselves, is ‘Covid-19: Quick

Access to NHSmail' under the 'Covid-19 Guidance' section. The table below lists the top 10 most visited pages on Digital Social Care during the research period.

Page	Page views	%
/covid-19-quick-access-to-nhsmail/	8849	23%
Digital Social Care Homepage	4748	12%
/latest-guidance/how-to-find-your-ods-code/	4122	11%
/covid-19-guidance/	1752	5%
/sharing-care-records-via-email/how-to-get-secure-email/nhsmail/	1288	3%
/covid-19-guidance/free-digital-tools-resources-for-covid-19/	984	3%
/covid-19-guidance/covid-19-microsoft-teams/	796	2%
/latest-guidance/covid-19-information-governance-and-information-sharing-guidance/	718	2%
/data-security-protecting-my-information/data-security-and-protection-toolkit/	661	2%
/covid-19-guidance/covid-19-quick-access-to-nhsmail/nhsmail-fast-track-how-to/	655	2%

3 Other technical support to care providers

Each NHS England region built upon their existing support capacity and utilised the one-off Covid-19 NHSmail rollout funding to create time-limited support to the STP, CCG, local authority leads and other parts of the system driving onboarding of care providers to NHSmail and Microsoft Teams. This onboarding drive has mainly been focused on care homes, and from the interviews with stakeholders has been related to both hospital discharges and the digital engagement with GP practices / Primary Care Network element of the Enhanced Health in Care Homes framework.

In the absence of a national plan or senior responsible officer (SRO) for this work, each NHS England region has developed its own response to care provider NHSmail onboarding with varying degrees of support, and in some cases appropriately involved other parts of the system, for example resource within the regional Academic Health Science Networks. However, the main onboarding drive has still been through the Sustainability and Transformation Partnership (STP) and CCG / local authority leads and it was not possible to quantify the resource across each of these in each region. This also means there is no consistent basis for tracking the support provided in terms of number and nature of queries dealt with or number of care providers supported to allow comparison across regions.

The most common queries received by the regional support related to:

- **No receipt of 'welcome' email just a password text.** The emails are automatically generated as part of the process that creates the NHSmail accounts, so loss/non-arrival was usually down to either local junk mail settings, spelling errors in the

email address provided or occasionally users deleting it by mistake. This could be escalated to NHSmail Accenture internally to re-issue. However, an alternative response was to lookup the provider's new address on the NHSmail global directory and send them a link to the Digital Social Care website with instructions on how to activate their account.

- **Received 'welcome' email but no text.** This was usually either down to the wrong mobile number being provided or the recipient deleting it by mistake. Some regions developed a "back-door" process whereby people could provide us with their NHSmail address, the correct mobile number and their site [ODS](#) code and have a new password issued overnight.
- **Password doesn't work / is expired.** This was usually solved by talking the provider through the problem as it mainly related to user error such as:
 - Not including the hyphens in the password.
 - Not entering the password as shown (i.e. case sensitive).
 - Using the wrong email address (i.e. their normal work address rather than their NHSmail address).
 - Not realising the need to change the password.
- **Activation of account.** Some people just wanted someone to walk them through activation regardless of any instructions they may have been sent. Most could be supported through scheduled video conferences in the early stages or signposting to resources on Digital Social Care.
- **Access the shared mailbox.** These enquires were often dealt with either via scheduled video conferences, talking providers through the process, or being signposted to resources on Digital Social Care.

As well as the Digital Social Care helpline and support from NHS England regional teams, some CCGs and local authorities have provided intensive support for care homes during the pandemic. The following two case studies illustrate the support provided by Herefordshire and Worcestershire CCG and Durham County Council.

Durham County Council: The Digital Care Home

Durham County Council and County Durham and Darlington NHS Foundation Trust have been working together to support local care homes with technology adoption. The original ambition of Health Call Digital Care Home was to support all older people's care homes across the County over a two-year period, but Covid-19 accelerated its rollout.

Health Call Digital Care Home was rolled out as a system to support electronic referrals e.g. into community health and primary care services but also remote monitoring of residents. Furthermore, it permits the creation and sharing of baseline observations to develop a record of what is 'normal' for each resident and also identify signs of deterioration. Resident information is pulled through to the electronic patient record. Care homes receive a pack with tablet and medical equipment to use for remote monitoring plus training and technical support.

The project has made it easier for care providers to make quality referrals and reduced the time they spend on the telephone, freeing up their capacity to deliver direct care. It has helped establish a baseline of what is normal for the person thereby making it

easier to identify early signs of deterioration. Pre-Covid-19 it was found that the system led to a reduction of 2 hospital admissions per care home per month.

To ensure the sustainability of the approach, joint engagement sessions in the early phase of implementation between the council and NHS (before the pandemic) were undertaken to raise awareness of the programme and enable providers to express an interest and ask questions. Co-production and direct feedback from care homes meant they worked as a partnership throughout to solve a shared problem and develop the right local solution. The council commissioned the local NHS Foundation Trust to manage the project implementation, which included providing ongoing training and support – from training on the device to follow up technical queries.

Key lesson was that the tech is simple - engaging the right people in the right way is the challenge. Often, it's the small things which make a difference – such as the ability to date and time stamp referrals which previously wasn't possible when telephone based. Some care staff have low skill and confidence levels with digital technology. Finding creative and virtual ways to deliver training is vital.

More information on this case study is available at the local Government Association website: <https://www.local.gov.uk/covid-19/covid-19-local-examples-care-technology-approaches>

Herefordshire and Worcestershire CCG: giving iPads to all care homes

The CCG chose to use Covid-19 response monies to provide iPads with SIM cards to all care homes in their area and to provide support to help them set up and use the devices to access NHSmail and video conferencing. The CCG procured and issued iPads to 270 care homes in their area.

Support to the care homes to set up and then use the iPads was provided by a dedicated team commissioned from the Institute of Public Care who worked in conjunction with CCG staff. In total, 119 person days (or 892.5 hours) of support for care providers was used, mostly over the phone over a four-week period in May and June 2020 and significant preparation and communication activity by the CCG, including setting up homes' NHSmail shared account in advance and requiring providers to respond to a welcome email to monitor account use. To date, 242 care homes are using the devices. The rest either still have NHSmail registration issues, a permanent manager is not in place to make some of the appropriate implementation decisions, or the low level of digital skills in the home has meant that they are unable to use the device even with virtual support.

Homes that are using the devices identified a range of benefits, including:

- Speed of communication in general with GPs, hospital and pharmacists.
- More timely and fuller information from hospital and GPs in relation to discharges.
- Certainty of GP care ward rounds through the use of virtual consultations.
- Resident communication with relatives and friends.
- Staff training, development and updating.

Sustainability is a significant issue as there is not the funding to provide on-going support to ensure full take-up of functionality, fully realise the potential of the device and address future support issues, or to provide devices to new providers. Care providers may also need to take on responsibility for the SIM card contracts and Microsoft Teams license in the future as the project has been delivered through one-off funding.

These case studies illustrate the importance of the nature and effectiveness of the range of support required by the sector to implement technology and apply basic systems, such as NHSmail and video conferencing, on an on-going basis. These are relevant considerations for all digital programmes, such as the national connectivity and devices programme, which include plans to deliver a large number of devices to care homes so that they can improve digital working. There have been some issues with GP surgeries and other allied health professionals not wanting to use Microsoft Teams as they are set up to use systems such as AccuRx. Support has worked best when the CCG manages relationships with local NHS partners.

Central purchasing of devices is not without challenges to ensure that best use is made of them. Learning from Herefordshire and Worcestershire, and that of a similar programme with Hampshire CCG, is that clear communication is vital. It is important to be clear about the rationale and process for any device dissemination. For instance:

- What is the purpose of the NHSmail accounts, how and when are those with accounts expected to use them?
- What is the purpose of the shared mailbox – how are those assigned to it supposed to check it and how often/why?
- What happens when a member of staff leaves/we need to change the user, how do we disable the account?

There is a wide range of technical competence within care homes and there are limitations to the NHSmail and Teams set-up currently offered. The initial set up of the iPad is a time-consuming process for those with low digital skills and some care providers will not be able to manage it. We recommend that this step is undertaken prior to dissemination of devices and / or that these common areas of difficulty are anticipated:

- The process of inserting the SIM card is difficult for some users, a pictorial step by step guide would be helpful.
- When setting up an Apple ID for the first time the user is asked to enter an existing Apple ID and password. If they do not already have one they must tap the 'Forgot password' icon which then offers the option to Create a Free Apple ID.
- Creating an Apple ID without any "defined payment" method is difficult. It is possible but requires amending the Apple ID profile via: settings, payments and shipping, enter an address and choose the payment option called "None". If this process is not completed the iPad will not download any Apps including free Apps.
- If a password is incorrectly entered too many times on an iPad the device will lock and you will be told that the device is disabled. In order to use the device you need to erase all data and settings on the iPad including the password. If the device has not been backed up then no apps and data can be restored:
<https://support.apple.com/en-us/HT211078>

- Setting up NHSmail for the first time on an iPad can be confusing as the process is different on a tablet to a desktop and the current instructions (screenshots) in the NHSmail guidance are for desktop versions.
- It is not possible for people to log into Microsoft Teams with the shared mailbox address (they must use their individual NHSmail account to do so). This means that users are required to remember to log in and out of the app between each use. This reduces functionality and is inconvenient.
- It is not possible for care homes to set up meetings on Microsoft Teams through the Teams app as this can currently only be done through Outlook. People find this confusing and limits the usability of the app.

4 NHSmail and other system onboarding

To support secure communication between health and social care services during the pandemic, fast-track roll out of NHSmail to the care sector was introduced, and the requirement to be Entry Level compliant with the Data Security and Protection Toolkit has been waived until 30 September 2020. This also enabled free Microsoft Teams licenses to be supplied to care providers to enable both external and internal video conferencing. In parallel to this, rapid onboarding to other digital systems, such as the Capacity Tracker, was also being supported.

4.1 NHSmail registration and use

A new process was quickly rolled out at the start of the pandemic to onboard adult social care providers to NHSmail. This fast track roll-out of NHSmail to the care sector, with a streamlined process and without the need to complete the toolkit at this time, led to a large increase in registration. At the end of March and in early April over 400 submissions were being received a day.

NHS England regional teams, CCGs, GP practices and local authorities have been driving the sign-up to NHSmail largely using the fast-track process. The fast-track process involves the completion of a Word form (downloaded from Digital Social Care). There appear to have been four different routes for applications, with regions having various mixes of these:

Route 1 – submission straight to care.registration@nhs.net (no checking)

Route 2 – via local system-level sense check then submission

Route 3 – via local sense check then region check then submission

Route 4 – straight to region to check then submission

Some regions introduced and evolved the application of these routes due to the high numbers of errors on forms up to that point, and therefore rejections by NHSmail, and also to allow monitoring of uptake. Each provider will usually apply for one shared mailbox, and two user accounts, with one of these two user accounts being the local NHSmail 'owner' who can request changes in NHSmail accounts. Social care providers have to provide a unique mobile phone number (not landline) for each person and an existing email address for them to receive a text with their password and an email with login instructions. An automated response is usually received within minutes confirming whether the application is being processed or not. If there are problems and the return

email advises that the application is not being processed, then a different address needs to be contacted to deal with this.

Prior to the prioritisation of NHSmail roll out and the relaxation of toolkit compliance requirements, 2938⁴ care provider locations had NHSmail accounts. As of 24 June, 28,115 individual users have been onboarded to NHSmail. There are now 10,320 care homes (65% of available homes) and 3,319 homecare agencies (31% of available agencies) registered with NHSmail⁵.

The increase in NHSmail registration has happened across all NHS England regions. From interviews with stakeholders, the sign-up with care home providers has been the main drive and has been related to hospital discharges and all the care elements of the Enhanced Health in Care Homes framework, but in particular the digital engagement with GP practices / Primary Care Networks.

There is not a transparent picture of the collective resource being applied within each region to onboard adult social care providers as the resource is multi-layered and across organisations and evolved as the volume of onboarding grew. Consequently, it is difficult to establish if there is a direct relationship between the number of providers signed up and the resource dedicated to supporting this. Interviews with stakeholders highlighted additional factors, such as where sign-up has been linked to a specific project, or where a local policy has been applied such as NHSmail being required to receive resident test results, or linked to device rollout as with Herefordshire and Worcestershire CCG, or local NHS buy-in, promotion and support from primary care in particular, or the make-up of the local care home market with single home owner businesses quoted as an example of cohorts that are harder to onboard. It is therefore likely to be a complex set of factors that give the current picture.

The figures also show that the reach into homecare organisations is significantly less than into care homes. In part this is likely to be a reflection of the less close links of most homecare providers with the NHS in general and local authorities being able to communicate securely with homecare providers through their own secure email systems. It also reflects the decision to put on hold homecare provider NHSmail applications for a period in April. This was put on hold as senior leadership in NHS England, NHS Digital and NHSX queried whether NHSmail should be extended to homecare agencies, despite the fact that the offer had been in place for all social care providers since at least February 2019⁶. The hold on homecare registration meant that some providers did not have their applications processed and were not able to be told the reason for this for a few weeks.

The number of providers that register with NHSmail is not necessarily an indication of the level of its active use, and the study could not access information on actual usage by location, though some stakeholders identified that this level of detail had been available from NHS Digital pre-Covid. For a provider to confirm the agreement to the Acceptable Use Policy and set their security questions they need to have activated their email account and, therefore, confirming the policy can be used as a proxy measure of

⁴ As at 23 March 2020

⁵ <https://digital.nhs.uk/news-and-events/news/over-six-thousand-care-providers-sign-up-to-nhsmail-in-just-six-weeks>

⁶ <https://digital.nhs.uk/news-and-events/news/data-security-and-protection-toolkit-helps-care-providers-get-online-with-nhsmail>

the maximum proportion of care providers using NHSmail. The percentage of sites onboarded to NHSmail that have had at least one user confirming the policy ranges from 61.24% in London to 72.45% in the Midlands. In summary, we estimate that a maximum of two thirds of social care providers are using their NHSmail accounts.

In interviews, care providers commented that they mainly used their NHSmail accounts with GP practices and for tasks such as: consultation with a patient, changes in medication and repeat prescriptions, obtaining a patient summary when there has been a hospital discharge. There is some use of NHSmail, but very variable use, with pharmacies and with hospitals in relation to discharges and outpatient appointments. Once the shared mailbox was properly set up and staff understood how to access it, then it became the main account for communicating with the NHS.

Though usage of NHSmail is variable, for those that are using it, interviews confirm the following benefits to care providers and the people who use their services:

- Speedier and more certain communication with GPs, hospitals and pharmacists, with some also mentioning communication with multi-disciplinary teams and other health practitioners, which takes time and frustration out of the current ways of engaging with these parties.
- Access to the NHS Directory to locate and identify people.
- More timely and fuller information from hospital and GPs in relation to discharges. This means speedier and more certain communication related to repeat prescriptions and changes in medication with the GP and pharmacy, helping to ensure the client has access to the right medication of the right dosage at the right time and saving staff time in chasing up medication related issues.
- Ability to send sensitive and confidential information securely to other parties, such as the local authority.

These benefits are covered in more detail below in section 5. We noted that some care homes have already been set up with secure email through a '.gov.uk' email address by some local authorities and so don't need NHSmail for this purpose and are therefore reluctant to register for another system.

There have been at least a dozen case studies into the benefits of NHSmail over the last few years. These case studies can be located at:

- <https://www.digitalsocialcare.co.uk/sharing-care-records-via-email/how-to-get-secure-email/nhsmail/>
- <https://future.nhs.uk/carehomes/view?objectID=14684944>
- <https://digital.nhs.uk/services/nhsmail/nhsmail-case-studies>

The majority of the stakeholder interviews also flagged that the relaxation of Data Security and Protection Toolkit (DSPT) compliance requirements was likely to be challenging to catch up on. In the context of the efforts and resources that had been applied to achieve care provider DSPT registrations to their pre-Covid levels, this indicates a very significant task to resource post-Covid.

As shown in the table below, there are currently at least⁷ 6,026 care homes and 1,623 homecare organisations that are registered on the DSPT.

Service type	Entry Level	Standards Met	Standards Exceeded	Other ⁸
Care home	1981	1874	45	2124
Homecare	422	608	3	579

The comparison with the proportion of providers with NHSmail registrations shows that there have been around 3 times the number of locations onboarded to NHSmail as there were providers that have published the DSPT, confirming the magnitude of the task.

4.1.1 Issues with NHSmail registration and use

The interviews with the helpline operatives, other stakeholders and the care providers themselves, gave a consistent picture of the key issues with NHSmail registration and usage, and therefore reasons for helpline calls and support requests. The headline observation is that the complexity of NHSmail registration, activation, use and change generates the majority of the enquiries. NHSmail involves “many moving parts”, with different contact points with NHS Digital depending upon what stage the provider is at, which particularly affects care providers with lower digital literacy and maturity. The detailed issues have been grouped around stages of the process.

Application

- The registration process, although it has been improved, is still tricky and discourages some care provers from continuing.
- Even with guidance on how to complete the simple fast-track Word form for registration, regional teams found many errors in how care providers completed the form that had to be corrected or resulted in rejection, particularly as the form is machine read. One region found that 50% of the fast-track forms they reviewed required amendments to avoid rejection by NHS Digital, and that 20% of their total had to be returned to providers to ensure the correct information was provided. Though usually a combination of things needing to be corrected in the NHSmail fast-track form, the most common errors the region found were:
 - Formatting errors e.g. extra spaces in text, extra rows added in the form, spelling mistakes, choosing a “town” with more than 11 characters (70%)
 - No mobile phone numbers given or an error such as an extra digit (60%)
 - Wrong or no [ODS](#) code (25%)
 - Only one person listed (12%) or asking for more than two people per site (7%)
 - Changing the “Social Care” text when asked not to (6%)
 - Writing (by hand) rather than typing the form (1%)

⁷ Drawing exact figures from the toolkit is problematic. One reason for this is that not all providers in the sector will register as homecare or care home providers. They might, for instance, register as a charity instead. The other reason is that some large, multi-site providers might publish one toolkit that covers their whole organisation whilst others will publish a toolkit for each service location. This means that the figure quoted is the minimum number of adult social care provider locations registered.

⁸ ‘Other’ covers organisations that have registered and not published or who published in the 2018/19 financial year but have not updated their Toolkit submissions for the 19/20 financial year.

- Where registrations were 'stuck' in the system it was not always clear as to why.
- In the context of using the shared mailbox for NHS communication, the fast-track limit of two individual accounts is insufficient to cover the number of people that may cover a role during the cycle of shifts for a location.
- Wanting to set up NHSmail with the same two staff members over multiple sites and linking them to more than one shared mailbox is usually not possible without some workaround.

Activation

- Many people have lost or accidentally deleted their NHS Digital email which contains their NHSmail address, this also applies to the text message which contains a temporary password. These can be deleted accidentally as spam, hidden in the junk folder or sent to a generic work mobile with multiple recipients who use the phone.
- Password resets (passwords not received or do not work with NHSmail address provided).

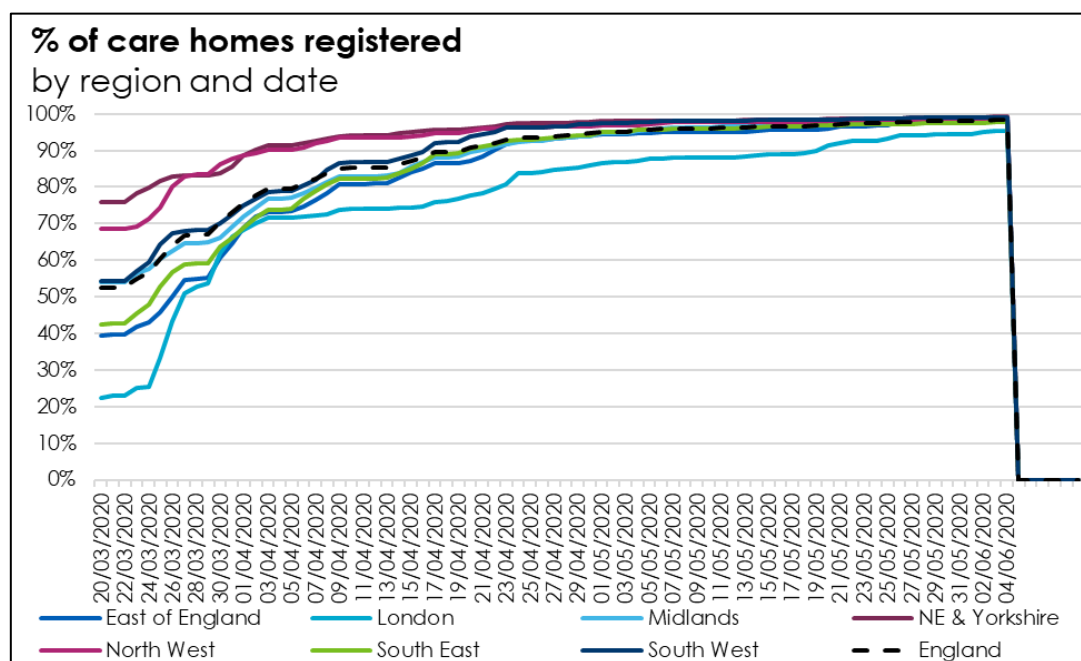
Configuring and use

- The defined structure for shared NHSmail accounts was too complex and long for most users and the process for setting up access to the shared email account from other email accounts not readily understood by a number of care providers.
- There is a lot of confusion on the purpose of the shared mailbox and what the recommended best practice is in terms of who uses the account and for what versus their individual account.
- Many providers think that once they have accessed their individual NHSmail account then the process is complete. Linked to this, many providers don't realise that once they have set up their own individual email account that they can then access the shared mailbox – many wait for their "shared mailbox password" to be sent to them.
- There is some confusion as to when the individual mailbox is used versus the shared mailbox. It is not clear whether promoting the use of the shared mailbox for most external, and particularly NHS, communication is the recommended practice.
- It is important to ensure that before the user logs into NHSmail for the first time that the 'this is a private computer' box (displayed just under the log in tab) is selected/ticked. If not, then the user will not be able to download and open any documents or attachments. This procedure only has to be done once.
- It is also important that when the user logs into NHSmail for the first time that they click on Login not Access email on the NHSmail portal so that they set up their security questions and accept the T&Cs.
- The ability to save the generic mailbox as a 'bookmark' on the iPad is a useful workaround for easy access but a brief guide to how to do this should be developed as the current instructions (screenshots) are for desktop versions and the process is different on a tablet.
- There is not an automatic leavers / movers process when people change roles or move between different care provider organisations – they can continue to access all their emails related to their previous post. Providers need to be made fully aware of this risk and put a leavers / movers procedure and process in place.
- Providers don't always realise that there is a hygiene process of clearing unused accounts after 90 days and so might need to get certain accounts re-established.

4.2 The Capacity Tracker

The Capacity Tracker was developed in partnership with NHS England North in 2017 and was rolled out as part of a national programme, funded in 2018/2019, covering care homes, community rehabilitation and hospice providers. Its remit was expanded as part of the national response to Covid-19 and currently covers: occupancy / vacancies along with specific business continuity information around Covid-19 outbreaks, admission status, PPE levels and workforce information that feeds to NHS and CQC, as well as providing a suite of reports for commissioners and other organisations.

All CQC registered care providers were requested to register and use the Capacity Tracker if they are a care home provider and CQC's 'Update CQC on the impact of Covid' online form if they are a homecare provider. This was detailed in a joint communication from CQC, Care Provider Alliance, Department of Health and Social Care and NHS England / Improvement to all CQC registered providers in April 2020. The measures supported the government's Covid-19 Hospital Discharge Service Requirements detailed in a letter to NHS and Foundation Trusts, CCGs and local authority Directors of Adult Social Care dated 19 March 2020.



The above chart shows the large increase in the Capacity Tracker registration, with 99% of care homes in England registered in June from just over 50% pre-pandemic. There is slight regional variation but even in the lowest region / STP (North London Partners in Health and Care) there is still 93% coverage. Approximately 90% of care homes update the Capacity Tracker within 7 days, which is a proxy measure for active use.

The central communications for sign-up to the Capacity Tracker have been re-enforced locally by access to funding. To receive payments from the Adult Social Care Infection Control Fund, homes are required to have completed the Capacity Tracker at least once and committed to completing the tracker on a consistent basis to be eligible to receive funding.

The Capacity Tracker is reported to be quick and simple to register and can be updated from any internet enabled mobile device. Registration takes approximately five minutes per provider and the quick update function enables the information to be updated in less than a minute. There have been very few calls to the Digital Social Care helpline in relation to issues with the Capacity Tracker and the interviews with care providers did not flag any issues with registering, set-up, support or use of the Capacity Tracker.

4.2.1 The Capacity Tracker help and support

A support centre was set up on 23 March to help register and on-board care providers. Initially the centre was open 8am to 8pm Monday to Sunday then in May, when the majority of providers had been registered, this was scaled back slightly, and the emphasis changed to user support to update the information and respond to questions to help embed the system. There are also seven regional leads, working alongside regional stakeholders, to help support and embed the Capacity Tracker during the period of Covid-19 and offer wider support to hospital discharge teams.

The Capacity Tracker worked with providers directly, including the large care home chains who centralised their updating during the lockdown period, and enabled an upload facility to enable them to update 'in bulk'. There are also nominated system champions - a guide and training is available - for those within CCGs or local authorities who can then better support their local providers and users of the system.

In interviews, the Capacity Tracker stakeholders stressed the importance of engaging with care providers: "we run user groups, master classes and training webinars as well as Q&A sessions for all providers and users of the system." Training and guidance is kept simple and up to date. There are user guides and short videos to help people register and update the system and an IT helpdesk for users with technical support requirements. "We have video training guidance as well as help guides available for all registered users and have integrated direct communication that enables us to communicate with all users (circa 30K) with important updates, bulletins and signposting to information from national groups."

The Capacity Tracker stakeholders also noted that, to optimise the benefit of any digital application, it is important that the implementation is included in a wider transformation programme – "digital applications alone do not change the world, winning the hearts and minds and demonstrating the 'what's in it for me?' is absolutely critical to developing a sustainable application."

Though it is unclear as to the level of resource that has been applied to the Capacity Tracker onboarding versus NHSmail, the noticeably higher level of onboarding for the Capacity Tracker may be related to the combination of its easier sign-up and use, central and joint communication on the need to sign-up, and the financial incentive through the Adult Social Care Infection Control Fund. It is also likely to have been impacted by the communication being sent out by the CQC, who have the most complete contact list for care providers in England.

4.2.2 The Capacity Tracker benefits

The functionality of the Capacity Tracker has been designed to optimise flexibility and make the user interface simple to use and quick to update. It can give real time reports – as users update – which gives the ability to quickly respond to requests. This can

provide visibility and enable local, regional and national support to be targeted where it is most needed.

The core functionality of the system is to make visible vacancies across England. This helps those responsible for discharging individuals by, for instance, removing the requirement for speculative, time-consuming calls so that the discharge process can proceed more seamlessly for the individual and support wider system benefits. From a provider perspective, being able to fill vacancies and ensure that the care home remains financially viable is critical to their sustainability. The Capacity Tracker has published case studies that set out the benefits of the system, including about the [City of York Council](#) and [Fulford Nursing Home](#) in York.

It is important to note that the occupancy information provided by the Capacity Tracker should not be used as an accurate indicator of bed vacancies across England. During Covid-19, providers were advised to post their available beds rather than a true statement of all empty beds in their service. During the pandemic, care providers had to quarantine certain areas of their homes or may have been able to care for fewer residents due to staff shortages. This means that the true count of empty beds is likely to be higher than that reported to the Capacity Tracker. Further research would be required to understand the discrepancy between reported and actual bed occupancy and to understand any financial implications for the sector of the Covid-19 pandemic.⁹

4.3 Update CQC on the impact of Covid

Homecare providers were asked to complete CQC's 'Update CQC on the impact of Covid' online form from Monday 13 April and it was extended to providers of extra care housing and supported living at a later date. This is an online webform with questions covering four themes: numbers and proportions of clients with confirmed or suspected Covid; number and proportion of staff who are unable to work; the types of PPE pressures they face, whether they can offer additional care hours. CQC report that there is an average response rate of around 67% of providers.

CQC analyse the information and disseminate it to local authorities, who are the main organisations who can support care providers at the local level. The PPE information is also shared with the PPE Portal. Because of the short duration of this research, information was not available about the support providers have received as a result of updating CQC. However, CQC reported that they have received feedback that the online form is quick and easy to complete.

5 Action research

Semi structured interviews were conducted with thirteen care provider organisations. This represents 7% of the care provider organisations that contacted the helpline up to 12 June 2020 and 18% of those that originally stated they were prepared to participate in the research interviews. All providers that originally stated that they were prepared to be interviewed were contacted by phone and email on more than one occasion, with many either not responding or no longer able to participate: operational priorities during

⁹ There is a discussion paper on the financial vulnerability of the sector both pre- and post-Covid-19 available from the Institute of Public Care https://ipc.brookes.ac.uk/publications/ASC_Pandemic.html

the pandemic appearing to be the main reason for the low participation rate. The interviewees by type of care provider were as follows:

Provider type	Number	Percentage
Care home	7	53%
Homecare	4	31%
Extra care	1	8%
Hospice at home	1	8%

The action research considered the usage, barriers and benefits of key technology interventions during the response to Covid-19, along with providers' views on the support they have received to date and what would be beneficial in the future. The number of care providers interviewed as part of the action research is very small and caution must be taken not to extrapolate these results for the whole sector.

5.1 Secure email

Most of the providers we interviewed used secure email: eight said they used NHSmail occasionally, three that they used NHSmail regularly, whilst two providers in our sample did not use secure email. Seven interviewees had started using NHSmail during the Covid-19 onboarding whilst two had been using it for two to three years.

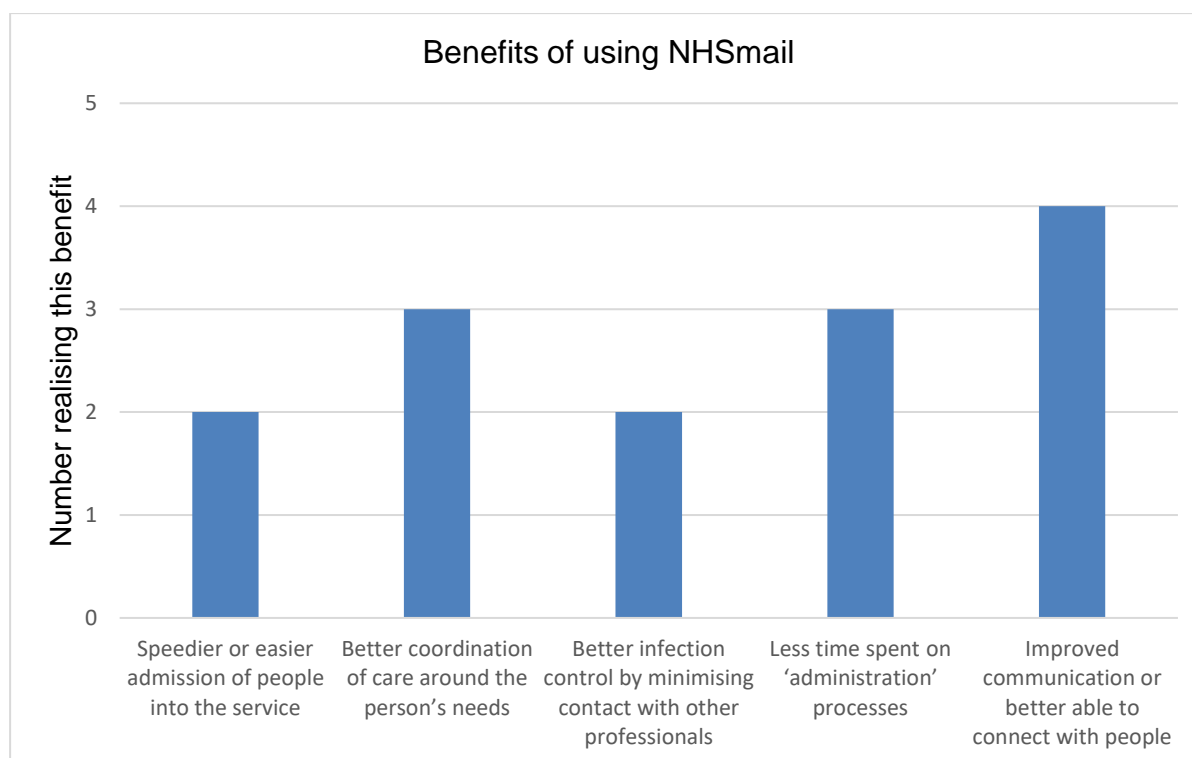
Even though most NHSmail adoption has been during the Covid-19 onboarding period, only 5 out of the 11 providers who used NHSmail regarded this as a 'central edict' they had to respond to, with four relating it to increased awareness of the requirements for secure email and two providers adopted NHSmail because support was available. Comments made by providers in relation to NHSmail onboarding included:

"It was useful to be able to register for NHSmail without having to complete the DSPT at this stage, but we're concerned as to how much effort this will be when we come to do it."

"We've had the CCG telling us to sign-up for NHSmail, but the local NHS system and local authority are not using it to communicate with us. Still mainly phone calls and community nurses still visiting the home on a daily basis."

5.1.1 Benefits of secure email

Providers were mixed in their views as to the benefits of using secure email, with 45% (5) feeling it was too soon to tell, 36% (4) experiencing benefits and 18% (2) not experiencing any positive impacts or benefits as a result of using NHSmail. Of the four providers who stated there had been positive impacts in using NHSmail, they identified the following benefits for them:



Comments made by the providers in relation to these benefits included:

- Better and more certain communication was mainly with GPs, to some degree with hospitals and pharmacists, and occasionally with multi-disciplinary teams and other health practitioners, which takes some of the time and frustration out of the current ways of engaging with these parties.
- Access to the NHS Directory to locate and identify people has been very useful.
- More timely and fuller information from hospital and GPs has helped in some discharge cases to ensure better coordination of care, and in particular helped to ensure the client has access to the right medication of the right dosage at the right time and saved staff time in chasing up medication related issues.
- The ability to send sensitive and confidential information securely to other parties, such as the local authority.

5.1.2 Barriers to secure email

Interviewees stated a variety of reasons for the mixed take-up and use of NHSmail. Examples included:

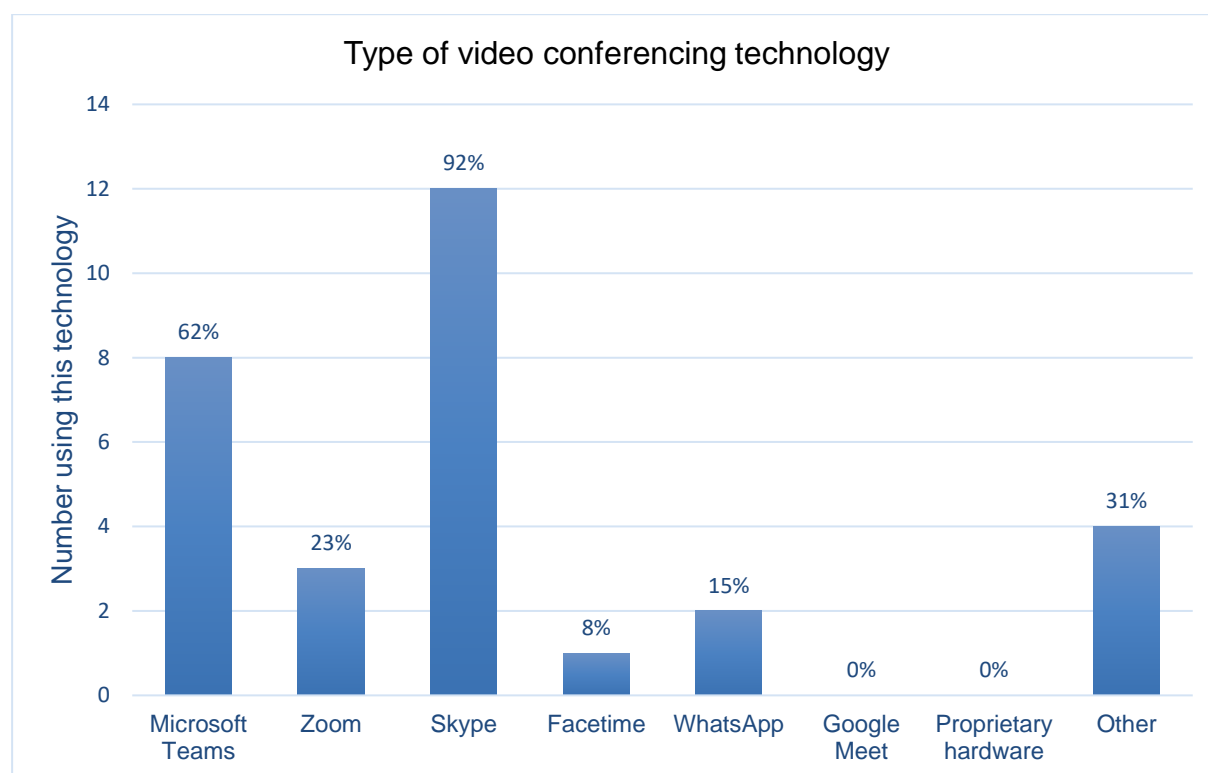
- A range of difficulties in registering, activating, setting up and using NHSmail.
- The level of digital literacy that seemed to be required to activate, set up and use NHSmail, and appropriately linking to and using the shared mailbox, was often challenging for the provider staff involved in these tasks.
- Mixed use by the local health and social care system which means it is not always seen as the route to securely communicate with local partners.

“We’re not using NHSmail regularly due to a combination of both the GPs not really using it and nursing staff in our home confused on how to access it when they also need to be accessing their nursing home email address.”

5.2 Video conferencing

There was a strong adoption of video conferencing: four providers said they used video conferencing occasionally, seven that they used video conferencing regularly, and two that they used video conferencing very frequently. The use of video conferencing being across the spectrum of GP virtual consultations, client contact with family, staff communication and meetings and other practitioner engagement such as social workers.

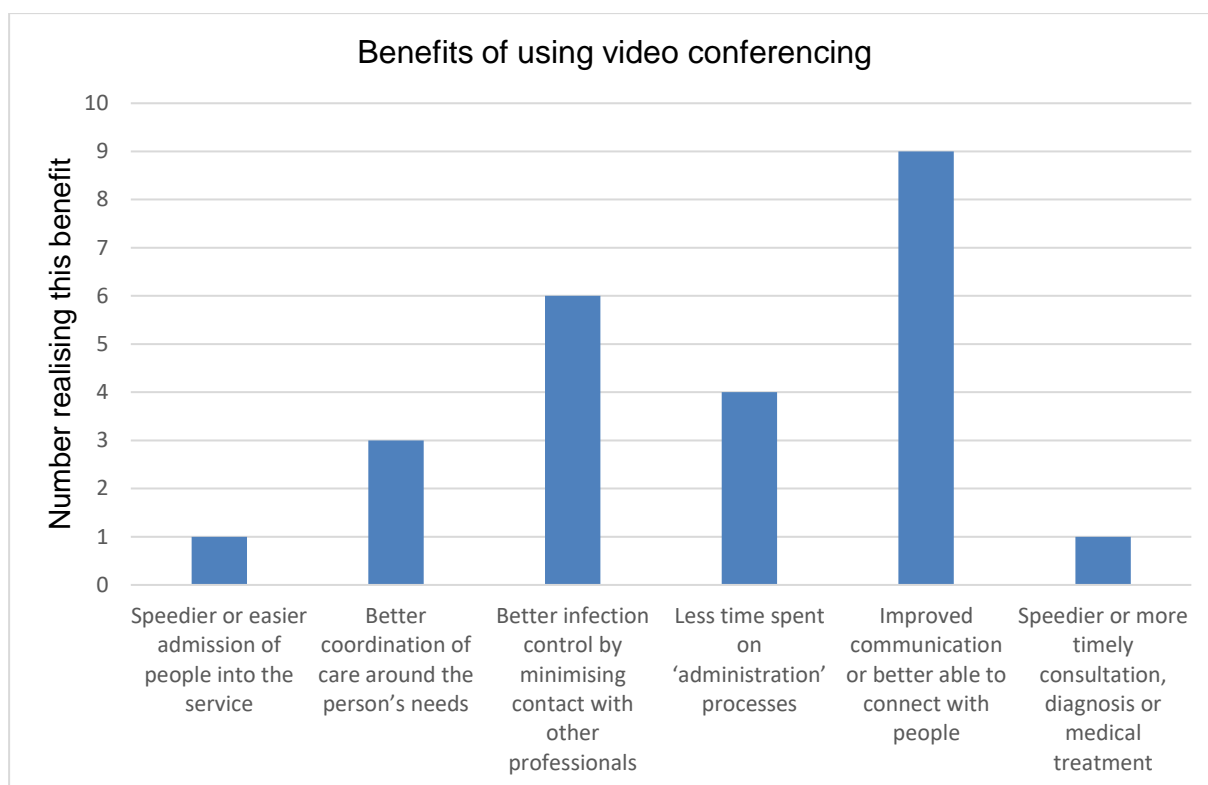
The main video conferencing application being used by the interviewed providers is Skype due to a combination of homecare providers using it with staff and the majority of care homes using it for resident communication with their family. All interviewees were using more than one video conferencing application. Providers' use of video conferencing technology is shown in the graph below. The 'other' category mainly relates to the AccuRx GP system.



Most providers have started to use video conferencing out of 'necessity' rather than because they were following official guidance. Homecare providers are using it to communicate with all office staff, who are currently home working, and caregiver staff in the community.

5.2.1 Benefits of video conferencing

Nearly all (12 out of 13) providers recognise positive impacts or benefits as a result of using video conferencing and one person thought it was too early to say. Of the 12 providers who stated there had been positive impacts in using video conferencing, they identified the following benefits for them:



Comments made by the providers in relation to these benefits included:

- Improved communication has been with a range of stakeholders, from clients and their family, to GPs for virtual consultations, to internal contact between dispersed staff and/or locations, and occasionally to other practitioners such as social workers.
- The virtual consultations with GPs is likely to continue post-Covid, and as well as helping with infection control, is likely to give more certainty to regular care ward rounds.

5.2.2 Barriers to video conferencing

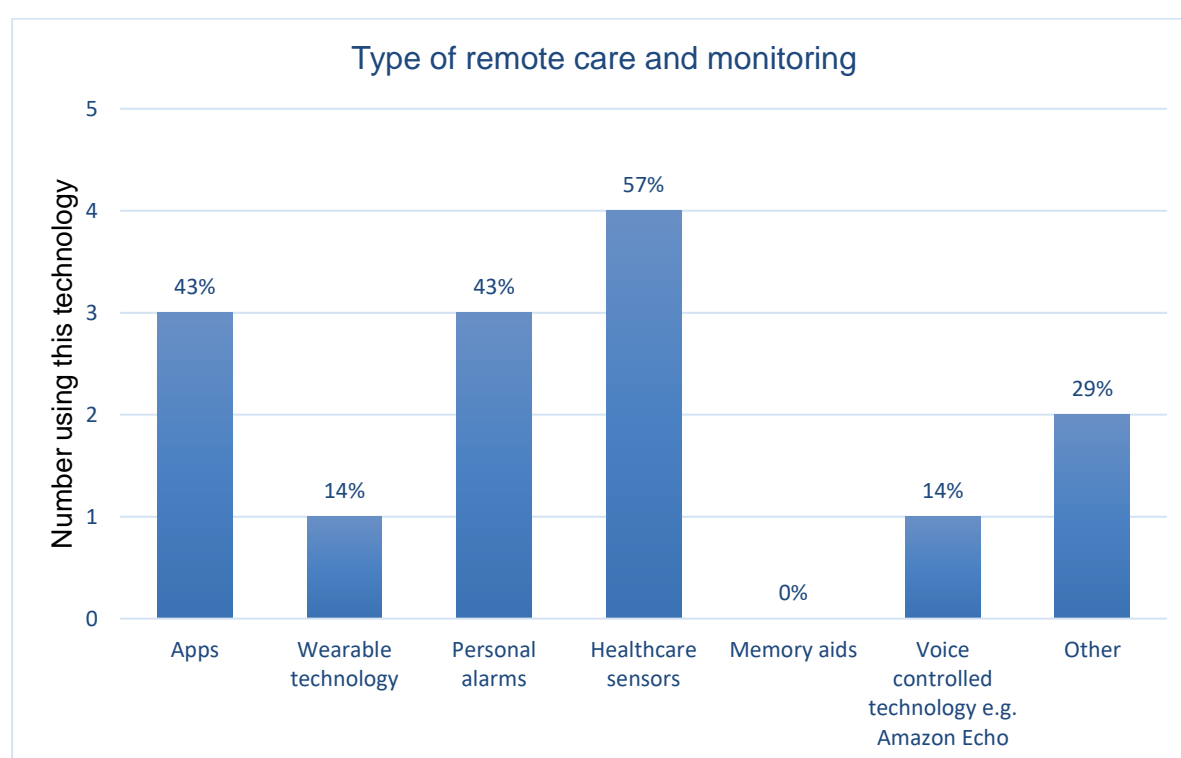
The interviewees have embraced the use of video conferencing for a variety of purposes. However, some of the challenges in implementing and maximising the use of video conferencing have included:

- The existing IT equipment not having either or both cameras and speakers and the provider not being sure what to purchase.
- A confusing array of potential solutions that can also vary by stakeholder. For example, investing in Echo Shows which have been beneficial with residents but then having to use a tablet / laptop / smartphone for GP virtual consultations and NHSmail.
- Different stakeholders using different applications, not just Microsoft Teams, and therefore having to be familiar with and set up for all of them.
- The connectivity within a care home, with providers often not certain as to the best and most cost-effective way to improve wifi connectivity so tablets and other equipment can be effectively used throughout the building. One care home provider was quoted £2,000 by their IT support company to install network cabling within the home.

- The culture change for care staff and them taking on revised practises and ways of working. As a generalisation, providers found their younger staff more digitally aware and more ready to understand and take on the changes.
- Many providers do not have IT support infrastructure and need readily accessible support, particularly when equipment such as iPads are issued free to the provider.

5.3 Remote care and monitoring and other digital solutions

Providers' use of remote care and monitoring was split roughly half and half as six providers in our sample did not use remote care and monitoring technology and seven did: two said they used such technology occasionally, three that they such technology regularly, and two very frequently. The homecare providers we interviewed did not use such technology. The chart below shows what types of remote care and monitoring are being used by the seven providers.

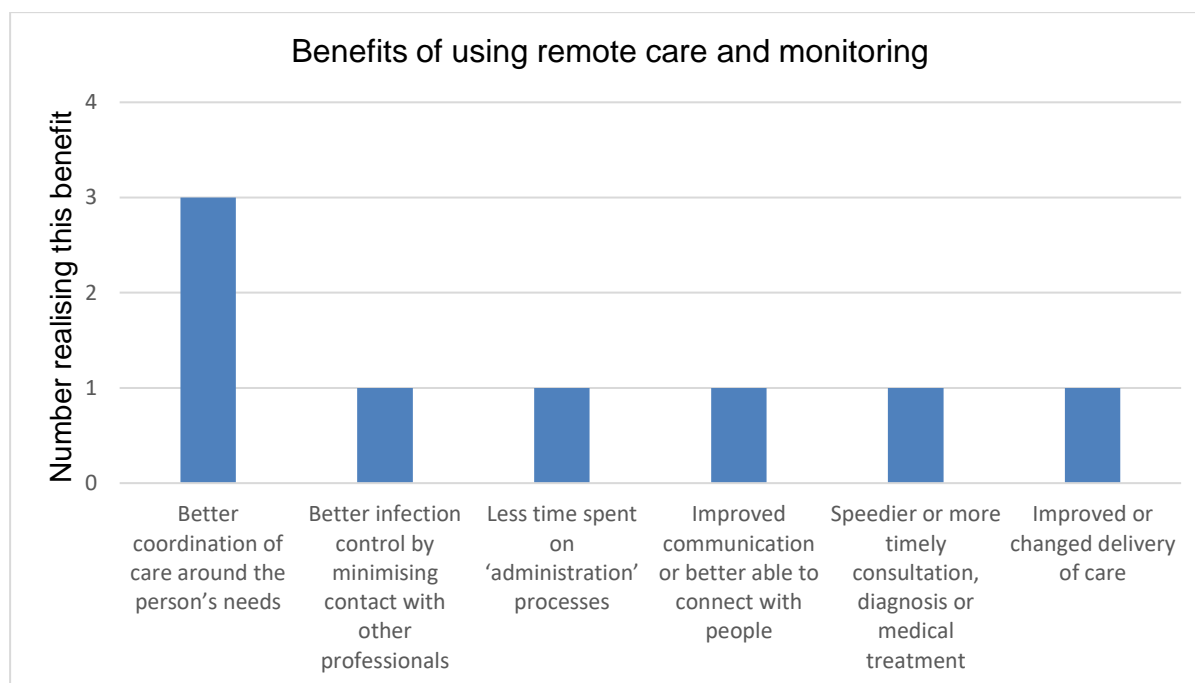


An example of a more innovative App that was being used by one care home is 'PainChek' which uses artificial intelligence software in conjunction with a tablet camera to inform the pain management plan for clients and supports appropriate/reduced medicating. The adoption of remote care and monitoring largely commenced pre-Covid, with most providers having used such solutions for two years or more.

We asked providers about their use of other digital solutions. The homecare providers use rostering and visit logging solutions and in two cases care recording and eMAR solutions. Two of the care homes use digital solutions for care assessment and recording and eMARs and medication management.

5.3.1 Benefits of remote care and monitoring

Nearly all (6 out of 7) providers recognise positive impacts or benefits as a result of adopting monitoring and care technology and one person thought it was too early to say. These seven providers identified the following benefits for them:



Benefits largely related to resident movements in the night and controlling building exits rather than health condition monitoring per se.

In terms of use of other digital solutions, providers commented that:

- The use of either or both of digital rostering systems and care planning, recording and eMAR systems by homecare providers enabled more timely responses and communication of changing care needs of the people they supported.
- Use of digital rostering and visit logging systems by homecare providers significantly reduced their administrative burden.
- Care planning, recording and medication management systems in care homes gave greater integrity of care operations and quality assurance, supporting the provision of evidence to CQC.

5.3.2 Barriers to remote care and monitoring

Interviewees who had no or limited take-up of digital care and monitoring solutions cited a range of reasons that included:

- Want to explore potential solutions but other operational priorities and lack of capacity to do so.
- The cost of implementing digital solution, including the staff time to do so.
- Their poor broadband connectivity and wifi throughout the location.
- Didn't feel the functionality of the digital technologies they had reviewed met their needs.

For two of the homecare providers interviewed, remote monitoring was seen as a telecare provider related solution rather than part of the homecare provider's offer and was for families or the local authority to commission separately. They were commissioned and paid to undertake set duration visits at set times.

5.4 Capacity tracking

Most interviewees are providing capacity availability data in some form: care homes using the Capacity Tracker and homecare providers using the CQC tool. One provider was also completing a separate local authority reporting and one provider was completing both the Capacity Tracker and CQC tool. Two providers were not completing either of the capacity tracking tools - an extra care provider and a homecare provider.

5.4.1 Benefits of capacity tracking

Three quarters of the providers using the Capacity Tracker had started to do so as a result of the pandemic, with official guidance being their stated reason for take-up. However, none of the providers thought that they had seen a benefit from completing the capacity tracking tools, with around a quarter saying it was too early to say and three quarters stating there was no benefit to them.

5.4.2 Barriers of capacity tracking

The care home providers interviewed did not have any issues with the Capacity Tracker registration and use and completed the returns as required as this did not take long, and so there were no barriers as such. However, as stated in the previous section, they did not perceive any benefit to them in using it and so post Covid-19 may be less inclined to continue providing the returns.

5.5 Support to the sector in adopting digital solutions

Interviewees were asked about their experience of support from both NHS organisations and local authorities in proactively adopting digital solutions. The free text responses received were as follows:

5.5.1 Support from local authorities:

The providers' experience on proactive digital adoption support varied by local authority/local care association, but overall most felt they had not received support.

“Only Walsall Council has proactively engaged and supported us to consider tech adoption and things such as NHSmail. Other local authorities and the NHS are not giving any support. Generally, the local authorities are not supportive as they are putting increasing pressure on our charge rates and so reducing the providers' opportunity to consider investment in tech adoption.”

In terms of reactive support to the Covid-19 crisis, the providers valued the Digital Social Care helpline because they had struggled with direct registration and set-up of NHSmail. Their issues had either been resolved by the helpline or they had been signposted to appropriate resources to do this, which were mainly the resources on the website. None of the providers had issues with the Capacity Tracker sign-up and use.

Interviewees responses to what would support their organisation to make better use of digital solutions included:

- Consistent approach and requirements across local authorities and between health and social care so provider only has to implement one approach or system.
- There being access to single systems across NHS, CQC and local authorities and the associated information sharing.
- Advice on what equipment and apps are most appropriate to use and guidance on minimum specifications for these to ensure on-going fitness for purpose.
- Grants to fund investment in digital solutions and/or ability to access systems at a low subscription cost level, along with associated IT advice and support, particularly for small providers where there may not be the scale of operation to justify their own investment.
- Grants and support to ensure they have the appropriate ICT infrastructure and broadband connectivity to enable the effective adoption of digital solutions.
- Information and case studies on what has been successfully applied elsewhere.
- Appropriate use of the digital solutions by the rest of the health and social care system such as NHS practitioners and local authority staff to undertake meetings and reviews using video conferencing, or hospital discharge summaries being emailed (via NHSmail) to the care provider.

5.5.2 Support from NHS organisations:

Most providers had experienced some engagement with CCGs, or local care provider associations on their behalf, in relation to Data Security and Protection Toolkit registration and therefore NHS mail and Microsoft Teams onboarding, but not in terms of broader proactive technology adoption. This was mainly care homes with homecare providers having less engagement with NHS organisations.

“Northumberland CCG has driven the registering for NHSmail as part of 'axe the fax' and our use with GPs, pharmacists and hospitals and the Capacity Tracker. But apart from the awareness raising and communications around these there has not been support around broader adoption of digital solutions and technology.”

One provider stated that their CCG are supporting the organisation to access the EMIS system, which will give them sight of District Nurse visits to their shared patients and certain patient information.

“Push for Capacity Tracker and NHSmail came through CCG, but more as things you must do rather than proactive support on technology adoption in the round.”

Further, the technology, NHSmail registration, activation and use, and IT support provided to care providers needs to be effectively aligned, as illustrated by the following local authority care home description of their experiences when provided with an iPad by the local CCG to support NHSmail and video conferencing:

Case study: provider experience of receiving an iPad

The iPad given by the CCG is activated but after many frustrating and contradictory conversations with various people from NHS IT support it simply will not perform the functions illustrated in their instructions. First off as an employee of the local authority, the emails containing our NHSmail account details were unobtainable due to local authority phishing filters imposed by our organisation. After finally speaking to someone who could recover this information, myself and my manager were able to login via the NHS portal on a Windows browser and access our email accounts to finalise the setup process.

Returning to the iPad I thought it would be a simple case of associating the shared mailbox with the Microsoft Teams app on the iPad. It was then after more time spent contacting support that I discovered that the shared mailbox would not be accessible through the iPad unless logging into the portal through a browser. This would mean binding a single email account to the iPad for a team of 14 senior staff to share if we were to use the Microsoft Teams app. I found this quite astonishing given the breach in GDPR, data protection and privacy this would create. As an alternative work around I was instructed to create individual email addresses for the staff and to have each individual login to the portal via safari browser to access outlook and the shared mailbox. Whilst this should theoretically work it would require some extensive training given among staff who are not all computer literate.

While not ideal to spend limited time and resources in an already difficult situation I set about requesting addition email accounts as instructed. I used a template given to me to submit the details of the members of staff to careadmin@nhs.net only to be met with an automated response saying “resolved and closed” with no further action. It was at this point that I gave up as I really don’t have the time to spend on this matter. We have a mobile phone on site which we obtained from the local authority IT department and have used this to conduct video calls via AccuRx with GPs simply and easily. It’s disappointing to see that a project devised with such good intentions and the ability to make a very useful contribution be let down so badly by poor implementation and substandard support.

6 Summary of findings

Combining the action research, stakeholder interviews, learning from the helpline and analysis of system data, we have summarised our findings against each research aim as follows.

6.1 Providing practical support to the sector

Digital Social Care helpline is a valued, practical support to the sector that has complemented the resources and support provided by NHS England and AHSN regions, CCGs, local authorities and existing product specific helplines such as for NHSmail and the Capacity Tracker. Providers’ experience of data protection and technology adoption support pre-Covid was very varied. This period has highlighted that some form of on-going support will be needed to embed and sustain the current NHSmail and video conferencing changes, let alone any DSPT registration catch-up or

further digital progression. Only a maximum of two thirds of care providers onboarded use their NHSmail accounts, which illustrates the challenge to embed such changes.

Digital Social Care support resources have been valued as useful tools for providers during adoption of NHSmail and video conferencing. Crucially, materials are tailored to the needs of the sector. The videos and written guidance were thought to be beneficial for staff, but instructions need to be very specific and / or accurate to providers' situations. For example, the video for adding an NHSmail account to Outlook illustrates the actions needed on a desktop computer, but many providers have tablets / iPads that need different instructions, and as a consequence provider staff have not always been able to successfully follow them.

Solution onboarding and digital adoption support during the pandemic has been significant, resulting in dramatic increases in onboarding to the Capacity Tracker and NHSmail of care homes, and to a lesser degree homecare providers. The support has been a combination of existing sources such as the NHSmail helpline, specifically commissioned time-limited support such as the Digital Social Care helpline, and a range of regional and more local resource (STPs, CCGs and local authorities) that built upon some time-limited secondment from other roles. This combination has provided a blueprint for locally tailored and central support but has not been undertaken in an overall coherent and consistent manner, resulting in very variable experience for providers. The absence of a nationally agreed work programme and SRO for the central funding may have contributed to this situation. There is still much work to be done and the time-limited nature of much of the support is a concern to the sector.

Capturing the support knowledge is important for sustainability. A rich knowledge has been developed by a disparate and disperse set of people involved in providing support to care providers during the onboarding, which needs to be captured and brought into a collective resource.

The process for application, registration and activation of NHSmail is still challenging and slow for many care providers, even with simplified requirements. For the use of NHSmail to become embedded, on-going support, monitoring and follow-up is likely to be needed, as well as creating a more resilient registration and activation process.

A cross-section of organisations and roles contacted the helpline, ranging from care provider owners, managers, IT staff and administrators to CCG and local authority commissioners, IT and pharmacy staff to GP practices and NHS providers. This shows there is a very mixed 'digital audience' who interface within the local health and social care system, and that Digital Social Care has been able to bridge this variety of parties to support local digital engagement and connectivity.

6.2 Shared learning on how technology is being used

NHSmail – even though over 70% of care home providers in some regions may have registered with NHSmail, only a maximum of two thirds of care providers onboarded are using their NHSmail accounts. From interviews with care home providers, the main driver of use appears to be related to whether the GP practices proactively use NHSmail with the care provider. There was some use of NHSmail with pharmacies, District Nurses, OTs and other practitioners. Homecare providers tend to have less

direct contact with GP practices and therefore were less likely to be regularly using NHSmail.

Video conferencing – is widely used by nearly all providers, with the three main drivers being GPs requiring this for virtual consultations, contact between clients and family and internal communication between dispersed staff and/or locations. However, there is limited use with other health practitioners and social workers, and even more limited use with NHS secondary care providers. Even though many providers are using Microsoft Teams, there are still a range of issues. For example, GPs using AccuRx and relatives more likely to use Skype or social media based solutions, such as Facetime or WhatsApp. The other key barrier is connectivity, either or both of the bandwidth and robustness of the connection and the wifi connectivity throughout the building, and ensuring they procured the right equipment.

Use of equipment - all interviewees found it challenging to navigate the equipment and technology options in a way that coherently responded to the needs of the people they support, themselves and other parties in the system. This was felt to be the result of a combination of:

- Some equipment not being suitable for the range of tasks. For example, the Echo Show was liked by some care homes for resident wellbeing in terms of video conferencing with families and the range of Alexa functionality, but could not be used for GP virtual consultations.
- Different parts of the system pushing in different directions. For example, being provided with the Microsoft Teams license, but then finding the GP practice used AccuRx and only sent the virtual consultation link via text when the care home only had a laptop or tablet without a SIM card.
- Not having a clear steer on the minimum specifications for equipment, broadband connections, systems and the like. For example, many care homes had computers and laptops but not necessarily with cameras, microphones and speakers to enable video conferencing.
- Where the provider had been provided with equipment by commissioners - usually tablets / iPads - it can be problematic and disruptive for them due to a combination of factors, including technical support, digital literacy of staff and compatibility with existing IT arrangements.

Remote monitoring, care management systems and other digital solutions – there is a very mixed and inconsistent picture to the use of other digital solutions, with some providers having implemented a range of digital solutions and others who were very 'paper based' with low digital literacy. An inference from our interviews and calls to the helpline is that the digital literacy and leadership of the owners/senior management of small care provider organisations directly impacts on the digital maturity of the provider as a whole.

The Capacity Tracker – is now used by nearly all care homes and the CQC system was mentioned by homecare providers. Particularly in the case of care homes, the point was made that similar information is being provided to the NHS through the Capacity Tracker, to local authorities through different arrangements and to CQC, without the information appearing to be shared across the system.

Attend Anywhere – has been provided to secondary care providers under a twelve-month license as part of the Covid-19 response to enable video conferencing and virtual consultations. However, none of the care provider locations interviewed had used virtual consultations with secondary care. This was surprising in the context of the level of engagement care providers' clients usually have with these services.

The research illustrated differences in the use of technology within the adult social care sector. For example, more homecare providers had adopted digital care assessment, recording and eMAR solutions, in addition to rostering and visit logging, than care home providers. Yet NHS digital engagement around virtual consultations and the like has been focused on care homes without similar attention on homecare providers facilitating contact with the people they support at home or for internal communication with field-based caregiving staff.

CQC have published [examples of how providers are responding to coronavirus](#). These examples emphasise the innovation that has been developed and implemented during this crisis. Examples are given from health and social care and some include use of digital technology. Adult social care providers have embraced new ways for people who use services to stay in touch with family and friends while personal contact isn't possible. There are examples of care homes arranging Skype calls for residents to keep in touch with families and of services setting up a relatives and friends WhatsApp group. There are also examples of activities provided remotely – that used to be done face to face – such as live streaming exercise and entertainment and holding 'virtual physio' sessions.

6.3 Barriers and enabling factors to the uptake of technology

Digital skills and confidence – the nature of the problems encountered completing the NHSmail fast-track form and the subsequent support queries to the helpline reflect the observations and support the recommendations of the [Topol Review](#) (Preparing the healthcare workforce to deliver the digital future, NHS Health Education England, February 2019) in relation to "...the development of the skills, attitudes and behaviours that individuals require to become digitally competent and confident." The low digital literacy of staff is an issue across a range of roles within care provider organisations, from owner to frontline carers. From interviews this was viewed as also affecting care staff confidence in adopting digital solutions more broadly and this is as much about culture change as equipping people with specific digital skills. Further, with typically over 15% of the social care workforce having English as a second language, there is a need for workforce development resources to be in plain English as well as other languages.

Strategic technical guidance and support – some callers to the helpline wanted more than just technical deployment support. They sort more strategic advice on digital solution selection and implementation, or support, in considering the different technical solutions. Despite the range of support to the sector to date, including Digital Social Care itself, this appears to continue to be a gap for the sector, potentially reflecting factors such as the very fragmented nature of the sector and small scale of many providers.

Data protection and data and cyber security – the majority of the NHSmail onboarding and adoption of digital solutions during recent months has been without completion of the Data Security and Protection Toolkit. The introduction of the fast-track

process for NHSmail and Microsoft Teams registration has been successful in significantly increasing the onboarding of care providers. However, interviews indicate that care providers have either not fully recognised what will be required to ‘catch up’ on these issues or are concerned about what will happen when toolkit compliance requirements are resumed. Further, some stakeholders felt that only a requirement to reach Standards Met would be sufficient as care providers already have NHSmail and Microsoft Teams, which would normally be the incentive for achieving Entry Level, and so there would be limited ‘compliance’ in expecting care providers to achieve only Entry Level.

Scaling digital adoption – the interviews with both providers and other stakeholders recognised that in addition to local system digital leadership, a significant range of support, workforce development and funding is needed to realise the opportunities of greater digital adoption and that care providers in particular need this in a coordinated and sustained manner to allow effective implementation and embedding. The scale of the challenge of digital adoption was also raised by all interviewees. The Skills for Care report ‘The size and structure of the adult social care sector and workforce in England, 2019’ states that 85% of the 18,500 providers employ less than 50 staff, and therefore usually lack dedicated resource for ICT and digital adoption issues. In this context, the level and nature of the support that needs to be provided to realise a digitally literate and enabled sector and the communication challenges within it are not to be underestimated. It also means that such endeavours need to be co-ordinated and linked to a clear national strategy, which allows for local variation to respond to local need and involve organisations that care providers recognise and trust.

Our findings reflect those from Digital Social Care and Skills for Care’s unpublished Digital Readiness Evaluation Report 2019. In this report, a representative sample of 501 organisations in England identified the following barriers to digital adoption.

Barrier	Frequency (%)
Lack of resource to invest in appropriate technology	48%
Time and costs to invest in upskilling staff	35%
Staff are resistant to using digital technology	24%
Lack of skills to make decisions on best systems for organisation	17%
We have problems with wifi connection	11%
Staff don’t have the skills needed to use digital technology	7%
Lack of appropriate systems available for social care	6%
Confidence in the reliability and/or security of the digital systems	6%
Lack of leadership from employers and managers	5%
Issues with interoperability	3%
Other	18%

6.4 Benefits of adopting technology

The action research interviews with providers considered their responses against a set of anticipated benefits of adopting digital solutions, as well as capturing specific benefits identified. The following table summarises the relative proportions of providers who realised the anticipated benefit for each of the digital solutions:

Proportion of providers realising benefits	Secure email	Video conferencing	Remote care and monitoring	The Capacity Tracker
Speedier or easier admission of people into the service	50%	8%	0%	0%
Better coordination of care around the person's needs	75%	25%	43%	0%
Better infection control by minimising contact with other professionals	50%	58%	14%	0%
Less time spent on 'administration' processes	75%	33%	14%	0%
Improved communication or better able to connect with people	100%	75%	14%	0%
Speedier or more timely consultation, diagnosis or medical treatment	0%	8%	14%	0%
Improved or changed delivery of care	0%	0%	14%	0%
Response to reporting issues with access to PPE or staff shortages	0%	0%	0%	0%

The key points from the above summary are:

- Access to NHSmail improves providers' communication with NHS organisations and therefore supports better coordination of care around the person's needs - where NHS organisations are using NHSmail with providers.
- The adoption of NHSmail and video conferencing has largely been Covid-19 related and most communication is with GPs.
- Use of NHSmail by care home providers and digital rostering and visit logging systems by homecare providers is viewed as reducing administrative effort.
- Adoption of video conferencing is seen as a significant benefit, if not a necessity, by providers during the pandemic, with some providers recognising an on-going benefit for both internal and external communications.
- The Capacity Tracker, whilst useful to NHS organisations and easy for providers to implement, was not perceived by providers as of benefit to them.

Despite the operational pressures that Covid-19 is presenting, some providers are still taking the time to consider how they build upon the sorts of immediate benefits detailed above and continue their digital journey. Some of the follow-up calls from the helpline and some of the action research interviews themselves developed into discussions on

the strategic options for digital adoption available to providers and guidance on the equipment and technology options. Examples range from the adoption of a specific app for a specific purpose through to a broader digital engagement for both residents and staff of a care home. Case study examples of both scenarios are detailed below:

St Mary's Mount Care Home: Transforming pain management using AI

St Mary's Mount Care Home is an independent 30-bed care facility which specialises in caring for those living with dementia. The care home introduced an Artificial Intelligence application, PainChek, to provide an accurate assessment of pain for those who cannot verbalise their pain levels. The application is loaded onto a tablet computer and is used by care staff to enable tailored treatment regimes to be applied. PainChek accurately assesses pain in those living with dementia at the point of care. The assessment takes no more than two to three minutes to complete using the tablet's built-in camera, with all data automatically uploaded to the PainChek Web App Portal. Carers, GPs and other medical staff can then access the data online.

Prior to using PainChek the care home used traditional paper-based pain assessments. The outcomes of these assessments were both subjective and time consuming, with differing results depending on who was completing them. It was also a challenge to differentiate between pain, pain related behavioural issues and other behavioural issues.

The PainChek solution has proved a simple technology to implement and is easily used by staff as it is an App on an iPad / tablet and therefore uses equipment and works in a way that staff are more familiar with.

St Mary's Mount has experienced a marked improvement in the accuracy and consistency of pain assessment outcomes since introducing the application and achieved valuable administrative time saving versus the paper-based approach. The care home has also observed a reduction in pain related PRN usage in particular residents, who despite this, are remaining pain free.

Ashley Grange Nursing Home: Enabling greater digital engagement

Ashley Grange Nursing Home is a family-run facility which provides a range of nursing care, residential care and respite opportunities to 55 adults. The care home has already implemented digital systems for care planning and recording system, eMAR and pharmacy integration, and ICT infrastructure with a large bandwidth broadband connection and a voice over internet protocol (VoIP) phone system.

Building upon its existing Data Security and Protection Toolkit registration, the owners realised the Covid-19 pandemic, whilst demanding the use of digital solutions such as virtual consultations with the GP practice, also gave an impetus and opportunity to continue the care home's digital journey more broadly to improve the quality and effectiveness of the care they provide. After discussion with Digital Social Care and the Institute of Public Care on some of the technical options for enabling both resident/family and care home/practitioner communication, engagement and information sharing, the care home owners have:

- Refreshed the care home's NHSmail accounts and set up access through their normal Outlook mailbox to maximise the use of secure email communication with all parts of the local health and social care system.
- Installed the new version of System One along with gaining greater access levels onto the platform, enabling secure access to further resident health data.
- Procured and installed an innovative VoIP desk phone, built with an Android operating system and with a portable high-definition touchscreen display (HiHi2 phones) instead of procuring Echo Show or equivalent and tablet computers. The HiHi2 phones provide one solution that meets all the care home's telephony, video conferencing and email needs for both residents' wellbeing and staff's clinical and care practice. The solution will enable better communication for families and residents and between staff and NHS and local authority practitioners through one secure device.

The owners see the investment will not only improve the resident experience and deliver safer care in a cyber secure manner but position the care home to realise the opportunities in telemedicine and virtual consultations with secondary care, and the Enhanced Health in Care Homes model more broadly.

7 Recommendations

Based upon the action research, stakeholder interviews, learning from the helpline and analysis of system data, we make the following recommendations.

1. **Recognise the scale of the support needed by the sector to adopt digital technology safely.** Herefordshire and Worcestershire CCG committed 119 person days to support 242 care homes to set up and use an iPad to use a shared NHSmail account and access Microsoft Teams. Scaling this up would mean roughly 12,000 days of support for the sector in England, and this would not include support to comply with Data Security and Protection Toolkit (DSPT) requirements. This is exacerbated by the fragmented nature of the IT supplier market for social care and the differing requirements of different autonomous commissioning organisations. Future digital adoption support for care providers should be in the context of national oversight via an SRO and a clear work programme, which coordinates across the health and social care system, providing greater certainty of a consistent level and quality of support to care providers. This should include a co-ordinated plan, with appropriate resource, to 'catch-up' care provider DSPT registration and organisational digital maturity. Without this the sector is not likely to meet the Joining up Care objectives for shared care records. A multiplicity of time-limited support programmes is not helpful, what is needed is a national commitment to sustained years of support.
2. **Ensure knowledge gained during this period of intensive care provider digital support is captured.** Many people have been drawn into the NHSmail and digital adoption support structures on a time-limited basis and from a range of teams during the pandemic. Their detailed knowledge of how to address the issues that arose should be captured and codified into a single place that can then be effectively shared for future support arrangements. Where resources and guidance have not been developed there should be a plan to fill in the gaps in available

resources, see Appendix 3 for a list of resource gaps. The helpline has done this to a degree with the products made available on the Digital Social Care website, which would provide a natural home for these resources. However, these and other resources should be developed into a comprehensive national knowledge base for digital technology in social care. It is important that we have ‘one version of the truth’.

- 3. Continue to resource ongoing technical support to help social care providers access secure email, video conferencing and other common digital solutions.** A knowledge base would still need to be complemented by the support of a non-time limited technical helpline – separate to any product specific support – to ensure providers can apply the guidance in their specific circumstance, recognising the low digital literacy of the sector. We further recommend that the helpline uses remote desktop access software to be able to see the caller’s screen.
- 4. Provide a safe place for social care providers to go for independent, strategic digital advice that can support the development of a bigger ‘digital community’.** In addition to the tactical adoption of specific equipment, there is a gap of free or low cost strategic advice on digital solution selection and implementation, or support in considering the different technical solutions. Related to this, some providers acknowledged the need for support in managing culture change and developing their leadership of change to fully leverage their digital investment. This would indicate that the strategic digital advice offer should either include, or link to, leadership and change management support for effective implementation.
- 5. Be cautious about supplying hardware to care providers as a digital solution.** Our research showed a very mixed experience of providing and supporting the use of freely issued digital equipment, such as an iPad, with some successes but many lessons to be learnt from the choice of equipment, to its configuration on supply, and on-going support. Reviewing the learning from other implementations would provide the evidence for best practice guidance to support future equipment roll-outs. Our experience is that this is best done as part of a broader, local digital transformation across health and care. We would further strongly recommend preconfiguring hardware and installing software before it is distributed and ensuring there is a wrapper of follow up support, which Digital Social Care could provide.
- 6. Broaden NHS digital support and engagement to include homecare, extra care and supported living providers to realise benefits for vulnerable people living in the community.** The Covid-19 pandemic has, because of infection rates in communal settings, very strongly focussed on care homes. However, there has been a strong commitment from the Department of Health and Social Care to support people to live at home for longer, and to uphold this commitment it is vital that we bring homecare and other supported living or extra care settings into the national conversation around digital integration.
- 7. Better understand the level and nature of digital literacy across the adult social care workforce.** This will support understanding of the skills gap and inform workforce development strategies and plans. There is some understanding of the issue but much of it is anecdotal. A clear picture of the state of social care workforce

digital literacy and what level and nature this needs to be is still lacking. Further research into this issue will support the formation of robust, evidence-based workforce development strategies and plans. Some of this work is already taking place with the discovery work on Digital Skills and Digital Leadership which Skills for Care are running.

- 8. Conduct a review to ascertain how to prepare the adult social care workforce to deliver the digital future: a [Topol Review](#) for social care.** The Topol Review (NHS Health Education England, 2019) identified the scale of the healthcare workforce digital development challenge and made recommendations on developing the skills, attitudes and behaviours that individuals require to become digitally competent and confident. We recommend a similar review for the social care workforce that builds on research about digital literacy and minimum standards by role. It should be a vision of where the sector could be and include recommendations on how to bridge the gap between the current reality and that aspiration. It should be clearly aligned with the Department of Health and Social Care's tech vision¹⁰ and cover the entire adult social care provider sector in England, including residential and home care, supported living, shared lives and extra care facilities. This should be sector-led to ensure buy in and develop a clear strategy to building a digitally literate workforce.
- 9. Develop a forum for new and existing digital leaders to form a digital community.** The digital maturity of a care provider is influenced by the digital literacy and leadership of its leaders and owners. In addition to developing the skills, attitudes and behaviours that the care workforce needs to become digitally competent and confident, ensuring digital leadership within the care provider sector is equally important. The Digital Social Care special interest group (circa 125 member organisations) were active in webinars and over email in sharing learning and expertise across organisations during Covid-19. However, there is a lack of digital leaders across the sector and those who do exist often don't work or share learning outside of their organisation. To embed a digital culture across social care a network or forum, similar to the Digital Health forum, should be developed to foster peer networking and learning. This will also be a useful resource of interested digital leaders in the sector who could input into national or local digital transformation policy.
- 10. A clear national stance on the software which will be used for each application area should be set out, including information standards and interoperability requirements.** Many providers we spoke to were using multiple different video conferencing software or different data collection tools based on the requirements of their different local stakeholders. This necessitated them learning to use multiple systems and frequently added to the data burden on staff. One example is video conferencing with GPs. Many of the providers we spoke to were using two or more systems to speak to different GP practices they are associated with. We further recommend that a survey of how GP practices are communicating with care providers should be undertaken, including what their intentions are to continue this post-Covid. Secure email exchange and virtual consultations between care providers and GPs was the most significant change in practice that we

¹⁰ <https://www.gov.uk/government/publications/the-future-of-healthcare-our-vision-for-digital-data-and-technology-in-health-and-care>

identified. Care providers are keen to understand what will be maintained post-Covid, and that those systems will be able to interact with each other, to ensure the benefits realised so far continue to be secured and further benefits leveraged.

Appendix 1 – Institute of Public Care research schedule

Opening greeting and introduction to include:

- Introduce self, thank you for taking part
- Introduce IPC and connection to Digital Social Care and the purpose of the project, timescales, products
- Describe how the data will be used and other GDPR issues
- Time needed to complete the research discussion

Individual details can be pre-populated from the helpline summary: name, contact details, job role, main service provided, number of staff, region and reason for original call to helpline.

CHECK - did the helpline resolve their issue, are there any further queries that require attention - can we help? Resolve their issue first before continuing with the research call.

1. Does your organisation use any of the following digital technologies?	Yes/No	If Yes, how often: “occasionally, regularly, very frequently”
a) NHSMail or other secure mail (state which and if accredited with NHS Digital)		
b) Microsoft Teams or other video conferencing technology e.g. Facetime, WhatsApp, Zoom (state which)		
c) Remote care and monitoring e.g. apps and wearables, personal alarms, sensors and memory aids (state what)		
d) The Capacity Tracker, CQC data collection or other tools providing data about care availability (state which)		

2. **If No, explore for each why not? What are or have been the barriers to your organisation adopting these technologies?**
(possible answers - capacity/time/priority, skills, confidence, cost, connectivity issues e.g. no wifi, functionality, ‘usefulness’ etc)
3. **If Yes, explore for each how long has the organisation been using these technologies i.e. have you started using them as a result of the Covid-19 crisis? What has helped or enabled your organisation to adopt these technologies?**

(possible answers - central edict to use NHSmail, help and support was available (ask from who), free, no face to face contact during the crisis, 'usefulness' etc)

4. Does your organisation use any other digital technologies e.g. care planning software, rostering system?

(prompts - ask for product and trade name, why they have it, how long have they been using it. Are staff using it to help your residents communicate with families etc? If there's anything practical we can capture and share with the sector to encourage more of that would be great - note responses for Q6 Other)

5. Have you experienced any positive impacts or benefits as a result of using these technologies?

	Yes – go to Q6	No – go to Q7
a) NHSMail or other secure mail		
b) Microsoft Teams or other video conferencing technology		
c) Remote care and monitoring		
d) The Capacity Tracker, CQC data collection or other tools providing data about care availability		
e) Other technologies (note from Q4 which)		

6. What has been beneficial about them - record if the technologies have improved any of the following. Provide specific details wherever possible

(Categorise responses against the areas below. Follow up to ensure specific examples e.g. what does the technology enable you to do that you didn't do before?)

Potential benefit	NHSmail or other secure mail	MS Teams or other video conf	Remote care and monitoring	Capacity Tracker, CQC update or other care tracker	Other (note which)
<p>a) Speedier or easier admission of people into the service. Check admission from where (hospital, council referral or self-funder) and ask if this can be quantified in hours saved per week, or X more people being admitted per week or other specific benefits</p>					
<p>b) Better coordination of care around the person's needs e.g. because they have been able to access quicker or more information about the person. Ask if this can be quantified in e.g. X more people being able to be cared for per week or other specific benefits</p>					
<p>c) Better infection control by minimising contact with other professionals e.g. agency staff, GPs, District Nurses etc (especially those with multiple contacts) Ask with whom they have not had to have a physical visit and what done instead or other specific benefits</p>					
<p>d) Less time spent by the provider on 'administration' processes e.g. phone calls or periods spent travelling to meetings etc. Ask if this can be quantified in hours saved per week, whose time saved or</p>					

<p>other benefits accrued like releasing more time for care</p>					
<p>e) Improved communication or better able to connect with people Ask between whom, and potential impact e.g. better working relationships with pharmacy or commissioners, or happier clients as able to speak to relatives, or provider filled bed vacancies quicker</p>					
<p>f) Speedier or more timely consultation, diagnosis or medical treatment Ask what particular support / diagnosis the tech enabled, how, and the potential impact of this e.g. avoiding hospital admission or reassurance to staff or relatives</p>					
<p>g) Improved or changed delivery of care by e.g. virtual monitoring by remote devices rather than care visits (meds prompts, lunchtime checks etc) Ask what types of activities done by care workers virtually rather than in person and the type of tech which can help care workers to do this (care tech or consumer devices like Amazon Echo), and specific benefits e.g. X more people being able to be cared for per week or able to operate with reduced staffing</p>					

h) Response to reporting issues with access to PPE or staff shortages during the crisis Ask how quick the response was, what they would have otherwise done or other specific impact					
i) Other					

7. **Why do you think you haven't experienced any positive impacts or benefits as a result of using these technologies?**

8. **Describe if and how you feel that your local council (or ADASS region or other local organisation) has been proactive in supporting providers with tech adoption during this time?**
Capture name of organisation. If there's anything practical we can capture and share with the sector to encourage more of that would be great.

9. **Describe if and how you feel that your CCG (or CSU or other NHS organisation) has been proactive in supporting providers with tech adoption during this time?**
Capture name of organisation. If there's anything practical we can capture and share with the sector to encourage more of that would be great.

10. **What would help you/your organisation to make better use of digital technology in the future?**
(possible answers - information about benefits and options, skills training, grants to buy hardware, connectivity issues sorted etc)

11. **Check if they would be willing to be used (anonymously or not) as a case study**

Thank them for their time and remind them of next steps - report publication (date) how be informed when available etc.

Appendix 2 – Summary of Digital Social Care helpline data 20 April to 19 June 2020

1 Helpline respondent overview¹¹

- 176 total respondents
- 112 via phone, 64 via email
- 56 (32%) of respondents agreed to a call back for research purposes

1.1 Service break down of respondents

1.1.1 Caller Job Role

Job Role	Total	% of Total ¹²
Registered Manager	83	47%
Owner	17	10%
Senior carer	10	6%
Carer	1	1%
IT staff	5	3%
Admin staff	10	6%
Local authority commissioner	3	2%
NHS commissioner	13	7%
Other	29	16%
Unknown	5	3%

Other: Operational Manager, Service Manager, Managing Director, SOCITM, Sales Co-Ordinator, Dentist, Regional Manager, Relationship and Compliance Manager, Director of Care, Pharmacist, GP Locum, Citizen Receiving Care, Head of Operation Support, Chief Operating Officer, GP, Customer Relations Manager, Activities Co-Ordinator, Trusted Assessor, Director, Trainer, Regional Clinical Manager.

¹¹ Repeat callers have been removed from these figures.

¹² Percentages throughout have been rounded to nearest full number, total percentages may therefore exceed 100%.

1.1.2 Service type

Service Type	Total	% of Total
Adult residential care	97	55%
Adult homecare	40	23%
Adult community care	5	3%
Supported living	2	1%
Adult day care	0	0%
Other	31	18%
Unknown	1	1%

Other: NHS commissioner, local authority commissioner, SOCITM, dentist, acquired brain injury unit, pharmacy, GP practice, hospice at home, trusted assessor, training company

1.1.3 Service size (by number of staff)

Number of staff	Total	% of Total
9 or fewer	5	3%
10-49	44	25%
50-249	48	27%
250+	23	13%
Unknown ¹³	28	16%
n/a (not a care provider)	28	16%

1.1.4 Service location

Region	Total	% of Total
North East	15	9%
North West	14	8%
Yorkshire and Humber	10	6%
West Midlands	14	8%
East Midlands	5	3%

¹³ The majority of “unknowns” are from homecare organisations

Eastern	8	5%
London	10	6%
South West	34	19%
South East	20	11%
England-wide	12	7%
Unknown	4	2%
n/a (not a care provider)	29	16%

1.1.5 Reason for Call

What was the main reason for the call?

Reason	Total	% of Total
NHSmial or secure email	139	79%
MS Teams or video conferencing	9	5%
Digital capacity tracking solutions	2	1%
Staff skills	1	1%
Other	25	14%

Other – How to access PPE, Immersive Labs Cyber Security Offer from NHS Digital, How to access testing, Data Security and Protection Toolkit, Issues with staff (not digital skills related), ODS Codes, advice on Facebook Portals, advice on how to improve broadband connectivity, how to access care page, how to set up iPad, advice on Alexa Show, care planning software.

Note – of those marked “other”, 7 (28%) wanted to discuss how to improve their broadband connectivity.

Appendix 3 – Recommended guidance material

In addition to the resources already developed as part of the Digital Social Care helpline response and by NHS England's Ageing Well regional leads, we suggest that the following materials should be developed to support the sector:

- NHSmail movers and leavers policy template.
- Guidance on closing an NHSmail account.
- Template data protection impact assessment (DPIA) for video consultations.
- Guidance on using Microsoft Teams for multidisciplinary team (MDT) meetings.
- Information governance assessment on the security of sharing patient confidential information in Microsoft Teams for MDTs.
- Guidance on WiFi boosters to improve connectivity in a residential care setting.
- NHSmail and Microsoft Teams guidance for iPads and other tablet devices.