Digital and Assistive Technology use in Disability Services during Covid-19:
A Report on the Experiences of 120 service providers

“Right to Connect”

National Clinical Programme for People with Disability

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Executive Summary

Covid-19 has presented a considerable challenge to the effective provision of disability services in Ireland. Our sector has responded in a variety of different ways and confronted an array of challenges in doing so. The use of technology has been a distinctive feature of our response. In the second quarter of 2020, the National Clinical Programme for People with Disabilities (NCPPD) undertook a survey of technology use to learn from the experience of service providers in the sector. We wished to identify particular difficulties encountered, highlight and share examples of good practice and identify opportunities to strengthen our systemic response across the sector.

The survey comprised nineteen questions and allowed for an open response format. The survey was disseminated electronically through National Disability Operations and cascaded to service provider organisations. Responses were received from 120 different centres providing services to persons with disability throughout Ireland; ranging from large to small service providers; covering both adults and children’s disability services; and including clinical services, day services, education and training programmes, residential and home supports.

A wide range of different technologies were used to facilitate service provision. Service providers were generally very positive about how technology enabled services to continue, to varying degrees, and in some cases, to actually increase their reach. Covid-19 has resulted in improved digital literacy among service users and staff, and it has indicated a capacity for future service enhancement; using technology to augment services that existed prior to Covid-19. Thematic analysis identified a number of issues that emerged from the responses received: these included a sense of connectedness and engagement; the importance of maintaining human interaction; the value of accessibility and family centeredness; the potential for service efficiencies and the needs for personal supports; the frustrations people experience and the barriers and facilitators to overcoming these. We provide a range of good practices reported by respondents which may be helpful to other service providers in thinking through opportunities for delivering services in a different way.

This report makes a number of specific recommendations. These include investment in training and up-skilling of staff to support the delivery of remote services; investment in technology and its necessary supportive infrastructure; development of national guidance on GDPR, IT security, and governance of virtual health and social care services. We recommend the use of structured change processes with a strong co-design element from service users and their families. We also recognise and recommend that more work needs to be done to establish why some people with disability have found it difficult to engage with technology. The Irish disability sector functions through a network of different service providers. The enhanced use of technology in our sector presents opportunities for more collaborative and integrated planning and delivery of services. Through shared working and
learning about the use of technology in our services we can strengthen the benefit to and positive experience of our services by our service users.
Digital and Assistive Technology Committee Members

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*With assistance from*

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Acknowledgement

The authors are extremely grateful to the many service provider organisations, their staff and in some cases service users who took the time and made the effort to return survey information. This work and report simply would not have been possible without you and we thank you for this. We will endeavour to convert your information into knowledge gains and service improvements for the persons with disability whom we serve and represent.
Glossary & Terminology

**Assistive Technology**: Refers to any device or system that helps to improve the functional capacity of a person.

**Digital literacy**: The ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.

**GDPR**: The General Data Protection Regulation 2016/679 is a regulation in EU law on data protection and privacy in the European Union and the European Economic Area. It also addresses the transfer of personal data outside the EU and EEA areas.

**Iterative**: Repeating something in order to improve it.

**Remote Services**: Services and supports to persons who are not physically present in the room or location from where the services are being delivered (i.e. remotely). Methods of delivery of these services may include, but are not limited to, email, telephone, video-conferencing, online supports, pre-recorded materials, etc.
**Introduction**

The Covid-19 pandemic has presented many and varied challenges to Irish society across all sectors. For people with disabilities, and for their families, Covid-19 has often undermined independence, personal contact and support; as well as the provision of assessment and interventions. The onset of Covid-19 in Ireland saw our disability service providers respond rapidly to the challenges it presented. Many of these services showed incredible versatility and flexibility in how they sought to maintain service provision despite being required to abide by Covid-19 restrictions, for the safety of service users and staff.

Undoubtedly, the disruption to the sort of services that were provided before Covid-19 has caused real distress and real difficulties. At the same time a broad range of technologies have come rapidly into use in the disability sector and the level of digital literacy has necessarily increased – at least for some. The use of technology is of course a central feature of the disability sector. For many people with disabilities Assistive Technology (AT) allows them to participate in society and claim their rights as equal citizens. This is recognised by the Irish government in its ratification of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), which includes the right of people to access AT.

Increasingly, globally, there is a merging of assistive and digital technologies. The world’s leading digital multinationals are headquartered in Ireland. Not only does this sector contribute greatly to the Irish economy but Ireland has become a hub for innovative thinking, imaginative pilots and the implementation of digital solutions. Often these can promote social inclusion and participation. The ubiquitous ‘smartphone’ is probably the most revolutionary and versatile form of assistive technology available.

In Quarter 2, 2020, the National Clinical Programme for People with Disability (NCPPD) established a Task Group to focus on Digital and Assistive Technology (DAT) in the delivery of disability services. This group sought to learn from the experience of service providers, during these difficult times, so that we can make our service provision more resilient and better informed by the many good practices occurring, while not underestimating the challenges that technology-mediated services continue to present for service users, families, carers and service providers. In due course we will also be seeking service user’s perspectives.

**Methodology**

We conducted a rapid survey of the use of technology in disability services in the context of Covid-19 during August/September. The survey explored how organisations delivered services using technology during Covid-19, with questions on the impact, barriers,
facilitators and learning gained (Appendix 1). This survey was disseminated through National Disability Operations and cascaded through the Community Health Organisations’ Social Care operational structures to service provider organisations. Returns were received from 120 different centres providing services to persons with disability throughout Ireland. These ranged from large to small service providers covering both adults and children’s disability services. Service provision areas included clinical services, day services, education and training programmes, residential and home supports.

Data was anonymised and coded upon receipt and transferred to an Excel spread sheet. Qualitative analysis was conducted in accordance with the methods outlined by Braun and Clarke (2006) involving the 6-steps of Familiarization, Coding, Generating themes, Reviewing themes, Defining and naming themes, and Writing up. This was an iterative process conducted by one of the data processors with contextual validity checks from other members of the survey management group. Quotes reflecting different themes were taken from the surveys and used to illustrate emergent themes. A content analysis of some categorical responses was also undertaken.

**Findings**

Overall there was overwhelmingly positive feedback from service providers in relation to the benefits of technology for service provision and how technology enabled services to continue to varying degrees during the early phases of the current pandemic. While face-to-face services cannot be replaced there was general consensus that there was significant value and a role for an increased use of technology in the delivery of services. Covid-19 has led to an improvement in digital literacy among service users and staff as well as unearthing an appetite and capacity for change and innovation. This presents an opportunity to drive some service improvements and innovations addressing the needs of users of disability services, their families and supporters.

**Types of services that technology assisted**

- Clinical – assessments, advice and information, multidisciplinary team (MDT) interventions, one-to-one interventions, group treatments/classes, behavioural support programmes, others – Physiotherapy, Occupational Therapy, Speech and Language Therapy, Psychology, GP Consultation, Others, etc..
- Assistive Technology - Specific interventions/supports remotely delivered.
- Education and training – part of structured programmes delivered remotely.
- Day Services - Social/Educational/Person-Centred Services/Other – zoom classes, exercise, art, dance, quizzes, PPE desensitisation, information on Covid-19, person centred planning, other virtual content and more.
- Home support – checking in, assessing needs, social interactions, remote monitoring, technology less useful for one-to-one personal services.
- Residential/respite – Supporting connectedness with families, supporters, advocates, some social and clinical services.
Types of Technologies Used

Phone, social media platforms (e.g. WhatsApp, Facebook), meeting software/Apps (e.g. Zoom, Microsoft Teams, Team viewer, WebEx, Skype), online platforms (e.g. Attend Anywhere, Physitrack, websites with pre-recorded content, YouTube, Office 365), assistive technologies (e.g. JAWS, Zoon Text, remote log on), Wi-Fi access (dongles), client management systems and other bespoke platforms.

Themes

*Connectedness*

Almost all respondents spoke about the capability and benefits of being able to connect using technologies in a safe manner, at a time when reducing physical proximity and in-person social contacts was necessary for public health and safety reasons. The impact was a reduction of isolation for services users and families but also the ability to continue receiving a service. Some providers reported that technology allowed them to reach a greater number of users at the one time. This connectedness was multifaceted and covered provider-to-service user interactions (both individual and group formats), peer to peer connectivity among service users themselves, service provider to families/supporters/advocates and vice versa, families to service users (e.g. in residential services), service provider to service provider interactions and also within services among teams and colleagues.

“Of the clients [service users] who participated in the online group 77% of them said it was great to see, hear and catch up with other clients. Comment from client ‘I felt connected and not forgotten’”

“Delivering these services enabled staff to keep in contact with all service users during a very difficult period. As a result of this staff were better equipped to provide support to individuals struggling with mental health difficulties, increased anxiety, isolation and loneliness due to Covid-19 restrictions.”

“The use of technology during this period opened up new ways of connections for people that they really did not know very much about at all. It actually in a very positive way forced the use of technology. It gave individuals an opportunity to stay connected with each other and staff, and to discuss their concerns and fears about the Covid-19 while their day service was closed”.

“Service users felt connected and supported through the pandemic. Through the consistent contact, we identified how service users had regressed and could move quickly to provide support where needed. It lessened somewhat the huge change in service users lives in not having the Service open to attend each day”.

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Engagement

The majority of respondents reported good levels of engagement with technology by both service users and staff. In fact many respondents expressed how surprised they were by people’s enthusiasm to use technology and the speed at which they adapted. Some services reported higher levels of engagement than was previously the case among some service users; resulting in higher levels of attendance (follow up will be required to assess if this has maintained):

“It has been a very positive experience with service users initially being hesitant but with support they have in most cases fully engaged.”

“There are some service users who declined to engage in sessions pre Covid-19 while in the day centre, [but] are now accessing the virtual training and engaging fully in the sessions, this has been a very positive outcome for those service users.”

While positive engagement was reported by many respondents a number reported that service users did not want to engage. While some reasons were cited, this is an area for further exploration and probing from a service users’ perspective. This may be a matter of choice but it is also important to explore and understand if there were access barriers (see later).

“Unfortunately, despite on-going efforts, there are some service users whom are unable to link into the sessions or who choose not to link in which is a pity.”

One recurring theme was that younger people used technology to increase their access to services:

“The impact hasn’t been as negative as initially expected. Children and families are responding well to remote services and some clients (mainly teenagers) are engaging and responding more positively to remote sessions than they were with face to face in a clinic setting.”

Technology also has the potential for facilitating engagement of staff particularly where staff are not always on site in the work place.

“As the service is residential, we anticipated issues with staff attending meetings. What we found was staff numbers increased for remote calls, as it was more convenient for staff to dial in as opposed to get to the residence. That was a positive outcome”.

Human Interactions

Closely aligned to the themes of connectedness and engagement was the recurring theme of human interactions. While there was a lot of positive feedback on technology in terms of engagement and connectedness, many providers highlighted the importance of in-person human interactions and that in some situations technology simply could not replace this.
Several respondents advocated for blended approaches. Some providers reported benefits to engaging with and observing service users in a more natural environment at home.

“People who already struggle with communication miss the face to face contact”.

“We have had to schedule face to face meetings whilst adhering to social distancing as some of our service users struggled with viewing the interpreter on a video call. In addition, it is more difficult to communicate sensitive issues on zoom calls. The inability to see someone in person can lose the essence of a meeting when on a zoom call as opposed to face to face, especially when service users were on a call with family. Meetings where sensitive issues need discussing work better in person.”

“Many service users adapted very well to their home based timetable and appreciated their calls and individual time with their keyworker, however they missed the interaction with their peers in their centre environment and some missed the structure.”

“Using video assessments for assessments has allowed MDT to gain a greater sample of the person’s skills across the day and in their natural environments, and has actually allowed for more comprehensive assessment than we can sometimes complete in services.”

**Accessibility/Person- and Family-Centred**

Many respondents reported improvements in accessibility to services as a direct result of switching some services to remote delivery using technology. Previous barriers such as geographical distance, access to transport, health issues, need to find childcare, family commitments were mitigated by the availability of online/remote services. Some providers reported on how the provision of flexible online programmes and choice gave a greater “power of choice” to service users:

“We have been able to re-engage with service users who had left the service prior to Covid-19 as they are unable to make the journey into the centre due to health or transport issues. The ease of access allowed us to engage with people who were in other services and people in the community who did not engage in any disability service”.

“One of the significant positive impacts of having a virtual delivery model supporting the face to face delivery has been the ability to bridge that gap in a timely fashion. One such example is the ‘learning through play’ programme for babies and young children, due to low incidence parents waited for long periods, or travelled long distances to be linked to this programme. Since this moved to virtual delivery, we have been able to connect and support parents across the country on a very regular basis.”

“Virtual Service is accessible to service users regardless of their location so for the first time, those who were ill/in hospital/on respite could continue to participate in services, despite these changes to their personal circumstances”.

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Several survey responses outlined how technology facilitated services to be more person- and family- centred with flexibility to suit individual circumstances. In some cases the availability of supports was important in terms of facilitating this access.

“New working options have been established. Some therapy groups have proved to be equally effective and have suited parents more than attending with their children in person. A survey of some of our service users showed that many would prefer to continue with a mixture of remote and face to face working even if everything returned to how it had been before”.

“The Vimeo videos were a resource that could be accessed at a time that suited each person, and who may not choose the interactive supports. For those who do not have internet at home, staff collected their devices and downloaded videos for accessing offline.”

“A large number of new participants [were] taking part as barriers due to geography, travel, fatigue, accessibility and child care were [now] diminished.”

Efficiencies

One theme consistently reported in the majority of survey returns was that of the efficiencies which technology has brought to services and service provision. In particular, was the reporting of time efficiencies, cost savings and flexibilities for service providers and their staff, as well as service users and families. In several cases these efficiencies were reported as directly translating to greater capacity to deliver services to a larger numbers of clients:

“Reduced travel time between meetings/ home visits. This has increased time availability towards other clients”.

“It also supported us to deliver programmes/clubs at very flexible times and saved people potentially travelling long distances”.

“Greater flexibility re: work hours which has been beneficial personally and for the families I support. I feel remote working has been positive for the families we support as parents have not had to take time off work”.

In some cases time efficiencies have led to direct service improvements.

“Through the use of technology, some high-priority service users have had their needs addressed much more rapidly than would have been possible prior to the introduction of the technology”.

“We have been able to assess and prescribe equipment to clients at a much faster pace. To date we have assessed 32 clients who otherwise would have had to wait for months for assessment”.

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“The fact that this service was available enabled us to ensure residents were assessed in a timely manner. The advice proffered seems to have been adequate and appropriate in that the residents involved have improved on their new eating and drinking plans”.

Administrative efficiencies were also reported with many respondents commenting on how the technology facilitated more efficient meetings and team working.

“Often meetings ran quicker than previously [and were] more focused and less chatting”.

However, this must be balanced by the reports of staff missing the normal human interactions involved in day to day team working and professional relationships as well as the many social interactions between work colleagues which are an important part of everyday working life.

Some respondents spoke about how technology facilitated “out of hours” working while others spoke about the dangers of blurring the lines between work hours and personal time.

While time efficiencies were reported in many cases some respondents spoke about the energy, time and effort it took to set up virtual services, although there was a sense that this was worthwhile once achieved. Some respondents highlighted the challenges of keeping material fresh for online and remote services and the sustainability of maintaining these programmes.

**Importance of Supports**

The theme of supports was multifactorial and reported in the majority of survey returns. This ranged from supports to build personal capacity within individuals, the importance of family and parental supports in many cases, formal supports provided by organisations to facilitate technology access, supporting families to support their relatives who were service users, to supporting staff themselves and reducing their isolation.

In terms of the amount of support required this varied significantly between individuals, some service users improved with supports and practice, other service users continued to find it difficult, even with support.

“We have found that there is a significant level of in-person support required for zoom sessions from start to end of session, this would run from running the technology to addressing questions that arise during the live session and direct support individuals need from support to allow them actively engage rather than passively watch the session”.

“It has been a very positive experience with service users initially being hesitant but with support have in most cases fully engaged.”

“Several clients’ IT abilities improved substantially, and this even drew other family members into active participation as they supported this engagement via technology.”
“Some service users who required 1:1 support have found the remote learning difficult”.

In many cases family were an important source of support particularly younger members of the family. The downside of this was that supports reduced in some cases when family members who were in lockdown returned to work and school, post lock down. The necessity to provide supports in some cases created demands on families and negated the respite which sometimes attendance at Day Services provides for some families.

“Even for those who could participate, there was a strong dependency on younger members of the family unit e.g. sibling or niece/nephew to support them to set up the call/participate in the session. As lockdown lifted, some of these family members returned to work and were no longer available to provide support. Some individuals could no longer continue, others were able to access the session but if an IT issue developed, were unable to resolve the issue by themselves. There was no individual who could access the session independently with no problems arising”.

“a lot of responsibility fell on families to support the individual completing a task or facilitating their involvement with technology”.

“Some families joined on the zoom classes with their adult relative and did not therefore get any respite from caring in that time”.

Traditional structured and organisational supports were also very important. This will have implications for future planning of services, skillsets and work practices. In addition to supporting individual and groups of service users, structured supports for families to facilitate them in supporting persons with disabilities were also important.

“For those who do not have internet at home, staff collected their devices and downloaded videos for accessing offline”.

“Due to service users having a physical disability they have required a lot on their families/carers to support them with accessing the virtual service. Our OT and SLT are working with families to help with this; again resources are required to make this more accessible”.

“Families report the regular remote support was reassuring and provided hope for the future at a difficult and uncertain time. The provision of behaviour support consultations helped one family to respond appropriately to the needs of their children after the death of their grandfather”.

Frustrations

Frustrations were also reported. There were various reasons for this ranging from technology issues to personal capabilities. Staff themselves sometimes missed personal interactions.
“At the start it was hard for everyone to get used to working with technology as some may have never used computers, laptops before and obviously now and again internet connections aren’t great at times and can be frustrating on service users and staff.”

“Frustration to service users caused by frequent call disruption due to reception issues which resulted in less interactive communication with service users”.

“Frustration caused be lack of personal interaction between staff on meetings”.

Barriers

Reported barriers to the delivery of remote services included:

- Availability/Access to Equipment and Training
- Lack of IT/technology skills and knowledge including fear of using technology
- Poor Wi-Fi and Internet Connectivity
- It was reported that some service users with Intellectual Disabilities, hearing impairments and/or ASD found it difficult to engage with technological interventions.
- Cognitive or other difficulties resulting from acquired brain injury that create barriers to effectively using technology.
- Fears around security and potential exposure to inappropriate content
- It was reported that for people who were previously trying to wean off overuse of technology, the mixed message of now being encouraged to use it, could be confusing.
- Unwillingness to engage in technology use among some service users with strong preference for face-to-face.

Facilitators

- Supports - Staff support to service users and families. Family supports were key in many cases.
- Planning/Scheduling – Structured planning and scheduling by service providers with good communication to service users and families. Scheduled times for individual calls.
- Training- Up skilling of staff on how to develop and deliver programmes remotely. Up skilling staff on how to set up applications for service users to access. Training of individual service users and family members. Online Training/ Sharing of information.
- Attitude of Staff/Families -Staff with good IT skills and willingness to share their skills. A ‘can do’ attitude among staff and management across the organisation. Positive disposition from service users and their families.
- Activities to keep people motivated, especially children during therapy (e.g. interactive games and activities).
• Established Rapport - The relationship that existed between the Service Users and Carers, between service providers and families was important. Trust. ("They trusted that we were not “closing services” and that we were trying to keep connection and delivery through a difficult time").

• Patience – “People having patience and understanding that this was a new way of communicating and we all needed time to connect but also how to give everyone time to talk. People had to wait for others to finish talking before they could speak. Meetings and classes were strange as we had to learn to take turns. We learnt that we had to have smaller groups online so everyone got a chance to be part, big groups did not work too well”.

• Champions- “Champions who had the knowledge, skills, and attitude to support the clients to participate. Champions also played a key role in disseminating information to less technologically proficient staff”.

• Communication – Good communication to staff, between staff and with service users and families.

• Collaboration - Collaborative working practices with service users and families and between different organisations.

• “How to” Guides - “All staff received a remote learning guide that short circuited their access to all technologies available in a short period of time”. “This enabled staff and students to smoothly convert to a new form of learning and teaching. In addition to this, staff engaged in on-going delivery of training via live webinars via MS Teams Live Events platform and recorded content of ‘How To’ guides and demonstrations of technologies on Moodle along with buy-in from managers in centres.”
Examples of Good Practice

This section presents a range of examples of good practice from survey returns. The examples are based on the original text from survey returns. We use coding numbers to identify the respondents and we have added our own italics to highlight some sections. The NCPPD intend to develop a separate but related resource to this report where representatives from some of the organisations will themselves describe these examples in video interviews. When this work is complete we will produce an updated report where examples of practice below will be linked to video clips, which will be hosted on the webpage of National Clinical Programme for People with Disability (https://www.hse.ie/eng/about/who/cspd/ncps/disability/).

1. A04/AN5: Example offered by a Speech & Language Therapist (SLT): “A child had been engaged in SLT supports and required a communication device; we had just agreed to start some trials of different assistive communication devices before lockdown happened. A couple of suppliers of assistive technologies agreed to courier loan devices for 2-3 weeks to the child’s home for trials at different times. Both companies had webinar trainings available online on how to use the 3 loan devices, so both the parent and the teacher of the child who was assessed, completed these trainings to gain further insight and to up-skill in how to use the technologies. The SLT used one of the online meeting platforms to meet the child’s parent and teacher twice weekly to set goals for using the device and coach them through using it. After each session, we updated the programme and emailed it on. The parent then implemented the programme at home with the child and we in SLT were always accessible by phone if she needed extra support. Following the loans, we were able to meet online and identify the most appropriate device for the child, and then we completed the application for funding for the device to the HSE. Previously this would have been done through many home visits, school visits and meetings in the school so a lot of time was saved with the same outcome for the child and family”.

2. A11/AN12: “Transition into secondary school can be a very challenging time for young people and their families, particularly young persons with additional needs and Autism Spectrum Disorder (ASD). Each year our team run a Transition Group for young people transitioning from Primary into Secondary school. The group content includes: feelings about the change from primary to secondary, friendships, questions about timetables, new subjects, issues highlighted over the previous weeks. This year we delivered this group successfully through remote technology due to restrictions. All participants and facilitators were able to engage online. There was sharing in the group and each young person was able to see the person that was going to be in their class. This helped to reduce the anxiety which we know children with ASD experience when there is significant change in their life. The group openly discussed their thoughts about secondary school. Any issues were followed up outside of the group with the young person and their parents. Feedback from participants was very positive. The pre planning was critical to the group success and a number of individual sessions were held to prepare the young person for remote group work, including establishing ground rules for interactions. Staff observed that the young persons were more engaged and relaxed as they were in their own home environments and were able to opt in and out of conversations within the group.”
3. A10/H10/H9: An organisation providing services to children and adults with intellectual disabilities in multiple settings from home to residential reported:—“Initially we used phone teleconferences for daily management and team meetings to speedily make decisions to keep our services safe and Covid free, especially residential services. We moved within weeks to the whole organisation getting crash courses on the use of SKYPE and TEAMS and head sets were sourced, as was information about muting and other ways to enhance the quality of calls etc. Remote services included: Positive Behaviour Support, Dialectical Behaviour Therapy, Individual psychotherapy with people with mild ID, ASD assessments for school age children, Transition assessments for young people transitioning to adult services in Sept 2020, Interagency handover meetings regarding school leavers, Adaptive functioning assessments, Staff training and supervision and Parent training”. The organisation gave an example of an online intensive interagency collaboration which they reported as preventing a 12 year child with ID and ASD requiring an out-of-county residential placement. Other agencies/personnel involved were TUSLA, CAMHS, psychiatry services, a paediatrician, Social Work department, Behavioural Support services and a psychologist.

4. A15/AN16: “Children’s Services: Starting Primary school can be a very challenging time for young children and their families, particularly children with additional needs and Autism Spectrum Disorder (ASD). Each year our team run a workshop for children starting primary school. The workshop content includes; practical tips to prepare children for the move to primary school, how parents can engage with the school before their child starts, development of a communication passport by parents for the teacher, how parents can ensure the school is prepared and informed of their child’s individual needs. This year the OT on our team prepared a PowerPoint presentation using her own voice and the slides that are used in the presentation. This was made available for parents to access online. The feedback so far has been very positive and many of our parents did access this on the website. Staff were available if parents had any further queries. This reduced the number of parents contacting the service as the workshop covered each of the areas that we know impact a child starting school”.

5. A20/AN21: “The client was referred to the service and he was identified as appropriate for virtual assessment when speaking to him on the phone. The assigned clinician, who was working remotely, organised a virtual assessment (using video conferencing software) with the client, another colleague and the local therapist, at a time that suited all of them. The assessment occurred within 2 weeks of the referral. The client was assessed, and a decision was made to order suitable equipment for him. The client was sent this equipment once it had been set up and programmed by the technician and a remote supply appointment was arranged. The technician assisted the local therapist and client in the setup of the equipment over the phone. The review appointment then occurred via the same method as the assessment. The client expressed their satisfaction with receiving the appointment and equipment so quickly. They felt supported by the remote set-up and confident that any concerns can be addressed promptly via remote support”.

6. A40/H41/I41 – An organisation providing services to persons with acquired brain injury reported on using a range of technologies (Microsoft Teams, online learning management system, telephone and email, Attend Anywhere, Information and Support Helpline, Website live chat) to deliver the following services; Online courses- (Designing a weekly timetable, Living with Stress, Fatigue after a Brain Injury, Design your CV, Understanding and improving your attention, Introduction to Mindfulness, Home Cooking, Hand Hygiene, User Guide to Microsoft Teams),
7. A11/N12/H12 – An organisation providing adult day residential and respite services reported – “We used teleconference facilities which were a challenge initially, we supported families to use online platforms where possible, staff used their own phones when we did not have available technologies in-house and multidisciplinary team members used their own laptops until the organisation was in a position to source laptops”.

Services delivered remotely included - one-to-one intervention with young people using phone screen, observations for assessment purposes, observations to support parents with new equipment, group work with specific client groups e.g. teenager support group, family support plan meeting updates with clinicians and parents, interagency work between children’s team and other health services, interagency work between children services teams across the region, teleconferences provided nationally, MDT meetings, senior management team meetings, advocacy meetings, management communication meetings, departmental meetings, admissions meetings, national meetings, interviews of potential staff in terms of recruitment, one-to-one therapy for adults at home without a day service, one-to-one therapy for people in residential services, activities for people including bingo, music session, CPD using webinars, staff training on line and the development of resources to support staff on line.

Our IT department played a critical role and worked tirelessly to ensure that staff were connected. Staff were flexible, creative and open to change to make the services work. Planning by staff, encouragement for families and the openness of families facilitated success.

8. A91/H92 - An organisation providing a range of services to children and adults with disabilities. We developed a menu of 6 online classes per day (Yoga, Zumba, Theatre, Bingo, Cooking, Art, Quizzes, Audio Book Club and more) resulting in 30 classes being available to 35 adults in their homes. We supported and trained staff to become Virtual Service Champions, supporting people to access this service on an on-line platform. Up to 1055 hours of on line sessions are offered per week. This Virtual Service model has been replicated across our adult services in other regions. We are now working on the expansion of Virtual Service menu options, in partnership with Service Users, to include self-advocacy and other educational/training content. The Virtual Service forms one component in a three-pronged approach to on-going delivery of supports to adult Service Users, alongside on site centre-based services and community based supports. In support of this Virtual Service initiative we despatched over 15 devices to service users to enable them to access the Virtual Service from home. These are long term loan devices, for their on-going use, and include Surface laptops, desk stands and wheelchair/floor mounting kits and additional AT software.
Other virtual services include AT e-learning and training, webinars, online AT assessments and tech support, online AT loan library and online staff clinical supervision.

9. A37/AP38: Report from a group of advocates formally representing users of services in a specific region – “People were happy to see family, friends and staff on their devices and enjoyed all the activities they did to keep busy. The preference is to return to face-to-face classes, meetings and programmes. People need to be out and about mixing with others. The positives were that that people did not have to travel long journeys to attend meetings. For example, the National Advocacy Council would meet usually 6-8 times a year. Using technology, meetings happened twice a month and we were able to work at a better, more comfortable pace, due to more meetings and no stresses on people to get back for bus runs etc. We will definitely be using technology for National meetings.

Another positive which will continue is that people had to start using their devices and downloading apps if they wanted to see family, this opened up a whole new world for family that lived abroad, every age group started using technology to communicate. We had one gentleman who had not seen his sister in 6 years as she had not been home to Ireland and now through technology they are both back in touch and have bonded through this pandemic. He was able to communicate through gestures, pointing and showing pictures, this was the case for so many others.

In one area staff developed and posted weekly Activity packs to all of the people who in normal times attend the Day Centres and were cocooning at home. They are now on Pack 32 as even though some individuals are now attending the Day centre on certain days, they wanted to provide them with activities they enjoy to do on the day/days they are not attending. Others continue to cocoon at home. Each pack contains a craft item to make, a game, a puzzle and some activities to colour or worksheets to complete (bespoke to each individual) and a personal note. Feedback from individuals and families was positive. They loved receiving a package in the post, knew what day it would arrive and would look out for it and felt very connected to the Day service and their friends. There was also some postal correspondence between individuals and support staff. This activity was enjoyable, inclusive and was not dependent on proficiency in using technology or being connected to a network. All of the individuals, irrespective of ability or communication skills participated in the activities.

Finally, another positive was that people supported by the service felt that they got more time to speak and felt listened too. Once they got their turn on screen they got to say what they wanted to. One of the group rules of any meeting or sessions online is to take turns and not to talk over people and that everyone had the chance to speak. This skill was really developed using technology and will continue. It was so important to make sure everyone was included and got screen time”.

10. A90/AN91: An organisation providing services to a specific cohort using common online platforms. “The delivery of physio programmes, this can be done safely and specific to needs, e.g. wheel chair seated class where the goals are similar and were delivered from location X but available to people from a variety of locations following the necessary assessments. There were a large number of new participants taking part as barriers due to geography, travel, fatigue, accessibility and child care were diminished. This highlighted the need for digital literacy programmes. In short you could have a physio delivering this model offering greater access with reduced cost (travel etc.) with frequency and intensity that can effect change”.

11. A93/AN94: An organisation providing services to a specific cohort identified a number of related initiatives. 1. The Technology Support Line – This support line offers technical support and guidance to service users and their families. During the Covid-19 emergency this service has seen a significant increase in utilisation. 2. Technology Training – The nationwide team of trainers have pivoted our training delivery to an online platform. This means the technology services had minimal interruption and service users continue to avail of online training in their homes. 3. Live Online Technology Events – We have completed 15 Live Technology Events which are available to watch afterwards on YouTube and iTunes. 4. Virtual Technology Clubs – These are now fully available nationwide. 5. Multi-disciplinary service to children & young persons by our therapists and AT professionals. A suite of online resources have also been developed which look at the range of services provided as well as training tips and techniques on independent living. 6. School programme delivered virtually across the areas of independence skills, orientation & mobility skills, communication & accessing the school curriculum with assistive technology and specific focus groups on primary school starters and those transitioning to secondary school. 7. Reach Out programme - Volunteers provided companionship to Service Users who would like extra social contact through a weekly or daily telephone call. The service allows for volunteers to alert keyworkers if and when an intervention might be needed.

12. A113/AN114: Another provider of a range of services to children and adults with disabilities highlighted: - 1. On line Activity Hub with online platform calls and classes for service users and family members. 2. Remote clinical assessment/ contacts with service users/ families using zoom/what’s app leading to a robust clinical risk assessment of service user’s home situation.

“The Activity Hub was set up by staff to support everyone to have access to activities at home when day services were closed. It continues to be available on our website as an option during the phased reopening of day services. It includes a timetable of leisure activities and a range of information to help keep mind and body healthy and happy. This could be scaled up and with some creative thinking become available to many service users across many agencies. This could be expanded to include more material, more individualised services and as a way of supporting people to access more services and keep social connections alive”.

13. A120/AN121: A particular staff member invested time during lockdown to keep 5 young men connected with each other. They had hours of fun and enjoyment over the weeks of a very difficult time in their lives. One Individual brought his Keyworker on a virtual tour of his Farm while on a video call. His tractor, his tool shed. Spent really good quality time doing this activity. Learned how to connect with his Peers on zoom, spent hours over lockdown connecting with each other. Service user learned to use What’s App and sent video clip of himself to his Keyworker driving his tractor with the support of his brother.
Recommendations

Based on the survey return of the 120 service provider organisations we have identified a number of specific recommendations:

**People** – We recommend investment in training programmes to upskill staff and build their capacity to support the delivery of remote services. This should involve training in the use of different technologies, building on the skillsets developed and experience gained to date. This could be rolled out in a tiered fashion, training all staff in basic skills and targeting specific staff to develop advanced skills who can then train and support others, including other staff, persons with disability, families and supporters. Specific training to develop skillsets in virtual content development is also needed.

Training programmes also need to target persons with disability, and the families and advocates who support service users, to enable them to engage effectively with services delivered using technology. We recognise that some service users and some service providers already have a very significant level of technology expertise; these individuals should be identified and their role as Connected Champions explored.

**Equipment** – We recommend investment in technology and supportive infrastructure nationally and in local regions and organisations. This may require a collaborative and coordinated approach between different government departments and the HSE. Almost all respondents spoke of the need for investment in IT, both hardware and software platforms to support the delivery of virtual services. Infrastructural investments will be required to support teams using telehealth practices. Technology investments which will facilitate access to technology for service users also needs to be considered, e.g. Broadband improvements, Access to Wi-Fi, Loan libraries, grants for equipment, Assistive Technologies, etc.

**Policy/Procedures/Guidelines** – Service providers introducing remote services must ensure that Standard Operating Procedures are developed/adopted which are aligned to best practice and adhere to all relevant policies, guidelines, regulations and legislation. To support this, all services should review the HSE’s national guidance in relation to GDPR, IT security, governance of virtual health and social care services, use of technology in the delivery of services, and digital inclusion and access (https://healthservice.hse.ie/staff/coronavirus/working-from-home/virtual-health/virtual-health.html). Compliance with the relevant policies, guidelines, regulations and legislation should be covered in the Service Arrangements. The development of local “Ground Rules”, where services are engaging with individuals or groups, should be developed in consultation with stakeholders.

**Process** – It is recommended that a structured change management and quality improvement approach is taken to underpin and guide the process of enhancing service
delivery. This will include processes for consultation and co-design with service users and their families, staff engagement and participation, service impact assessments and outcome assessment. It is essential that the development of new approaches to the delivery of services are based on identified and prioritised needs of services users and families and the feasibility of meeting these needs.

**Programme Development/Virtual content** – We recommend that organisations review how an increased blend of service provision (in-person and virtual) can enhance a more person-centred and flexible service and provide greater choice to service users.

**Shared Learning** – We recommend the establishment of structures and processes for sharing learning and experiences to date. This is a rapidly changing area. There will be pockets of innovation that will benefit from being shared to drive the sector forward in terms of the use of digital and assistive technologies and the learning from small scale pilots.

**Collaborative Working** – We recommend the development of structures and processes to encourage organisations and service users to work collaboratively in developing services and to identify and share virtual content that addresses the needs of service users.

**Service User Perspective** – We recommend further enquiry to gain a more comprehensive insight into service users’ perspectives and experiences of service delivery using technology during Covid-19. The present survey was targeted at service provider organisations. While some insight was gained into service user experience, this survey by no means reflects the range of experience from a service users’ perspective.

**Specific Access Issues** – We recommend exploration of the reasons why some persons with disabilities found it particularly difficult to engage with technology and/or to identify solutions to improve access. Some factors may be disability-specific and relate to difficulty in using the various technologies. Other factors may relate to a person’s interests and aptitudes. Person-centred approaches to encouraging and fostering engagement with digital technologies need to be developed.

**System Strengthening** – Our learning from the experience of how service providers have responded to Covid-19 has highlighted some good practices to support more resilient services with the potential for broader coverage and reach in the future, post Covid-19. It is important that this translates to improved outcomes for service users. The capturing of such outcomes as well as data to support service planning and delivery should form part of a broader review of data management systems and strategy within disability services. In addition, to support adoption of the recommendations outlined in this report, we recommend that a governance structure be developed to support effective and coordinated implementation of these changes.
International Outlook - We recommend that developments in the use of digital and assistive technologies should be informed by international developments in this field, such as the work of the World Health Organisation’s GATE (Global Cooperation on Assistive Technology) programme (Khasnabis et al, 2015) and DATA (Digital and Assistive Technology for Ageing) programme (Khasnabis et al, 2020). This may be facilitated by establishing close working links with WHO’s Europe Office, as well as other international stakeholders in this area.
Appendix 1

Technology in the Delivery of Disability Services in the Context of Covid-19 – Service Provider Survey

*This survey is concerned with the use of technology to deliver services and supports to persons with a disability who are not physically present in the room or location from where the services are being delivered (i.e. remotely). Methods of delivery of these services may include, but are not limited to, email, telephone, video-conferencing, online supports, pre-recorded materials, etc. (Please return this survey by email to the National Clinical Programme for People with Disability ncp.disability@hse.ie by Friday 28th August)

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<th>Service Name:</th>
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<td>CHO Area:</td>
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<tr>
<td>Brief Description of Service: (Adult, Children, Intellectual, Physical &amp; Sensory, etc., Day Services, Residential, Respite, Healthcare, Social Care, Home Care, Personal Assistance, Education, Training, etc.)</td>
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<tr>
<td>Approx. number of service users:</td>
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<td>Name of person completing survey:</td>
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Note: We recommend that the survey is completed by a senior representative in an organisation on behalf of the organisation, liaising with those responsible for service delivery and technology support functions. If there are numerous departments and examples of delivering services remotely using technology in a large organisation, the survey may be filled out by individual service/departmental leads (e.g. Manager of Day Service, Head of Therapy Department). Please specify the service and organisation in the box above.

1. What services* have you been able to provide remotely using technology during Covid-19 pandemic?

2. Describe briefly the impact of delivering these services remotely using technology (this may include anticipated and unanticipated positive and negative impacts)?
### Appendix 1 – Contin’d

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<th>3. For those services* that you have provided remotely using technologies what technologies have you used?</th>
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<th>4. What barriers have you encountered in delivering services* remotely using technology?</th>
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<th>5. What solutions did you use to overcome these barriers?</th>
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<th>6. What most facilitated successful delivery of services* remotely using technology?</th>
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<th>7. What has been your main learning from delivering services* remotely using technology?</th>
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<th>8. Are there services that could be delivered remotely using technology with further resources/investment? (Which services? and what resources are required?)</th>
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9. What factors (or measures) helped service users engage with remote service delivery using technology?

10. What factors prevented/made it difficult for service users to engage with remote service delivery using technology?

11. What is the main feedback from service users on remote service delivery using technology?

12. What are the main advantages of remote service delivery using technology (for service users, teams and providers)?

13. What are the main disadvantages of remote service delivery using technology (for service users, teams and providers)?

14. What specific advice would you give another organisation who would like to develop remote services delivery using technology?
15. What are the main gaps in terms of national guidance to facilitate the delivery of remote services using technology?

16. Will you continue to deliver remote services using technology in a post Pandemic situation? If so, which services? If not, why not?

17. What supports/resources do you need to facilitate the delivery of remote services using technology?

18. Have you an example of a service/s which you delivered remotely using digital and assistive technologies which is/are scalable and implementable across the sector and which you are willing to discuss in more detail? Please describe briefly.

19. Any other comments?

Please return this survey to ncp.disability@hse.ie by Friday 28th August
References


