



REDUCING SOCIAL ISOLATION THROUGH TECHNOLOGY:

A Report on the Illinois CARE Connections Program

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PROGRAM OVERVIEW

Illinois CARE Connections (ICC) was a collaborative program with the Illinois Department on Aging (IDoA) and Illinois Department of Human Services (IDHS) that provided technology devices for socially isolated seniors and persons with disabilities in Illinois. The program was supported through federal CARES Act funding that was made available in spring of 2020 during the height of the pandemic. The program ended in spring of 2021 but technical assistance is available through September 2021. The Illinois Assistive Technology Program (IATP) implemented the program by processing referrals, purchasing and assembling the technology bundle for each participant and shipping the bundle to eligible recipients. Based on need, bundles included a tablet device, case, headset, keyboard, hotspot, instructions, Wellness Recovery Action Plan

"I just wanted to say thank you so much to the Illinois Care Connections Program for the technology bundle that he received. Words cannot describe how the program has assisted him to stay in touch with our family and participate in programs and services he receives. Thank you again so much!"

DANA, on behalf of her son

(WRAP) program information, and any assistive technology needed for access and use. IATP developed an accessible online referral system and developed webinar trainings for providers within each of the three agencies responsible for submitting the referrals. Participants were required to be receiving services through the Illinois Department on Aging or the Illinois Department of Human Service - Division of Developmental Disabilities (DDD) or Division of Rehabilitation Services (DRS) providers and programs. For IDoA, the participant had to be age 60 or older and receiving services from the IDoA Community Care Program or through one of their Area Agencies on Aging. Throughout the following report, participants from these two IDoA programs are referred to as Aging.

Participants were eligible if they had been socially isolated as a result of COVID-19 and were experiencing loneliness and a lack of connectedness. IATP and the University of Illinois Chicago-Assistive Technology Unit provided telephone technical assistance if the participant needed help with the tablet bundle received. In addition, clear, concise and accessible directions for operation of the device were included in the bundle for each package shipped.

Referring agency staff followed up with each recipient after the bundle had been received. Additional follow-up was also done by IATP through direct mailing to each recipient.



“This past year has been so very lonely for me, so I cannot thank the Illinois Care Connections Program enough for the generous gift of an iPad to break up the time. Among the many features it offers, I have been able to Face Time with my daughter and granddaughter who live in Canada! It has been well over a year since I have had the opportunity to see them in person, and there is no end in sight to the US-Canada border reopening. Being able to use this new technology and seeing their faces has truly been a gift from God.”

LAURA

DATA SET OVERVIEW

A total of 3,307 referrals were approved and technology bundles were provided to eligible recipients funded by CARES Act dollars. An additional 703 approved referrals resulted in bundles provided to eligible developmental disability recipients with supplemental CARES Act dollars from the Illinois Department of Human Services – Division of Developmental Disabilities.

This report provides an analysis of final data on the 3,307 technology bundles provided and highlights differences identified between the three types of individuals who received tablet bundles. The additional 703 DDD clients were not included in this data analysis to keep the N of all three groups relatively equal for comparison purposes and to ensure the total N data is not over-influenced by the DDD group size.

Post bundle receipt data was obtained on over 60% of all recipients. Collection of post bundle receipt data was fairly equal across all three groups with Aging at 66%, DDD at 65% and DRS at 57%. Table 1 provides a snapshot of the overall data set size.

Table 1. Overview of Data Set

	Received Technology Bundle	Percent of Total	Post Data Obtained	Percent with Pre and Post Data
Aging	1,039	31.42%	688	66.22%
DDD	1,207	36.50%	782	64.79%
DRS	1,061	32.08%	608	57.30%
Total	3,307	100.00%	2,078	62.84%

"Thank you so much to Illinois Care Connections for the iPad for my daughter! She is having so much fun exploring the features of the iPad, Face Timing with her friends, and listening to her favorite songs through applications to not feel so isolated. Thank you all so much for your dedication - we really appreciate it!"

JONI

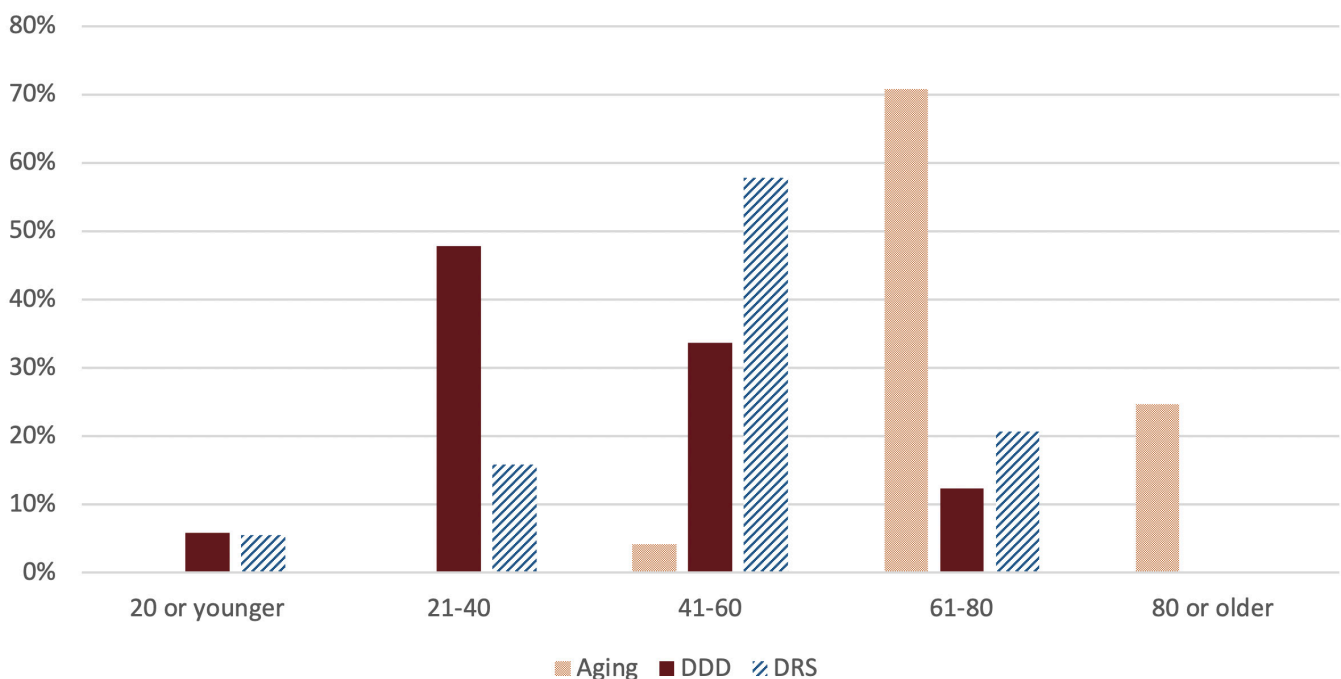


AGE

The majority of the 3,307 individuals who received technology bundles are in the age group of 61-80 (33%) and 41-60 (32%). Close to a fourth (23%) are in the 21-40 age group while 8% are age 81 and older and 4% are 20 or younger. Obviously, the age distribution was starkly different between the three referral groups. Those referred by Aging were skewed to the older age range with a full 96% of clients referred age 61 and older. The DDD referrals were comparatively much younger with almost half (48%) in the 21-40 age range with another 34% in the 41-60 range. Well over half (58%) of the DRS referrals were individuals in the 41-60 age range with another 21% age 61-80 and 16% age 21-40 which is consistent with an employment focused system.

Chart 1 provides an overview of the age distribution of all bundle recipients.

Chart 1. Age Distribution



REFERRAL REASON

The vast majority of referrals identified combating social isolation (45%) and being able to communicate with family (39%) as the primary desired outcome for obtaining the tablet bundle. The remaining referrals identified recreational activities (9%), other activities (6%) and being able to purchase necessities online (1%) as the primary desired outcome. These ratios were relatively consistent across all three groups with combating social isolation and communicating with family the vast majority for all three accounting for 92% of all referral reasons for Aging to 74% for DDD. The DDD group identified recreational activities as the primary desired outcome for 16% of referrals which was the largest proportion outside of addressing social isolation and communicating with family.

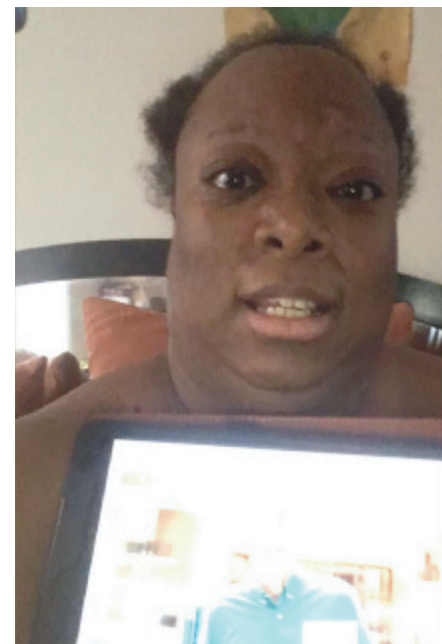
FUNCTIONAL SKILLS NEEDED TO USE TABLET

Individuals completing a referral were asked to identify any functional limitations that would impact the ability of a recipient to use the tablet. This information was used to help identify any adaptations and/or peripherals that were needed for the basic tablet bundle. Questions were posed specific to interacting with a tablet. For example: Can the individual interact with a tablet without magnification or do they need magnification? The vast majority of individuals referred had sufficient functional skills to use a tablet without significant adaptation, specifically 96% had sufficient cognition, 98% had sufficient motor skills, and 98% had sufficient hearing. Screen magnification was needed for 27% of referrals making vision the functional area that required the most adaptation to support tablet use.

The proportion of functional limitations across all three client groups was very similar to the totals. The only variance was the DRS group who had a higher ratio of 37% of referrals who needed screen magnification compared to 22% for Aging and 23% for DDD.

"I live alone and have felt very much isolated even more so when the COVID-19 pandemic began. Thanks to the Illinois Care Connections Program, I have been using the iPad I received to connect with my family. I'm still learning how to use it, but every day I smile even bigger when I know I can see my loved ones' faces. I am so grateful and very much appreciative of this program."

ELLA



**Paula A. Basta, Director, IDoA,
Kathy & Lisa - ICC Participants**



"I just wanted to say thank you to the Illinois Care Connections program, and everyone who assisted in Sydney acquiring an iPad. Like so many, it's been difficult for her being isolated during the COVID-19 pandemic. Having the ability to FaceTime with family has opened up a window to the outside world for her. We are just starting to look at possible Zoom opportunities to expand her connections even further - it's all quite new and exciting. Thank you all for your hard work and dedication to make this happen!"

TERRY AND SYDNEY

BUNDLE TYPES

Requests for iPads (73%) were almost four times more common than requests for Android based tablets (27%). This significant preference for iPads could be based on past use of and familiarity with IOS devices, more superficial awareness of the Apple/iPad brand name, or possibly an artifact of family or provider influence when completing the referral form and making the tablet equipment request.

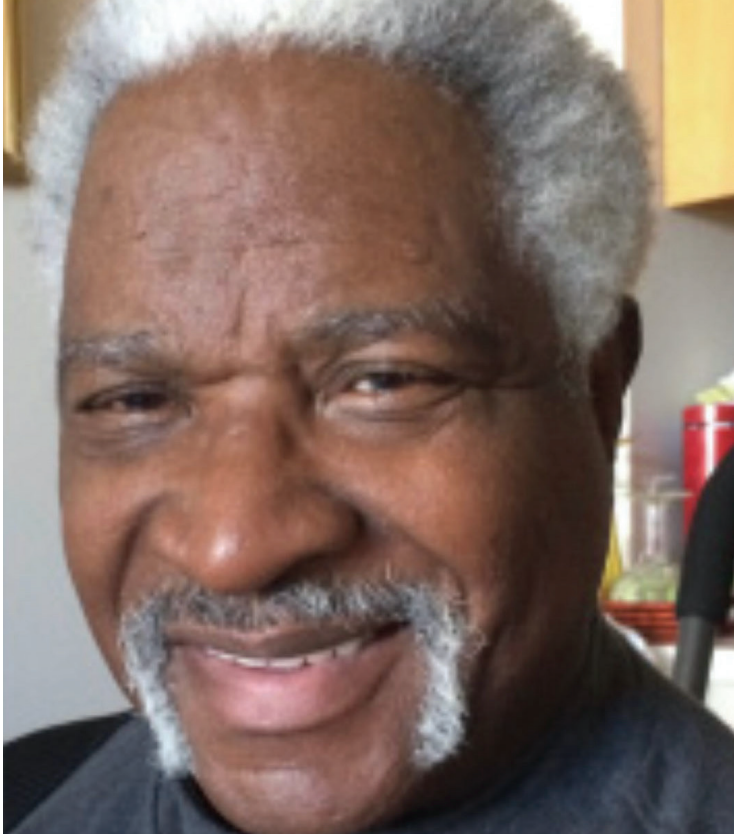
The preference for iPads over Android tablets was relatively consistent across all three groups. Of the minority tablet type requests, Aging referred clients were the most likely to request Android (32%) and DDD referred clients the least likely to do so (23%).

The supply of iPads available for purchase during the pandemic was severely limited at times. This significantly slowed the ability of IATP to ship iPad bundles as quickly as desired, especially at the beginning stages of the pandemic. Supply availability improved in spring of 2021 and all technology bundles were able to be provided by summer of 2021.

KEYBOARDS AND HEADPHONES AS ADD-ON TO BUNDLE

Keyboards were included in 39% of all tablet bundles provided. Over half (51%) of all Aging referred clients requested/obtained a keyboard with their tablet bundle compared to about a fourth (26%) of DDD referred clients. Forty-three percent (43%) of DRS clients requested/obtained a keyboard.

Headphones were provided with all bundles. Originally headphones were to be provided by request only as an add-on, but it quickly became clear that most all referrals were requesting headphones and buying them in bulk made it more efficient to provide them with every bundle. Providing an option for private listening was determined to be a basic need for all recipients. The rate of request and use of keyboards for the aging group suggests that providing a keyboard for all and buying in bulk would increase efficiency of bundle provision.



“It is incredibly hard for me to be isolated, but the iPad I received from Illinois Care Connections helps me connect with others. My grandchildren have helped me learn how to use this equipment, and we share our days with each other. This is very new for me, but I have enjoyed learning this technology. Hopefully, more of my friends will be able to take advantage of the program, and we can communicate with each other better. Thank you so much for this opportunity.”

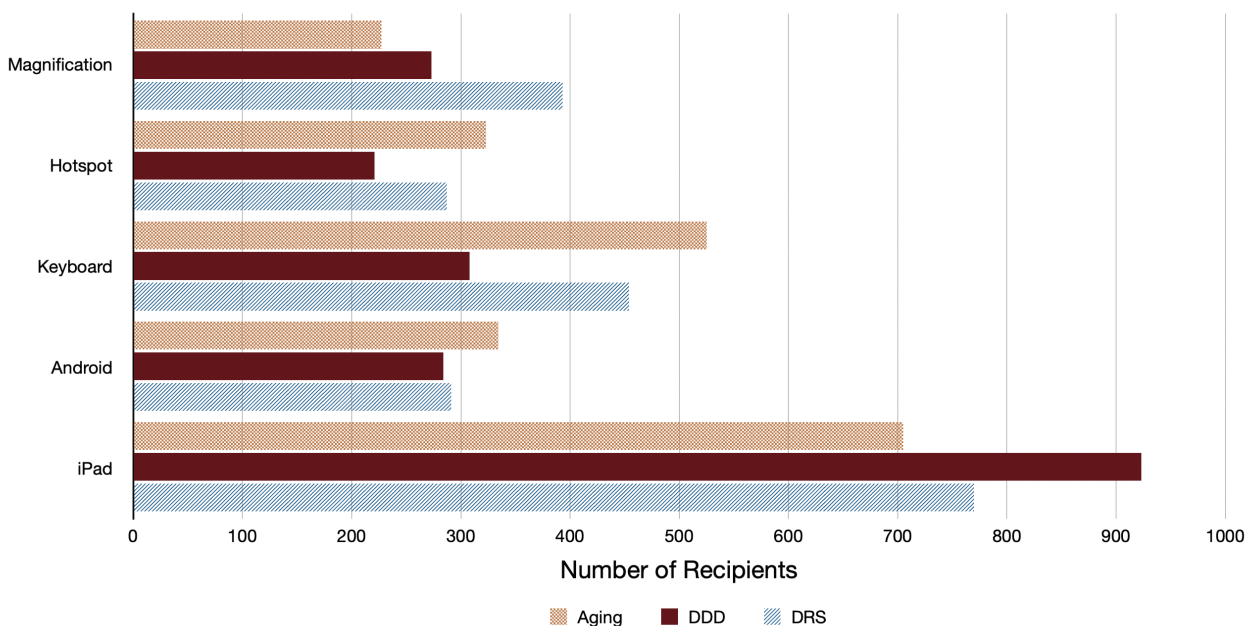
CLARENCE

INTERNET ACCESS - HOTSPOTS

Hotspots were provided to a fourth (25%) of all recipients. Hotspots were provided more for Aging recipients (31%) and DRS recipients (27%) than for DDD recipients (18%). Originally DDD requests were at a similar percentage as the other groups, but phone call follow-up was done for all referrals to verify if existing internet access was available and could be used instead of requesting a hotspot. This follow-up verification significantly reduced the hotspot requests for this group. It is unknown if similar follow-up was done with the other groups if those request ratios would have decreased also.

Chart 2 provides a summary of the count of key technology items recipients received, specifically magnification, hotspot, keyboard, android, or iPad, by recipient group type (Aging, DDD, DRS).

Chart 2. Type of Technology Provided by Client Group



LONELINESS RATING

The UCLA Loneliness Rating Scale¹ was administered at the time of client referral to identify a baseline rating of loneliness and again after receipt of the tablet bundle to identify any change in rated level of loneliness. This scale provides a rating of 3 to 9 with ratings of 3-5 identified as “not lonely” and ratings of 6-9 as “lonely”.

A total of 2,078 tablet bundle recipients have pre and post loneliness rating scale scores. The overall mean change in rating is 1.9 moving from a baseline rating of 7.1 (mid-range of lonely) to 5.2 (at the top of the “not lonely” range). Well over half (63%) rated loneliness as less after obtaining the tablet bundle. There were significant differences in reported loneliness change based on referral group as summarized in Table 2.

- The mean rating for DDD recipients changed from 7.4 (mid lonely) to 4.7 (not lonely), an improvement of close to 3 points, with 81% rating their loneliness less post intervention with the tablet bundle.
- The mean rating for DRS recipients changed from 7.4 (mid lonely) to 5.4 (edge of not lonely) an improvement of 2 points with 70% rating their loneliness less post intervention with the tablet bundle.
- The mean rating for Aging recipients changed from 6.6 (low end of lonely) to 5.8 (same low end of lonely), an improvement of a little less than one point with 37% rating their loneliness less post intervention with the tablet bundle.

Table 2. Loneliness Rating Scale Summary

	Mean Pre-Bundle Loneliness Rating	Mean Post-Bundle Loneliness Rating	Pre-Post Change	Percent Less Lonely Rating
Aging	6.6	5.8	0.8	37%
DDD	7.4	4.7	2.7	81%
DRS	7.4	5.4	2.0	70%
Total	7.1	5.2	1.9	63%

It is not known if this variance between the three groups is reflective of systemic differences in how each group perceives their own level of loneliness, in how the rating scale is being used/applied, and/or is an artifact of other influences.

It is interesting to note there is a difference in baseline mean loneliness ratings between the three groups with DRS and DDD recipients reporting more baseline loneliness than Aging recipients. This does suggest a fundamental distinction in how each group perceived their loneliness level within the context of the pandemic related “shutdown” environment. It seems possible that DRS and DDD clients perceived the pandemic shutdown as creating more social isolation and loneliness because they were more “connected” and “not lonely” before the pandemic. Conversely, Aging referred clients may have already been experiencing some level of loneliness pre-pandemic and the changes due to the pandemic were perceived as relatively less.

1. A Short Scale for Measuring Loneliness in Large Surveys: Results From Two Population-Based Studies. Hughes ME, Waite LJ, Hawkey, LC, Capioppo JT Research on Aging. 2004;26(6):655-672

Correlations between the age of clients who received a tablet bundle and loneliness ratings revealed no significant relationships. This was true for all recipients and for recipients by group.

“Thank you to the Illinois Care Connections Program! I recently received my tablet, and it has helped me communicate with friends and family during this extremely lonely time due to the COVID-19 pandemic. I’m so grateful as it has allowed me to keep in touch with others as well as stay safe. Additionally, having this device has assisted me while healing from my recent surgery. I’m so excited to have access to my email, bills, and other applications right in front of me. Thank you again!”

RHONDA

PRIOR TECHNOLOGY USE AND LONELINESS RATING CHANGE

The change in loneliness rating was also analyzed as a function of prior tablet use. The majority (79%) of all bundle recipients had no prior tablet experience that would translate to using the bundle provided. This was also true of all three groups with both Aging and DDD at 76% and DRS at 88% of recipients with no prior use experience.

There was a slight difference in the level of loneliness rating improvement post bundle receipt between all recipients who had prior tablet experience (1.67 point improvement) and those who did not (1.92 point improvement). Both moved from a lonely rating area (7+) to a not lonely rating area (5+) with the recipients without prior tablet experience showing the larger impact on reducing loneliness.

These same change differences and ratios were seen in the Aging and DDD groups. Conversely, DRS recipients showed a greater loneliness rating change for those who did have prior tablet use experience. Most of this change is attributed to the higher baseline loneliness rating for those with prior tablet experience (7.7) versus no prior tablet experience (7.4). For the other two groups the baseline rating for both those with and without prior tablet use was almost exactly the same.

It is important to note that the N for the DRS recipients with prior tablet experience is relatively small (72) which could be a factor in the difference. Both Aging and DDD have at least double that number of recipients with prior tablet experience.

“Recently receiving an iPad has changed my life! I have been able to write emails, send messages to my sisters, friends and family, and even FaceTime with them, which I have never been able to do before - let alone visit them during the pandemic. I am able to go online to find information, and I also take some typing practices. I am incredibly thankful for what Illinois Care Connections and the Illinois Department on Aging are doing for people like me, and for making a difference in the community. The iPad has completely changed the way I feel, spending so much time at home. Thank you again for making such a difference.”

RUDY

DEVICE USE

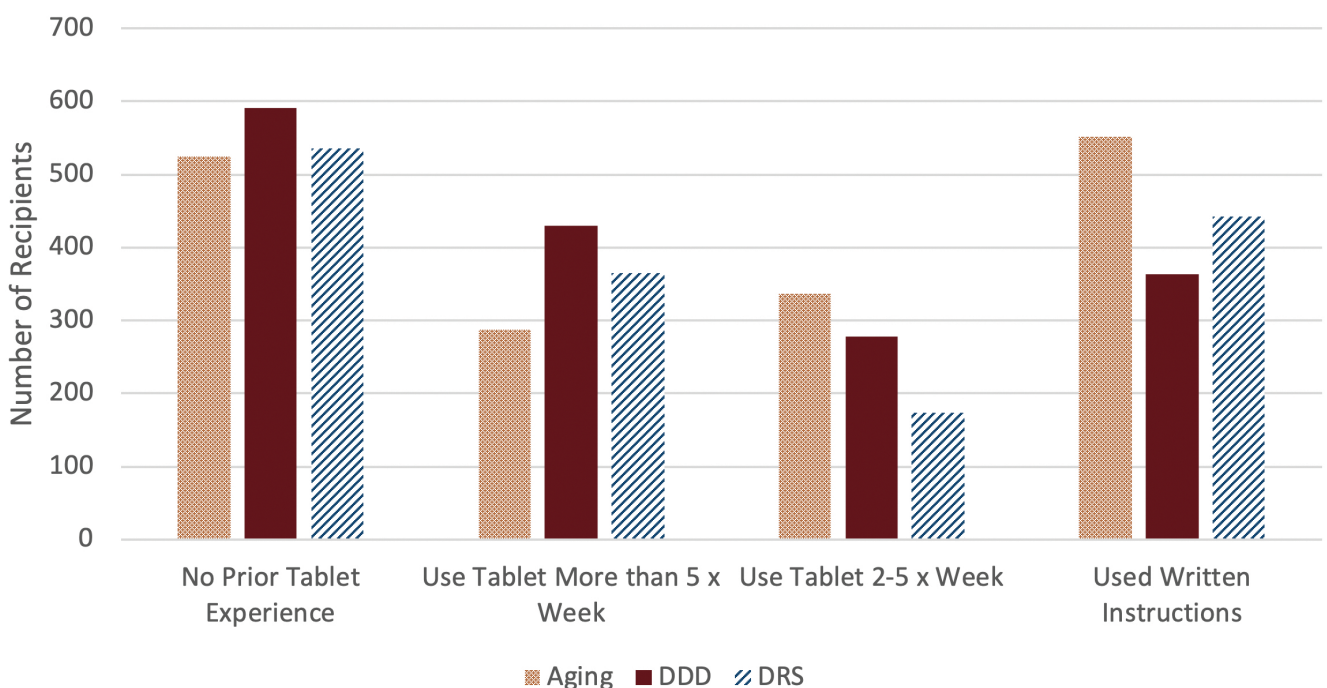
Follow-up data from 2,078 bundle recipients indicate extensive use of the technology provided. The majority of recipients (52%) reported using the device more than 5 times per week so pretty much daily. Another 38% reported using the device 2 to 5 times per week which is still very regular use while 10% indicated they used the device once a week. This extensive weekly use was seen across all three groups of recipients. Aging recipients were a little more likely to report 2-5 times per week (49%) than more than 5 times per week (42%) while the other groups had a larger majority report more than 5 times per week, DDD (55%) and DRS (60%).

INSTRUCTION USE

As noted previously, accessible directions for operation of the device were included in the bundle shipped to each recipient and additional support was available by telephone through IATP and the University of Illinois Chicago-Assistive Technology Unit. About two thirds (65%) of recipients used the instructions provided with the bundle shipped. A significant majority of Aging recipients (80%) and DRS recipients (73%) reported using the instructions. This is very different from 46% of DDD recipients who reported using the instructions. This difference could be related to more reading disabilities found within the younger DDD group along with greater access to and preference for using human support (parents/siblings who might be readily available in the home) in lieu of the provided instructions.

Chart 3. Provides a summary of prior tablet experience, amount of time the provided tablet is used and if written instructions were used by recipients.

Chart 3. Tablet Experience, Use Time and Instruction Use



OUTCOMES AND SATISFACTION

Overall, 89% of bundle recipients reported that they would not have been able to obtain the technology needed to address their social isolation without the Illinois Care Connections program. Almost all aging recipients (91%) and DRS recipients (91%) indicated the program was their only way of obtaining the technology while 85% of DDD recipients reported this was the case. Recipients were also asked to report their level of satisfaction with the Care Connections program. Ninety-seven percent (97%) of all recipients reported being highly satisfied or satisfied with the program with almost identical high levels of satisfaction reported by Aging, DDD and DRS recipient groups.

Stories from recipients demonstrate how critically important these tablets have been to their ability to combat social isolation and remain well during the pandemic.



"Kathy said she is using her iPad for Facebook, attending church, playing games and audiobooks. She is also taking a class to learn about voiceover and loves the Siri app. She is so appreciative for the opportunity to have received the bundle. She said thank you to IATP and IDOA!"

KATHY

FUTURE PLANS

The Illinois Department on Aging – Community Care Program assists senior citizens in maintaining their independence by providing cost effective alternatives to nursing home placement. Due to the successful impact of the ICC project, IDoA is seeking to fund an augmentation of the original ICC project to ensure Illinoisans age 60 and above receiving services through the Community Care Program (CCP) have increased access to needed technology bundles in order to combat social isolation. Having CCP program participants maintain and/or increase communication with family and friends and have opportunities for social interaction regardless of COVID protocols is a high priority for IDoA.



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